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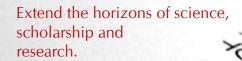
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#### MANAGEMENT OF INNOVATIVE PROJECTS OF SMALL AND MEDIUM BUSINESS

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Abstract: Complex application in project management in Russia and support from legislative and executive power, a business community, the public and mass media is one of the most priority directions of social and economic development of Russia in the third millennium. In this work the concepts "project management" and "project managements" are considered and specified. The main characteristic of the company is provided, the analysis of the existing control system of projects is carried out. The temporary organizational structure in the company is created. Offers on planning and arrangement of tasks for each participant of the project are formulated. Functions, both founders, and each participant are defined. The plan for "packing of a franchise" in the LLC Tatburstroy company is developed and realized. Recommendations about design activity for the enterprises of small and medium business are submitted. This project was implemented with direct participation of authors within 7 months. The project payback period is calculated. The priority "return of the spent investments" has been carried out already at a stage of test sales. Thanks to implementation of this project, the company has begun to realize the global purpose connected with scaling to regions of Russia and the CIS country.

Keywords: project, project management, small and medium business, business, LLC Tatburstroy.

#### 1 Introduction

Today one of the main factors of social and economic development is business.

Businessmen it is a social and active part of the population. The basic principle for them is self-employment and an opportunity to independently make decisions. We should find out what role small and medium business plays in market economy and why it is important to introduce modern methods of management of projects at the enterprises. Small and medium business and also activity of businessmen determines the level of democratization of the country and openness of his economy. Due to support of small and medium business the state solves general problems of increase in welfare of the population. Small and average business allows to increase the average level of social responsibility, an economic initiative and competence of citizens of the concrete state. The competition is the main operating condition of small and medium-sized enterprises in system with market economy. She allows to contain increase in prices for goods and services, induces businessmen to increase constantly quality of production and to introduce new methods of maintaining and management of work at the enterprise. One of such methods is also the method of design activity. Now project management became the professional activity recognized around the world. For the last 30 years project management was created as new culture by administrative activity and became a peculiar cultural bridge in civilized business and business cooperation of the countries of different continents with different history of development, traditions, economy and culture.

Complex application in project management in Russia and support from legislative and executive power, a business community, the public and mass media is one of the most priority directions of social and economic development of Russia in the third millennium (Etemad, 2004).

#### 2 Methodology

The purpose of this project is creation and packing of a franchise for scaling of the LLC Tatburstroy company to regions of Russia and the CIS country on the basis of justification of financial and economic expediency. The project of packing of a franchise is initiated by authors on the basis of drawing up SWOT analysis. The conducted research shows existence of the potential market of services in production and installation of protections in regions of Russia and the CIS countries. Entry into the market is planned by means of carrying out advertizing campaign. The current situation of the LLC Tatburstroy company has proved that at the accurate and correct organization of business income

can reach 30% of the turnkey contract sum. But it is necessary to consider also negative sides of this business. It is difficult to automate such business. Therefore, the buyer of a franchise will be completely involved in many business processes. But there is a problem of turnover of staff and establishing interrelation between links (Anglichanov et al, 2010).

This project provides existence of the plan of achievement of goals (a complex of works) and also existence of system of powers and responsibility for achievement of the goals headed by the project manager (Bessonov, 2013).

Processing of material was conducted on the basis of department of economy of production of Kazan Federal University according to standard techniques of the Russian scientists (Bodrunov & Rogova, 2014; Villalobos Antúnez, 2013).

As starting point serve the description of service, justification of the project, the general restrictions, information about already executed similar projects. Alternative ways of implementation of the project are analyzed, criteria of success are defined. This document is further a basis for all design decisions and uniform understanding of the purposes of the project all its participants (Golenchuk, 2008; Sulkarnaeva et al, 2018).

#### 3 Results and discussion

The innovation of the project is that the LLC Tatburstroy company first in the market will sell a franchise which will include the full management on fast opening of business in any city of Russia and the CIS. Thanks to a franchise the company had had a number of competitive advantages concerning competitors:

- fast and simple scaling;
- additional income;
- increase in loyalty of clients and suppliers

Strategic objectives of the project were: development of the concept of the project, development of a brendbuk, development of a franchayzingbuk, development of the financial plan, development of the website, advertizing start.

Also the analysis strong and weaknesses of the project has been presented in this project.

#### Strengths:

- stable turns and profit on payment of a franchise;
- fast scaling;
- using scaling by means of sale of a franchise, it is possible to test the market of various regions without risk for the head company

#### Weaknesses:

- the main part of profit is received by the franchisee;
- weak motivation of the franchisee as he subconsciously thinks that the franchise will make for him profit without special work.
- franchisees who have won the market can want to separate from the franchiser

At a stage of initiation of the project market researches on this project are conducted. Hundred franchises from different spheres of businesses have been analyzed.

Having analyzed data it is possible to draw a conclusion that franchises of firms from construction spheres don't enjoy popularity. It is connected with the fact that the most part of owners of these firms, businessmen of the eightieth - are the ninetieth years, and at that time the concept "franchising" didn't exist, and firms developed by opening of branches. Thus, we have found out that the franchise of the LLC Tatburstroy company will be one of the first in the sphere of construction (Clifford & Larson, 2003).

Each project has the strategy of his realization. Project of creation of a franchise not an exception. Primary purpose which is strategically important: return of investments and receiving percent by founders of the company (Zabolotskaya, 2015).

The strategic objective is achieved due to accurate debugged technology of packing and also selection of qualitative personnel. To achieve result are necessary: active, passive sales, advertizing of the company (Schumpeter, 2008).

Today in the market of franchises in a services sector there is a number of competitors: "Loaders service", "House to everyone", Spetsizolyation.

As a result of a research of franchises of competitors, it is possible to draw a conclusion that franchises in the sphere of construction and services sell the companies which are in the market recently. Therefore the potential franchisee can have problems with payback as at most the young companies business processes in the organization aren't smoothly running, accurate duty regulations aren't made, and in general there is no system approach to business. (Masur et al 2004).

When planning components of project management, first of all, authors were faced by tasks:

- to develop organizational structure;
- to create team of the project.

Process of creation of organizational structure of the project happens at the general meeting and is approved as heads of structural divisions. Such approach allows to reduce probability of emergence of the conflicts at distribution of resources for performance of functional and design tasks (Kirshin & Titov, 2012).

Line-up of the team of the project: project manager, programmer, designer, advertiser, maker-up, two sales managers, HR specialist, support service of the franchisee (Petrov & Kachayev, 2014).

Qualities inherent in employees: conscientiousness, discipline, responsibility, diligence, decency, honesty, politeness, skill to communicate, high professionalism.

The temporary organizational structure of the project has been created and approved.

The sphere of rendering of services assumes high degree of discipline of personnel, accurate differentiation of functions, and therefore the question of type of organizational structure didn't stand. Of course, in this case the hierarchical structure of management has to be used. The organizational structure of this project has been developed and introduced on LLC Tatburstroy. This structure is temporary as has been created only under this project (Kosheleva, 2009).

Project management "packing of a franchise" is the first attempt to apply design approach to development of the company (Pletnev & Nikolaeva, 2015).

The hierarchical structure of works of the project is set according to four phases of the project: Initiation, Planning, Performance, End (Stanley, 2004).

#### 1 Initiation

1.1 Research of the market of franchises.

When carrying out monitoring of a condition of the market has come to light that only 1% of franchises are connected with the construction sphere. Also weaknesses of the existing franchises have been noted strong. Points which are necessary for packing of a qualitative franchise have been as a result created.

1.2 Creation and adoption of technological process. The structure of personnel, quantity of his units is defined. Duty

regulations are made and approved. The salary to the employees is approved according to the staff list.

- 2 Planning
- 2.1 Statement of tasks, coordination of the budget, approval of the plan of works.
- 2.2 Development of the marketing plan and strategy.
- 3 Performance
- 3.1 Search of office room and its equipment.
- 3.2 Selection of necessary personnel and distribution of tasks.
- 4 End
- 4.1 Ready franchising beech
- 4.2 Start of sales of a franchise

Development of the planned schedule and its performance. Management of time in the project includes distribution of time of the sequence of stages of his implementation, development of the planned schedule is necessary for coordination of activity of participants of the project, the order in which works have to be performed decides on her help.

The project is a little budgetary (is 175500 the sum of investments for creation of a franchise) and owing to this fact rather mobile that allows to avoid many risks. But, despite it, quickly pays off and makes rather high profit. By drawing up the estimate on the project it is necessary to consider all expenses; on payment of personnel, the Internet, etc.

As a result of the test period of sales 1 franchise to St. Petersburg has been sold. The package which has been sold was "Expert" for 220000 rubles. Therefore the priority "return of the spent investments" has been carried out already at a stage of test sales.

The conducted research has allowed authors to develop the management which will receive the franchisee upon purchase of a franchise. His existence allows the head company to save time of training of future franchisee and also to increase the cost of the franchise (Romashova, 2011)

#### 4 Summary

Authors have specified concepts project management and project managements.

The results of a research given above have shown that the company changes strategy, thereby adapts to the market. It demands big expenses of time. In this case it is necessary to consider project management as the solution of this problem. Thanks to such approach the company can optimize all resources in the shortest possible time.

Authors have formulated approach to application of project management in the large organizations. Which combine a number of signs:

- business processes are smoothly running;
- the organizational structure is accurately created;
- existence of current assets;
- full range of services or goods;
- high qualification of the project manager.

For the organizations of small business project management is suitable only for the solution of specific objectives

#### 5 Conclusion

By results of work, the analysis of the existing control system has shown that the company in the company is competently built a control system of projects. And the revealed problems are connected with seasonality. The term of implementation of the project was 7 months. Thanks to implementation of this project, the company has begun to realize the global purpose connected with scaling to regions of Russia and the CIS country.

To results the fact that already in the course of test sales, 1 franchise has been sold was. And the got profit completely has paid back invested funds of founders of the company.

The main actions for implementation of the project are a creation of temporary organizational structure in the company and also accurate planning and arrangement of tasks for each participant of the project. In this work functions, both founders, and each participant are defined. The plan for "packing of a franchise" in the LLC Tatburstroy company is developed and realized.

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#### «TRANSITION PLOT» IN DINA RUBINA'S WORKS OF THE 1990TH (YEARS)

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Abstract: The article deals with the features of functioning of "transition plot" (L.D. Bugayeva) in Russian women's fiction of the fourth wave of emigration by way of the example of Dina Rubina's works. "Plot transition" is the result of the narrativization of "transition experience", which represents the process of overcoming the emigrant psychologic traumatic experience and the representation of a new variant of self-identification. The specific nature of the emigrant psychologic traumatic experience in relation to D. Rubina suggests a disruption of consistency in the process of reidentification self, the combination of the stages of autoreflexion and the involvement of social and cultural norms into the system. Such variant of the emigrant psychologic traumatic experience determines the specificity of the literary solution of the strategy of inscribing emigration into the space. Of particular importance in this regard is the carnivalization of the genre strategy of the travelogue, which generates the quasi-biographical character of the Rubina's ego-narrative. The consequence of this is, firstly, the active interaction of the strategy of the travelogue with the novel genre strategy; and secondly, the complexity of the structure of traumatic discourse. The inclusion of the travelogue of the novel strategy into the genre format determines the generalization of the emigration space; grotesqueness of the carnival masks provides the possibility of delegated residence of the emigrant psychologic traumatic experience, the reflection of which becomes the emerging novel strategy. The latter fairly consistently reproduces the "protocol of dying" (L.D. Bugayeva), which is one of the most frequent discursive transition strategies in "transition plot".

Keywords: women's fiction, transition plot, travelogue, emigrant psychologic traumatic experience, Dina Rubina.

#### 1 Introduction

Consideration of works by Dina Rubina in the context of the problem of cultural borderzone is determined by at least two factors: on the one hand, the writer's passing certain phases of emigration, forming "transition plot"; and on the other hand, the constancy and inner replacement of the forms of literary representation of this plot. The obvious dynamics and discrepancies between the creative stages of D. Rubina in the 1990s and 2000-2010 are quite clearly coincident with certain phases of emigration, which, according to the concept of Arnold van Gennep, form the rite of transition: preliminary (the rite of separation), liminary (intermediate state) and postliminary (the rite of inclusion). At the same time, in the case of D. Rubina, the 1990s, the phases coinciding with the liminary phase of "the rite of transition", are complicated by the very nature of it: repatriation / aliyah, and its next phase is complicated by the duality of cultural self-identification: "the prose writer" of Russian-speaking Israel" (D. Dmitriyev), "an Israeli author who writes in Russian" (L. Gomberg), "Russian-speaking, Jewish prose writer" (Yu. Pavlov), etc.

#### 2 Methodology

For the most part, the methodology of literary research of this problem, used in analyzing the material, is similar to that used by the colleagues from the Kazan Federal University (Amineva, 2015). The methodological background of the article is based on the structural-semantic method (Sayapova & Arsenteva, 2014; Zinnatullina et al, 2017). and the foundations of the gender analysis of the literary text, which allows to considering "the plot of transition" precisely in women's fiction (Shevchenko & Nesmelova, 2015; Villalobos Antúnez, 2015).

#### 3 Results and Discussion

As it is known, aliyah is one of the basic concepts of Zionism, legislatively enshrined in Israel, opposed to yeride – the emigration of the Jews from Israel; and the literal translation of these concepts very clearly demonstrates their axiological meaning (aliyah – «climb», «ascent», «elevation» / ascending, yerida – «descent», «descent» / descending). Accordingly, the character of the experienced and reflexed emigrant psychotrauma changes. In one of her interviews in 2015 D.

Rubina asserts a certain sequence of the experience of aliyah, anticipating the emigrant stage to the repatriation phase proper. Such differentiation is noteworthy; in this case, the stage of emigration is conditionally correlated with the process of national self-identification, and repatriation – with the process of cultural self-identification.

The peculiarity of the trauma of emigration determines the specificity of "the plot of transition" in works by D. Rubina in the 1990s. L.D. Bugayeva, considering the psychoanalytic mechanism of generating "transition plot", operates with the concepts of "mirror stage" and "photographic stage" (U. Eco) of the formation of the subject. "Mirror stage" provokes the writer's autoreflexion as a way of reconstructing "self": "The mirror gives the opportunity to see the world and look at oneself with the eyes of an outsider. At the same time, the mirror image, according to Eco, is rather a double of not an object, but of that contextual field into which the object reflected in the mirror is inscribed and to which it can be accessed, moving the view from the mirror to the object itself. In mirror reflection, there occur at the same time the doubling of the body as an object and the body as a subject facing the object one. Emigre writers ... often use themselves as models; the autoreflexive narrative partly performs the role of a mirror in which the subject's view of the author activates imagination and memory, including. the memory of the unspent. The sign nature of a photograph pointing to the object in its absence represents a large degree of alienation of "self" from one's reflection, as compared to "the mirror stage" At the same time the researcher emphasizes that the autoreflexive autobiographical literary narrative of the emigre writer equally demonstrates both "the creation of a complex of ideas about oneself ("the mirror stage") and "the inclusion of social and cultural norms into the system ("the photographic stage)" (Bugayeva, 2010).

However, the work by D. Rubina is characterized by a different type of combining these two stages, the specificity of which is determined by the specificity of the literary solution of the strategy of inscribing of emigration into the space. The writer widely uses the genre format of the travelogue, which, as L.D. Bugayeva notes, "forcibly puts the author in the position of understanding the experience of the path". "... the appearance in the emigrant works of the theme of the travel quest, initiated by both the expulsion and the questions of the Valence formula, and characteristic of almost all emigre writers, receives an additional motivation: striving for balance and stability, and along with the need to mitigate the consequences of the change of place, state and status" (Bugayeva, 2012; Nurhayati, 2018).

However, the absolute majority of Rubina's travelogues are attributed not to the nineties, but to the zero years: "Jazz band on the Charles Bridge" (2003), "On the Road from Heidelberg" (2005), "Mirror-like Surface of the Lake in Cloudy Haze", 'Coxinel" (2005), "The Villa "Consolation" (2005): The Sunday Mass in Toledo" (2001), "The Cold Spring in Provence" (2005), "Snow in Venice" (2011), "The White Ass for the Savior" (2007)), etc. It is them to fully correspond to the nature of the modern travelogue, in which "space ... becomes a tool for solving the problems outside of it". As O.V. Mamurkina notes, "remaining a convenient form of immediate fixation of impressions, the travel prose has become a universal matrix of comprehension of "the other", "the creation and consolidation of "the image of the other" at different levels of literary generalization, regardless of the author's tasks, and consequently his narrative strategy" (Mamurkin, 2013). In the case of D. Rubina, the travelogue is directly connected with the construction of Israel's national myth, creating a complex structure for the mutuality of One's Others (Spain and Italy), Foreigners (Germany) and Others (France, Holland, Belgium). Moreover, the address to the national myth turns out to be a direct evidence of the final elaboration of the emigrant psychologic traumatic experience and the relative completion of the process of the national self-identification of the author.

#### 4 Summary

The prose of the 1990s, characterized by the sharpness of this particular process, significantly transforms the genre format of the travelogue, demonstrating, rather, the carnivalization of the strategy of the travelogue, which finds itself in the story "In Your Gates", in the collection "... Ich bin nervoso", in the novel "The Last Boar from the forests of Ponteveder", etc. The emigration space at the same time unfolds as "an area theater", a carnival, the participants of which masks become. The tragic character of the comprehended space is supported by an emphasis on style grotesqueness and anecdotal sharpness of the content plan. According to E. Larionova, "the grotesque of Rubina is a kind of game with the reality, with the help of which the author manages to embrace such a wide-spread narrative structure, which often goes beyond the context. ... < here - A. A, T.B., O. O.> the techniques of the carnival complex are pronounced: laughter, a masked crowd and tragedy" (Larionova, 2012).

The carnival nature of the emigration space determines the special nature of Rubina's ego-narrative in the texts of the 1990s, which D. Bykov called "a quasi-diary". The open autoreflexivity of travelogues of the zero years is preceded by quasi-biography, which expresses a peculiar "code of behavior" in a foreign culture, which in turn becomes one of the ways to overcome alienation of the another's space. This "code of behavior" is a quasi-biographical image of the writer, illustrating E. Said's thesis that in emigration "writing becomes a habitat". It is noteworthy that in travelogues proper, D. Rubina almost completely refuses such a quasi-biographical mask.

Writing as a declared "code of behavior" or "conventional posture" (S. Dickinson) motivates the appearance of "the plot of works" in the fictions by D. Rubina; quasi-biographical narrator acts as the author of either a real literary text ("Here the Messiah is coming comes"), or the surrounding life begins to be experienced by her as her own text ("The Last Boar from the Forest of Ponteveder"). The consequence of this is, first, the active interaction of the strategy of the travelogue with the novel genre strategy; and second, the complexity of the structure of traumatic discourse. It is the appearance of the novel strategy that determines the generalization of the emigration space (in the future generalization is replaced by the principled eclecticism of the Israeli space). The pronounced grotesqueness of carnival masks provides the possibility of delegated residence of an emigrant psychologic traumatic experience, the reflection of which becomes the emerging novel strategy. The latter fairly consistently reproduces "the protocol of dying" (L.D. Bugayeva), which is one of the most frequent discursive transition strategies in "the transition plot".

In the "The Last Boar of the Forest of Ponteveder" romanization is subjected to a storyline based on a love tetrad: Alfonso – Lucio – Bruriya – the wife of Lucio. Of particular importance in this case is a fairly clear ethnic specification of the images: Lucio, Alfonso and Bruriya – Spanish Jews, the wife of Lucio and half-sister of Alfonso – a Jew with a mixture of gypsy blood. As is known, in the literary world of D. Rubina, the Spaniards and the Gypsies, playing the role of the representative of nations, form the image of their Other, in the next works directly participating in the construction of the national myth.

However, the plot-forming role in this novel space is reserved for a Spanish component, and, as in subsequent travelogues, D. Rubina is interested in Spain's tanato-orientation. I.S. Izotova, considering the problem of death in Spanish culture, notes that "the idea of a special Spanish attitude to death has a real basis. This attitude lives in the specificity of funerary and tauromachy (corrida) rituals - collective, tanato-oriented practices. These practices form the foundation of the Spanish tradition, that is, the key determinant of the old Spanish everyday life and are the characteristic manifestations of the Spanish "cult of death". The latter is a habit of constant "speaking" on death, which is a part of a living self-continuing stereotype ("the games of the Spanish in real Spain"), generated by the narcissistic closure of

traditional Spanish culture at the very itself in the beginning of the 18th century" (Izotova, 2012).

D. Rubina plays up precisely this stereotype, which determines the nature of Spanish everyday life, by deciding at least two key tasks. The first is the problem of overcoming the boundaries of One's Other and turning into One's, which is equally significant for both the Spanish component and the Olim narrator (the accentuated use of this particular definition fixes the status of Dina from Matnas, emphasizing the borderline character of her self-identification). The second task is connected with the process of cultural self-identification, acting out the "code of behavior", which eventually becomes the basis for national self-determination.

In the first case, the storyline of the novel strategy is actualized; unfolding love tetrad, one arranges, on the one hand, Alfonso, and on the other, Lucio, and, both, demonstrate "the game of the Spaniards in this Spain". The dominants of the novel are Habanera Carmen and the ancient Spanish song about the last wild boar from the forests of the Ponteveder, equally setting the motif of the tauromachy (corrida), which defines the Spanish "cult of death" as the only content of life.

The development of the motif of the tauromachy in the novel is characterized by a gradual strengthening of drama, which claims to be a symbolic transformation of the image of Lucio. "The Curse of the Boar", about which the hero tells the narrator, among other things, determines the appearance of the mystical similarity of the man with the very beast. Invariably accentuated at the beginning of the novel, the zoomorphic image of Lucio supports his being taken in as a jester at the court of Alfonso Human (in this way, in the opinion of the narrator, the name of the director Matnas is translated into Russian).

However, in the finale the motif of tauromachy turns into a motif of a knightly duel; the accentuated polarization of the images of Alfonso and Lucio is replaced by almostly absolute identity: "the screaming boss, accustomed and annoying to all" turns into "Knight Alfonso the Human", Lucio also changes the image of the buffoon to the image of "the beautiful knight, finally freed from the spell".

The transformation of the motif of tauromachy becomes the performance of "the death scenario", directed by Lucio, it is him the narrator tells about: "... it seems to me that the artist ... must compose the story of his life, love, death by himself..." "The Death Scenario" is a sort of logical conclusion of the constantly present play in death (throughout the novel, Lucio constantly frightens those who are around him with sham playback of either the very moment of death or its attributes); and, the perseverance and lack of goal-setting in the actions of the character turns them into a kind of "protocol of dying", which has an ambivalent direction.

"The death scenario" reveals itself most clearly by the parallel unfolding of Purimspiel, organized by Matnas and the theatrical action initiated by Alfonso for the employees of Matnas himself. The crucial point is that the theatrical performance, played out by the characters for themselves, flows into a knightly duel / tauromachy, the outcome of which is the murder of Lucio by Alfonso. In this case, the vital symbolism of Purimspiel, partially realizing the Bakhtinian idea of carnivalization, is based on the idea of "inversion of binary oppositions". In contrast, the European theatricalization of Alfonso turns into a triumph of death and is perceived by Dina and Taisia as the last act that concludes "the death scenario".

#### 5 Conclusions

Thus, "the death scenario", on the one hand, appears in the novel as a form of delegated representation of the emigrant psychologic traumatic experience; it is that with which there is a link of the creative community declared by the narrator, relating it to Lucio ("We were friends with him, we both were jugglers, fiddlers, game players, rope-walkers, shameless huglars, differently, but we both gave ourselves into the property of the

crowd, and we both had no one to appeal to, as soon as the shadow of the offender  $\dots$  "

On the other hand, becoming a direct reflection of the national "cult of death", she demonstrates the impossibility of crossing the boundaries of One's Other, the final transformation into One's. With regard to the image of Lucio, the "narcissistic closure of traditional Spanish culture to oneself" is revealed through the dramatization of national mythology; with regard to the image of Alfonso, this feature, as often happens in the work by D. Rubina, is treated literally, turning the character into a reflection of the national stereotype.

The prospect of the present study is the consideration of "the plot of transition" in the works by D. Rubina of  $2000-2010 \,\mathrm{s}$  in the context of the problem of interaction of national and gender constructs.

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#### PUSHKIN AND CHINA

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Abstract: The article is devoted to the actual problem of "Pushkin and China". For the first time it was designated in Russian studies of literature by M. P. Alekseev. This issue was discussed most actively in the 1970s, when two views on the Pushkin approach in the reception of the "Chinese theme" were formed. The first position was defended by D. I. Belkin, who proposed to consider not only China, but also, in general, the East as a "concept" in Pushkin's work. Special attention was paid to the conscious nature of Pushkin's perception of Chinese classical culture, which is why the study was subjected to both works of art by the poet and his political writings, diaries and travel records, also memoir prose. The second view belonged to the specialist in Iranian studies I. S. Braginsky, who continued to develop the ideas of academic N. I. Corrad of universal typology in the Russian material. From his point of view, Pushkin's reception of the East (including China) proceeded in a semi-conscious form, which does not reject the need to turn to conscious borrowing reflected in political essays or diary notes. It discussed that in the analysis of A. S. Pushkin's poetic works the concept of "West-East synthesis" is of great importance. The East is not an inclusion of "Oriental motives", but a fragment of consciousness, a moment of aesthetic vision. The authors of the proposed article synthesize these two approaches and by examples show what positive results can be obtained in this case. We record the facts of A. S. Pushkin's appeal to the Chinese tradition (at the biographical, historical and cultural levels). At the same time, we show how the "Chinese text" is presented in Pushkin's consciousness, if not to close it with "small time", according to M. Bakhtin, and to include in the "big time" which is a wider historical and cultural extent. In other words, we study Pushkin's poems (the poetic heritage of the late, mature years, mainly 1830s) in the context of the Chinese worldview, acting as a "matrix of analysis" due

Key words: Russian literature, A. S. Pushkin, East, China, text, interpretation.

#### 1 Introduction

The topic "Pushkin and China" has already been the subject of deep scientific researches. In the 1930s it was clearly marked by M. P. Alekseev (Alekseev, 1999). The author explained the reasons for Pushkin's enthusiasm of China based on his huge material. According to M. P. Alekseev, China was part of the orbit of European politics, being identified with the delights of aesthetic taste in the highest manifestations. In both Western literature and Western art of the XVII-XVIII centuries "Chinese" (or "Sinisism" in the Russian vernacular way) held a special position. The elite of Russian society took up the baton of "Chinese fun" (in architectural ensembles, garden and park complex, residential interiors), literature expressed "Chinese" in the subjects, tunes and images. A. S. Pushkin was familiar with N. Bichurin (called father Iakinf), a monk and sinologist, the head of The Russian Spiritual mission in Beijing and the author of ethnographic works about China and translations from Chinese. The poet enthusiastically read about China, something was published in the "Literary newspaper" edited by him.

The continuation of the development of "Chinese theme" in Pushkin's work was the article written by D. I. Belkin (Belkin, 1958). He contested for the position of M. P. Alekseev that "the interest of the poet to China was caused by the French literature". D. I. Belkin pointed out that the poet's attention to the exotic country was caused by biographical reasons. Pushkin was fascinated by the genealogy of the noble family to which he belonged, and from various sources, including family legends, he knew that the famous "Arap of Peter the Great", who was his great-grandfather Hannibal, was sent to Siberia in the status of major of the Tobolsk garrison, to the Russian-Chinese border, to measure The Great Chinese Wall. Over the course of his life Pushkin collected materials that expanded his knowledge about China, its history and philosophy. D. I. Belkin explained in detail how the preparation for the trip to China and Tibet took place and why it wasn't put through. The interest of A. S. Pushkin to China "was of truly scientific by nature... Poet saw a huge country with great future in China."

One cannot agree with these facts. They reflect the form of A. S. Pushkin's conscious reception to Chinese cultural world. However, there is a question about the ways of unconscious

perception of their traditions, implemented in the figurative-motive system of Pushkin's lyrics.

This was written by I. S. Braginsky in course of Pushkin's relation to the East as a whole (Braginsky, I. S, 1974). Trying to catch and understand the meaning of the poem "Grapes" (1826), he came to the conclusion that there is a semantic depth. It is not reduced to autobiographical "Crimean layer" of memories of the poet (but this view prevailed). This was "the work that bears the imprint of West-East literary synthesis," according to I. S. Braginsky. He was attracted by classical Oriental poetry as the means of explanation of A.S. Pushkin's creative vision, and there one can see the main merit of Oriental scientist who dealt with the problems of Russian classical literature.

Pushkin's poem "Grapes", from his point of view, "is a fairly typical kyt'a". Kyt'a is one of the forms of Arab-Muslim lyrics. I. S. Braginsky shows how the poet managed to achieve his "inaccessible simplicity" by mastered superimposed principles of Oriental writing in his own text. A. S. Pushkin, in accordance with this logic, worked in the genre of "javab" - a kind of "response" to the works of predecessors, and this was done "not by imitation, but intuitively». I. S. Braginsky did not reject the Western edge of Pushkin's masterpiece. It is a question of the need to Supplement the "Western" interpretation of the "Eastern" interpretation for the sake of cultural balance. I. S. Braginsky insisted on the fact that the isolation of the Eastern and Western elements is a heuristic procedure. The essence of "West-East synthesis" is not limited to the search for the entanglement of Eastern motives "in "Western" works, as it was done by those who reduced the reception to the procedures of conscious operation of figurative units. In the lyrics of "West-East synthesis it is impossible to separate the East from the West".

We will try to show the forms of "Chinese text" on specific examples from Pushkin's poetry.

#### 2 Methodology

The main method of research presents a complex approach combining several methods. Two of them are of the greatest value. They are 1) structural-semantic and 2) literary-hermeneutic methods.

The essence of the first method is to take into account the whole palette of intra-architectural relations. The text within its boundaries is thought of as a system of signs, a model of reality. As for the second method, it is based on the art of interpretation of meanings. The main position of hermeneutics is the process of understanding the "alien". Understanding is not limited to the rational sphere and logical operations. It allows the participation of the intuitive sides of consciousness. There are lots of meanings, explicit and hidden, in any kind of texts. The meaning of the statement is not only the meaning embedded in it by the author, but also what the interpreter was able to extract from it. Hence, there comes a large role of the dialogical factor. The dialogue we need to understand is the openness of the creative consciousness, which "encourages people to savor every word" (Villalobos Antúnez & Bello, 2014; Karpanina et al, 2018).

We also point out that the article takes into account the fundamental results of modern comparative studies, for them see the article (Afanasev & Sayapova, 2016; Ozerova & Bekmetov, 2016; Ibragimov et al, 2015; Smirnova et al, 2016; Gazizov et al, 2017).

#### 3 Results

One of the motives of the late Pushkin's lyrics was the motive of natural existence, connected with the theme of death and cemetery. We can find it in his poem "When out of town, pensive I wander..." (1836). It begins, in Taoist spirit, with the description of aimless wandering of the hero behind a city line which suddenly, without "intention", brings him to a public cemetery. The poet uses the technique of contrast: a public

cemetery for him symbolizes the continuation of the city, its crowd and overcrowding. This cemetery is opposed to the village, causing serenity and tranquility of its simplicity. The poet depicts a situation typical of ancient and medieval Chinese lyrics: the hero visits rural graves in the autumn, in the evening and in silence, when the sounds of the wind are heard; these are not just archetypes of the decline of physical and spiritual forces, as can be assumed, based on the analysis of the "cemetery theme" in the works of European sentimentalists and preromantics; these are the attributes of the world, providing the depth of understanding of the essence of the Universe in its cycled movement. To hear the "secret voices" of the Universe, the Chinese poet nurtured loneliness - in the mountains, but more often in the forest, during the twilight, in everyday sadness, breaking the privacy for a fun, but, in general, friendly communication "heart to heart" restrained. In addition, the rural cemetery is a family cemetery, and in this status it corresponds to the piety found in Chinese lyrics in relation to ancestors.

In the poem "Again I visited..." (1835) there's a really touching episode when a hero is on his way returning to his places of origin ("ancestral possession") "in the light of the moon" passes three pines; they welcome him with peaceful "familiar noise" on the road "covered with rain", which rises in the mountain. These are the features of a typical Chinese lyrical picture: night, silver moon, pine trees, a river with the "sloping banks," even a lonely ride on horseback.

The natural look of life is emphasized by A. S. Pushkin in his earlier poem "Winter. What should we do in the village?"(1829) . Until now, it was analyzed as a kind of diary entry of one day in the life of a nobleman; the poet perfectly imitates prosaic intonation in the text through the reproduction of ordinary things and events (a cup of morning tea, brought by a servant, "the old neighbor's magazines", the hunting scene, the evening game of draughts - one of the entertainment in "the countryside", a meeting with the provincial "girls", animating the sleepy world of the estate, psychologically accurate depiction of the establishing relations between them and the hero, first timid, and then so uninhibited that the acquaintance ends with an unexpected kiss on the twilight porch). Pushkin does not keep to a predetermined plan, he wanders from subject to subject, capturing the mood of blissful nostalgia, it's healthy "doing nothing". Although the condition is referred to as "the poison of boredom", nonetheless, it wasn't annoying; hero lives in socalled tempo of the Space, slightly speeding it up when it wakes up the likeness of the passion, which is non-binding, existing here and now, in the mode of simultaneity. The purpose of life is to fill this moment, for it does not appear by the will of the hero, but is given from above as a gift of heaven, a reward for the ability to escape from the use of hard work where it is unnecessary. In this new reality, everything is incomplete, fragmentary, vague: reading the book is tiring because of the mismatch of letters and thoughts coming to the state, creative work-writing poems-comes to naught because of the lack of tension and attention, the circle of mundane conversations about the upcoming elections, the weather and the "king of hearts". The world is enveloped in a fog of laziness, kind indifference, passivity, forcing the hero to obey the order, which is not usual for his unbridled nature. The world must be taken as a whole, in the form in which it is given, and wait for the bright colors to bloom - that's the philosophy of Pushkin's carelessness, hidden in the Russian district destiny. Nothing original about it. On the one hand, it asserts the fullness of the traditional topos with its slow life structure, reflected in the works of European classicists and sentimentalists, on the other - it's in the "big time" Taoist painting depicting the "fresh" existence of man as a normal, unburdened and "correct" process plays solo to Pushkin's philosoph. It is necessary to enjoy any everyday little things, as does Bai Juyi (772-846), a Chinese poet. He enjoys his warm, custom-made home robe, which protects him from the winter cold ("I made myself a warm robe").

a bathrobe has been sewed for me –

here is already warmth!

- he sincerely shares his enthusiasm and further notes in a conversational style:

In morning I'll wear -

and so I sit until dark.

At night I'll be covered -

will sleep well until morning.

The only thing that does not give him rest is the idea that the robe belongs only to him, and the poor neighbor lacks it, and he has to warm the pathetic, transitory body with imperfect "tools", like a musty stove or an old hearth.

Traces of the ancient Chinese concept of "Xiao Yao Yu" (way of life in "carefree wandering") are found in other Pushkin texts of the same year, 1829.

So, in the poem "Whether I wander along of noisy streets..." the poet reproduces the situation of non-directional movement in the urban space and internal seclusion among the noisy crowd. Starting from the first verse it is given in the form of a personal verb: "I wander (along the streets)", "I enter (into the temple during the divine service)", "I surrender (to reflections)" e.t.c. Thoughts of the hero are about the nature of elevation above the ordinary, their theme is connection between generations, a change of life, an objective cycle of birth and death. They have spiritually and stylistically sound Eastern idea of a calm, ennobled acceptance of fate; death does not frighten the hero, because it is inherent natural regularity. One detail of the text can't but attract: Pushkin's hero is ascetic, but this quality isn't embodied through his avoiding of people and the salvation of the soul by going into monkish seclusion, but it lies in the quiet selfassertion among them, as if among the dangerous, raging sea there is a sandy island. Taoist and Confucian hermits of old China knew this co-existence well and, in every way introducing, left the archetypes of such experiences in lyrical

The culture of China has identified two types of seclusion -"small" and "large". The first view was close to Christian escape from world temptations; man left the home abode, populating wild forests and mountains; he must avoid what distorts the truth, distorts the straight path, what breaks the main purpose of man - to stay spiritually clean in front of the Heaven. The second assumed a symbolic "departure from the world": as Pushkin's hero, the recluse lived among people in his usual way (eating, drinking wine, having fun, making friends), but internally maintained a deep and persistent concentration, so that he found the strength to escape from self-interest, careerism and cruelty. Most often, it was a civil servant; he could easily build a "spiritual temple" among the social noise, and his very fearlessness is not an example of selfish self-rescue but an altruistic assistance to those who could observe his behavior and make the right conclusions. All thoughts of the "large" hermit come up to the understanding of the brevity of human existence and the uselessness of idle speculation. The ideal of "large" asceticism, again, is greatly presented in the ancient and medieval Chinese lyrics.

#### 4 Discussion

It may seem that the proposed interpretation of Pushkin's image is a game, a kind of experiment. We are sure, however, that the General methodological calculations will be able to convince in the opposite: 1) eternally actual classical literature needs live contextual reading and 2) any kind of an interpreting idea is realized in the mode of quiet complementarity. Classic needs controversy, in fact, an endless conversation about it.

#### **5 Conclusions**

Thus, in this article we tried to consider the images of Pushkin poetry in the Eastern (Chinese) context. The East of a concrete case is not only the object of knowledge, but also conceptual tools, a meta-language by means of which it is possible to describe technique of formation of art reality. The science of Pushkin's work is enriched with new meanings, and Orientalism (Sinology) expands the boundaries of its application.

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#### STEALING FROM SAFE DEPOSIT BOXES

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Abstract: This paper addresses the issue on the security and reliability level for storage of material values in safe deposit boxes. The banking services market is quite developed, and there is also a great demand for provision of safe deposit boxes for use. Despite the significant degree of regulation, there are a wide range of problems in the provision of these services, which are considered during this study. Having analyzed the current judicial practice in cases in which disputes related to the use of safe deposit boxes were considered, the authors developed an algorithm describing the specifics of the consideration of such cases by courts. In connection with the aggravation of the problems described in the work, the authors proposed a set of measures to address them. Within the framework of this paper, a methodology has been developed for calculating the rating of banks, depending on the quality of service delivery. Based on the results of the study, a matrix of possible ways of solutions to eliminate these problems depending on the costs of their implementation and the time for realization was constructed. It is assumed that the recommended methods will help prevent such situations and reduce the negative effect of negative consequences.

Keywords: Bank, market of banking services, safe deposit boxes, safety deposit box leasing, deposits of valuables in a bank, value deposit agreement, bank vault.

#### 1 Introduction

Nowadays one of the main issues in the banking system is the reliability and safety of the deposit boxes. Security-ten layers, including video surveillance, 24-hour guard, and biometric Disaster protection-the world's finest seismic architecture & fireproofing, backed by comprehensive insurance. Climate control-cutting edge and constantly monitored. Privacy-devoting one room to each client (Abdelal et al, 2006). The existing regulatory framework for safekeeping in safe deposit boxes consists of provisions of the Civil Code. In addition, On Banks and Banking Activities, one of the services rendered by credit organizations is leasing to individuals and legal entities special premises or safes in them for safekeeping of documents and depositing valuables (Abdelal et al, 2006). The Civil Code of the Russian Federation provides for two options for depositing valuables in an individual safe deposit box: a contract for the provision of depositing services with the use of an individual safe deposit box by a client (Section 2, Art. 922 of the Civil Code) and the rent of a banking safety deposit box or storage with the provision of an individual safe deposit box to a client (clause 3, Art. 922 the Civil Code) (Sakaev, 2016). The first type of contract implies a safe option for the client, as the Bank takes valuables from the client according to a list, controls the process of placing and withdrawing them from the safe, and is responsible for the loss of valuables. At the same time, the second type of contract implies that the Bank only provides the customer with a safety deposit box, and the Bank's liability comes only in the event of physical damage to the banking safety deposit box, which is understood as a violation of the terms of the contract with regard to the safe and inviolable nature of the safe box. Specifically, the requirements of security for such services are laid down in the provisions of the Law "On Protection of Consumer Rights" (Tuan, 2017). The main problems considered in this paper are the conditions of the second type of contract.

#### 2 Experience Obtained From Practice

To date, the main agreements that a Bank enters into with customers when providing them with an individual banking safety deposit box are a contract on depositing valuables in a banking safety deposit box and a rent contract for a banking safety deposit box. When concluding the first type of contract, a list of the valuables transferred to the bank for depositing is compiled. And under this agreement, the bank bears all responsibility for the contents of the individual banking safety deposit box, since here the service is the depositing of valuables, and the safety deposit box is only a storage facility. The second type of contract is when the bank provides services for the provision of an individual banking safety deposit box for use. There is no list of valuables for safekeeping; the confidentiality of the contents of the safe box is respected and therefore the bank does not bear any responsibility for it. In this regard, the first type of contracts is unpopular among banks; they prefer to conclude contracts of the second type. Having analyzed the legislation which is related to the situation in question, we saw that the main focus of safe deposit boxes was given to the Civil Code of the Russian Federation. However, it focuses more on the contract for depositing valuables. But in the Civil Code of the Russian Federation there is no an article regulating exactly the rules on which a rent contract for safe deposit boxes should be drawn up and be in effect. It is said in the Civil Code that in the event of the conclusion of such an agreement, the rules of the chapter governing the rental of property shall apply to it. But this chapter does not deal with safe deposit boxes.

To date, banks provide a wide range of services and banking products. One of the traditional banking services provided to individuals is the rent of a banking safety deposit box, which is used to deposit various items. Most often, valuables are deposited in the safe deposit boxes, as well as they are used in transactions for the purchase and sale of expensive property.

Safe deposit boxes are a very interesting bank product. For many, this product is regarded as a guarantor of reliability and security, while others see it as an opportunity to hide a part of income and acquired valuables from interested persons. The relevance of studying this topic is that in today's realities there is a controversial judicial practice regarding the definition of the legal nature of these relations. Often, bank customers do not understand what obligations the bank takes on in these relations. Almost all the largest banks of Russia offer leasing of safe deposit boxes. Banks offer different types of safes and tariffs for them, depending on the size and characteristics of the safes

In this regard, there is confusion in determining the type of contracts and their ambiguous interpretation. And so in practice there is a huge amount of disputes between Banks and their clients. As practice shows, the Bank's clients mistakenly believe that by placing their valuables in an individual banking safety deposit box, they are guaranteed security in any case, regardless of the type of contract concluded. In this regard, to date, unfortunately, the practice of litigation in such cases is sufficiently developed and extensive, which indicates the urgent problems of this type of banking services. After analyzing the array of judicial practice relating to this problem, we identified certain features that take into account such cases, and developed a special algorithm presented in Fig 1.

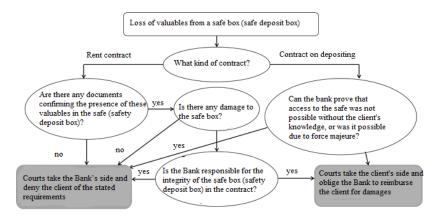


Fig 1. Specificity of consideration by courts of the disputes connected with a stealing from an individual safe deposit box.

Table 1. Comparison of rental prices for safes up to 50 cm high and 35 cm wide (2017)

Name of the	Rent period of a safe / price in rubles per month			
bank	up to a month	2 months	3 months	year
Sberbank	and more 1 620	2 760 and more	3,870 and more	9 855 and more
VTB 24	1 240 and more	2,509 and more	3 690 and more	8,985 and more
Raiffeisen	2 399	4099	6,099	13 099
Alfa Bank	2 450 and more	4 900 and more	7 350 and more	29 400 and more
Otkrytie	Tariff information is provided in the course of individual consultations			
Gazprombank	2550	2,200 and more	2 600 and more	8 900 and more

Source: compiled by authors on the basis of data from official websites of the banks (Vasiliev, 2008; Kloss, 2012; Giddens, 1991; Taylor, 1994; Villalobos Antúnez, 2016; Burke & Stryker, 2000)

Table 2. Number of branches of banks providing services for leasing banking units

City	Sberbank	VTB	AK BARS Bank
Moscow	27th	59	1
St. Petersburg	9	22	2
Nizhny Novgorod	8	3	3
Kazan	4	4	1

Source: compiled by authors on the basis of data from official websites of banks (Vasiliev, 2008; Kloss, 2012; Burke & Stets, 2000)

Thus, in the event of the loss of client's valuables from an individual banking safety deposit box, the first question arises: what contract was concluded between him/her and the bank: the rent of a safe box or depositing client's valuables? Everything is simple if the second type of contract is concluded: taking into account the provisions of the Civil Code that regulate this type of contract, the Bank is responsible for the contents of the safe, which was described. And if it cannot prove that without the knowledge of the client, the seizure of valuables from the individual banking safety deposit box is impossible, or that it happened because of force majeure - in this case the courts call on the Bank to respond to its obligations to the client and compensate him for the damage.

Another thing, if it was concluded exactly on the rent of an individual banking safety deposit box. Then the client can win in court if three important conditions are observed:

- The contract prescribes the bank's obligation to monitor the access to the premises where the safe box is provided to the client, as well as the bank's responsibility for the safety, integrity and serviceability of the safe box;
- 2. The safe was damaged (opened, broken, etc.);
- 3. The client has documents or other evidence confirming that the client had these values and put them in the safe box.

#### 3 Role Of Financial Institutions

Speaking about safe deposit boxes, let's note that they are currently one of the most reliable options for depositing material values offered by the banking sector. Accordingly, the demand for this type of banking services will always be especially high during the crisis periods and summer holidays of citizens. Consider the interests of stakeholders in Fig 2.

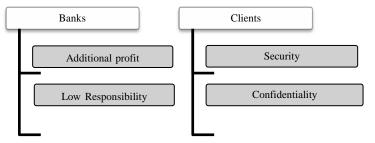


Fig 2. Stakeholder interests when providing an individual banking safety deposit box in rent.

Based on the interests of the parties, it can be concluded that each pursues its own benefits. And it is not always possible to find the optimal solution that will take into account the desire of both the bank and the client. At the same time, it is necessary to determine the relationship of other interested parties to the adoption of a set of measures to address the problems associated with the market of safety deposit boxes. For example, insurance organizations can be of great help in taking measures to eliminate existing problems. There is a remarkable experience of foreign countries on this issue: for example, in France, the cost of rent depends on the terms of insurance of the client's values, placed in the individual banking safety deposit box. And in Spain, a client can insure his/her valuables placed in an individual banking safety deposit box from various types of risk: from fire, theft, etc.

At present, in Russia comprehensive insurance contracts are concluded between banks and insurance organizations, which also provide for the insurance of depositories where the individual banking safety deposit boxes are located. However, the insurance of individual valuables of the clients themselves is not provided.

So, we offer the following ways of solving this problem and improving the system of using and protecting cells from the side of a bank:

- the division of depositories in this case, the client will have a full idea of his/her voluntary choice: 1) either incognito lower cost and security, but complete confidentiality, thereby all the risks for the property are borne by the client, 2) or safely: the cost of maintenance and security is much higher, what is compensated by the bank's responsibility for the contents of the safety deposit boxes;
- insurance of safekept valuables in safety deposit boxes is the least possible option, since the insurance market, as a rule, focuses on large volumes of demand, and this type of services is the least popular among customers, and the banks themselves have a negative attitude - too high demands from insurance companies;
- the use of information technologies a complete security system aimed at minimizing the risk of unauthorized persons accessing the contents of the safe box - electronic key, access system to the premises, introduction of blockchain technology for locking, biometric data: fingerprint, retinal scan;
- Creation of a separate structure in the banking system, which will specialize only in this area - an integrated wellestablished system and control over a certain range of banking safety deposit box services.

#### 4 Effect from the state

In recent years, the state is actively fighting for issues concerning money laundering, or means obtained illegally. At the same time, one of the first laws governing a bank in obtaining cash (both in cash and non-cash way) is the federal law "Concerning the Counteraction of the Legitimization of the Proceeds of Crime and

the Financing of Terrorism"  $N_2$  115 -F3 dated 07.08.2011 (Sakaev, 2016). However, with respect to safe deposit boxes, the duality of this law is observed, since the attractiveness of safety deposit boxes for clients is precisely that banks are not interested at all in sources of receiving money or valuables placed in a safety deposit box.

In this case, it is worth considering the possibility of introducing not only restrictions on concluding a rent contract for safe deposit boxes without a list of valuables, but without documents confirming the sources of receipt of funds. After all, this in the course of transactions with safe deposit boxes that will help to minimize stealing from safe deposit boxes, in addition, it will reduce the number of places possible to conceal the proceeds of crime

As for the safekeeping of jewelry, it is possible to use chipping to account for jewelry. The Ministry of Finance is already going to introduce chips into jewelry. However, the main objective of their implementation is to protect a consumer in terms of the quality of products purchased in jewelry networks and to obtain a market in which all participants pay taxes. Such experience obtained voluntarily in April, 2016 with fur products, led to the fact that since December of the same year, electronic labels have been required to put by all manufacturers.

However, speaking of jewelry, these chips can be further improved by introducing information about their acquirer in them. The given information would be confidential; the rights to jewelry would be made out in special bodies on the basis of checks with original seals of shops and transferred (secondary resale) by the contract of sale. This method, first, would protect the owners of jewelry from theft, since jewelry in the literal sense would be personal and resell them would not be possible. Secondly, it would give the state some control over the secondary market for the sale of jewelry, which is completely absent at the moment.

Also, we see additional measures to prevent safe deposit boxes from theft:

- The prospect of introducing special permits from executive authorities to banks that provides such services, with a view to checking the security of safe deposit boxes, ensuring the safety of the values of customers in an individual banking safety deposit box.
- Implementation of minimum requirements for ensuring the protection of safety deposit boxes at the legislative level, as well as security monitoring systems by law enforcement agencies, or established commissions.

#### 5 Method For Calculation Of The Banking Rating As To The Quality Of Rendering Services On Provision Of The Individual Banking Safety Deposit Box

The methodology developed by us contains in its structure 4 blocks, which consist of both quantitative and qualitative indicators presented in Table 3.

Table 3. Structure of the indicators of the methodology for calculation of the banking rating as to the quality of rendering services on

provision of the individual banking safety deposit box

Blocks	Indicators	Unit weight	
	Number of depositories		
"Security"	Number of cameras in the depository	0. 35	
	Number of safety deposit boxes in the depository		
	Number of employees with access to safe boxes		
	Rent price		
	Additional maintenance costs		
"Cost indicators"	Bank's costs of protection (billion)	0. 2	
	Penalties for the client		
	Loyalty program		
"Image of the Bank"	Rating from international agencies (Moody's, Forbes, Fitch)	0. 2	
mage of the Bank	Rating by assets		
	Customer Testimonials		
"Qualitative indicators"	Number of clients "returned to the Bank"	0. 2	

Three banks were selected as the objects of analysis: Sberbank, VTB, Ak Bars Bank. After collecting the statistical data, all the values obtained were indexed within the block relative to the maximum and minimum (in the case when the indicator was negative) by the formulas 1 and 2, respectively:

$$I_p = \frac{x_{i-Xmin}}{x_{max-Xmin}}(1)$$

$$I_p = \frac{x_{max-Xi}}{x_{max-Xmin}} (2)$$

Further, using the product of the arithmetic average to the weight assigned to the block, block indices for each Bank were found (3).

$$I_B = \frac{\sum_{1}^{n} I_p \times m}{n} (3)$$

The final rating was found by the sum of the block indices according to the formula (4).

$$R = \frac{\sum_{1}^{n} I_B}{n} (4)$$

Thus, after the production of all necessary calculations, we obtained the following results, shown in Fig. 3.

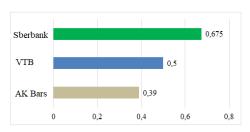


Fig 3. Final ratings of banks on the quality of rendering services for the provision of an individual banking safety deposit box, calculated by the author's method.

As we see, after the analysis and calculation of the rating of banks by the author's method, the most reliable for this kind of services is PJSC Sberbank with a rating of 0.675. The second place is occupied by Bank VTB (PJSC) which rating was 0.5. And PJSC "AK BARS" BANK is in the last position - 0.39 points.

#### 6 Summary

Based on the foregoing, it can be concluded that these services are characterized by a lack of legislative regulation, what leads to numerous disputes between banks and their clients. In addition, there are a number of other problems that need to be addressed by banks in conjunction with the state, as well as other financial institutions.

#### 7 Conclusion

In fact, storage in safe deposit boxes is a trustworthy institution of banking services. Losses from safe deposit boxes are rare and the Banks are constantly upgrading depositing conditions there. At the same time, if the loss occurs from the banking safety deposit box, the Bank is only liable for violations of the safe conditions and the integrity of the safe. The client is burdened with the obligation to prove the facts of the actual location of valuables in the bank safe.

The difficulty of determining the legal nature of these relations with respect to what these contracts are: a contract on depositing or rent is the basis of the problem under consideration. The following conclusions were made within the framework of solving the problem:

- the difference in depositing contracts in the safe deposit boxes provided for by law leads to problems that are considered in the judicial practice of resolving such disputes;
- Depositing of monetary funds under the contracts on depositing in safe deposit boxes is economically unjustified and may evidence about their illegal sources; in general, there are alternative bank proposals for safekeeping cash;

- Financial institutions may also contribute to the development of this service, drawing attention to the foreign experience of insurance of valuables placed in bank safes;
- The state needs to maintain uniform standards applied to banks on the issue of safety deposit boxes, as well as restrictions on the valuables placed therein, the obligation imposed onto a bank to record the values in the safety deposit box, as well as the sources of their receipt; chipping values will help in reducing thefts, in general, and from the banking safety deposit box, in particular;
- Introduction of special permits from executive authorities to banks that provide such services in order to check the security system for the storage of safe deposit boxes, as well as the introduction of minimum requirements for ensuring the protection of safety deposit boxes at the legislative level;
- An increase in the number of financially literate population will significantly help to reduce such a problem and preserve and increase their capital, and hence the country's capital as a whole.

Thus, there are a number of mechanisms that can protect banks, their clients and the state from the occurrence of such situations.

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## INVESTMENTS IN ECONOMY OF THE REPUBLIC OF TATARSTAN: FROM DEFINITION OF CONCEPTS TO THE ANALYSIS OF A SITUATION

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Abstract: The competitiveness of domestic production can be ensured by the innovative activity of economic entities in the form of development of new goods, technologies, methods and tools of production and management. At the same time, investment is one of the most important conditions for the implementation of innovations. Solving the issue of development of investment activity lies at the root of the quality of institutional entrepreneurship in the formation of the investment climate in the region. The investment climate is the object of close attention of potential investors both in Russia and abroad. The need for actualization of knowledge about the investment sphere in the Republic of Tatarstan (hereinafter - RT) determined the content of the study presented for the study.

Key words: investment, investment activity, investment climate, investment in fixed assets, foreign investment, gross regional product, institutional entrepreneurship.

#### 1 Introduction

In the conditions of the obsolete material and production base of domestic production, the periodically arising state of economic instability, the acute competition from foreign producers of goods and sanctions of foreign countries, investment in the reconstruction, modernization and renewal of fixed assets, development, development and development of technologies, ensuring food security and independence of the domestic economy, improving the quality of human capital la country. Clarity of the definition of the need for investment requires an understanding of the cause and effect relationships of their organization, and further specifics in the work of institutional entrepreneurs in creating attractive conditions for business and scientific communities to identify points of convergence in the development of innovation and the development of industrial and entrepreneurial structures.

Despite the abundance of studies of the conditions and effectiveness of investment activities carried out in Russia, the tasks of clarifying the conceptual apparatus and updating knowledge about the situation in the designated field are relevant. In this connection, the authors propose and justify the expediency of constructing the work in the following sequence: the disclosure of the conceptual apparatus and the algorithm of investment activity; a quantitative assessment of the effectiveness of investment policy in the country as a whole and the RT in particular; a study of institutions that determine the state of the environment for the implementation of investment activities in Tajikistan.

#### 2 Methodology

The methodological basis of the research presented in the article is presented by scientific achievements and the most famous research programs of Russian authors in the field of investment activity. The scientific propositions, conclusions and recommendations formulated in the present paper are justified by the results of studies obtained on the basis of the economic-statistical, abstract-logical methods and methods of system analysis.

As sources of information for the study, legislative and regulatory acts of federal and local authorities, publications of the State Statistics Committee of the Russian Federation and the State Committee for Statistics on RT, the publications of the Ministry of Economic Development of the Russian Federation (hereinafter RF) and the Ministry of Economy of the RT state and prospects of the investment climate, materials of periodicals.

#### 3 Results and discussion

In Federal Law No. 39-FZ of February 25, 1999 "On investment activity in the Russian Federation carried out in the form of

capital investments", investments are defined as money, securities, other property, including property rights, other rights that have monetary evaluation, invested in the objects of entrepreneurial and (or) other activities in order to obtain profit and (or) achieve a different useful effect. Similarly, B.A. Raizberg believes that investments are "any available means designed to serve future needs, for which they are diverted from current use and are invested in a particular business that benefits" (Raizberg, 2003; Metlenkov, 2018).

In the Oxford Explanatory Dictionary, the concept of "investment" is defined as, on the one hand, "the acquisition of means of production, such as machinery and equipment, for an enterprise in order to produce goods for future consumption; on the other - the acquisition of assets, for example, securities, works of art, deposits in banks or building societies, etc., primarily in order to obtain financial returns in the form of profit or increase in capital " (Business Oxford explanatory dictionary, 1995). The researcher IA. Zimin views this concept as "... long-term investment of capital in an enterprise" (Zimin, 2000). I.A. The form defines investments as "... investments of capital with the purpose of its subsequent increase" (Blank, 1995; González & Villalobos Antúnez, 2016).

Thus, realizing the process approach to the definition of the concept of "investment", it means the process of investing resources in the reproduction of the assets of the enterprise, industry, region, country.

Is it not clear whether investments are resources that must be appropriately invested or the investment process? Since the resources themselves are a product of management and designate any value possessing useful properties, the resource interpretation of investments seems to be a delusion.

Authors of the textbook S. Fisher, R. Dornbusch and R. Shmalenzi believe that "investments take place if part of the current production is used to increase fixed capital" does not even give a definition of the case (Fisher et al, 2002). Thus, on the one hand, investments, □these are resources, on the other □ the process of investing, with the third □certain situations. In this list there is an object and description of the moment when a certain action is performed by individuals or legal entities, therefore, it is advisable to define investments as a flow of values (capital goods) in the direction of reproduction and use of vital goods.

In accordance with Federal Law No. 39-FZ "On investment activity in the Russian Federation, carried out in the form of capital investments," investment activity is the investment of investments and the implementation of practical actions in order to obtain profit and (or) achieve a different useful effect. This is an iterative activity to drive investment in order to ensure the effectiveness of investing resources in the development of capital assets.

The importance of investment growth is determined by the role of the country's leadership in improving investment, customs and tax legislation, the development and implementation of investment growth programs of the regions' investment attractiveness, and the development of mechanisms to increase efficiency from the implementation of investment projects. The state of the investment sphere in the Russian Federation is actively analyzed in the mass media. According to the estimates of Rostat, the total investment in the fixed capital of the country since 2011 increased from 11.04 trillion. rub. to 15.97 trillion. rub. in 2017. The volume of GDP in this case grew from 60.3 trillion rubles, respectively, up to 92.10 trillion. rubles. Growth in investment in fixed assets in 2017 compared with 2016 amounted to 4.4%, GDP - 1.5%. Comparing the dynamics of investments and GDP by sectors of the economy in 2016, we can note a positive trend in the sectors of agriculture and forestry (an increase in the volume of production by 4.8%, investments -

13.3%), mining (an increase in output by 2, 5%, investments - by 14.4%), transport and communications (an increase in production volume by 1.8%, investment - by 1.3%). Multidirectional dynamics is observed in the manufacturing industries (growth in output by 0.1%, reduction in investments by 9.8%), production and distribution of electricity, gas, water

(1.5% growth in production volume, 10% decrease in investments, 9%), construction (reduction in construction volumes by 2.2%, growth in investment by 3.9%), wholesale and retail trade (a 4.6% decrease in production volumes, an increase of 8.2% in investment) (see Fig. 1).



Fig 1. Dynamics of the production index and the index of the physical volume of investments in fixed assets in the context of the branches of the economy for 2010-2016

The researchers are concerned about the sectoral structure of investments, whose direction is directed towards the services sector, while the production sphere is the basis of economic stability and security of the country.

Growth is also observed in terms of foreign direct investment, which amounted to \$ 32539 million in 2016 (in comparison with 2015, the volume grew 4.8 times), in the first half of 2017 - \$ 16.197 million. Despite the the positive dynamics of the values of this indicator, they have not yet reached the level of 2013 (before the introduction of external restrictions on trade and investment activities), when their value amounted to 69219 million dollars.

Among other things, it is important to understand that the observed growth in investment in fixed assets is not sufficient for the modernization of the Russian economy. Evidence of this is the value of the indicator of the degree of depreciation of fixed assets, which on average in Russia is more than 48%. This affects the competitiveness of domestic production, the innovative activity of enterprises and, as a result, the quality of

life of Russians. Among the reasons restraining foreign investment in Russia researcher Yu.K. Zaytsev singles out "... the investment climate of the Russian economy, the risks of maintaining low economic growth in the coming years, and uncertainty about future external economic restrictions due to the sanctions confrontation" (Zaitsev, 2015).

So, ensuring the economic stability and security of the Russian economy, as a basic function of the country's government, is due to the state of the investment climate.

The investment climate, defined as a set of factors and conditions of an economic, political and social nature, which determine the propensity of investors to organize a flow of values in the direction of reproduction and use of vital goods, is the result of institutional entrepreneurship (institution-building activities) of the country's leadership (Khaziahmetova & Harisova, 2010).

A large economic dictionary reveals the concept of "condition" as "a circumstance on which something depends" or "data from

which to proceed when solving a problem" (The Big Economic Dictionary, 2007). According to the philosophical definition "the condition is that environment, the environment in which processes or phenomena arise, exist and develop" (Frolov, 1987)

The term "factor" is defined as "one of the main resources ... of the economy; the driving force of economic, production processes, which affects the result of productive, economic activity " (Raizberg et al, 1999). This is the "engine" that capitalizes a particular resource (Salikhov, 2008). The factors and conditions are interrelated. The growth of investment activity in the country is provided by the conditions and factors within and through which investments become effective.

The difficulties faced by the country after the introduction of economic sanctions by foreign countries have determined the vector of efforts towards the development of investment management institutions, corporate-government cooperation, tax and other methods of stimulating investment in the country's economy. As a result, the state program "Economic development and innovative economy" was developed in the Russian Federation, the "National Entrepreneurship Initiative", the "Commissioner for the Protection of Entrepreneurs Rights", the "Open Government" project, the "Agency for Strategic Initiatives" openly, for the development of investment cooperation Russia with China, Austria, Italy, France. Sweden,

Finland, the Intergovernmental Commission for Investment Cooperation, the Russian-Japanese Investment Fund (Freinkman & Yakovley, 2014).

Within the state program, 11 subprograms have been developed, including "Formation of a favorable investment environment". Total amount of funds for the implementation of the Program from 2013 to 2020. is 885.7 billion rubles, for the implementation of this subprogram - 89.1 billion rubles. The Ministry of Economic Development of the Russian Federation has developed 12 target models for simplifying business procedures and increasing the investment attractiveness of Russian regions.

In addition, the Ministry of Economic Development of the Russian Federation implements financial and institutional support programs for small and medium-sized businesses. As of March 2018, 26 special economic zones are operating in the Russian Federation.

According to the prescription of the Address of the President of the Russian Federation V.V. Putin to the Federal Assembly of the Russian Federation (12.12.2013) the work on formation of the National rating of the investment climate in the subjects of the Russian Federation was started. According to the integral index of the rating, RT retains its leading positions from 2015 to 2017

Table 1. National rating of the investment climate (Postanovleniya, 1998).

Region	Place in rating 2017	Place in rating 2016
Republic of Tatarstan	1	1
Chuvash Republic	2	2
Moscow	3	10
Tula region	4	4
Kaluga region	5	3
Tyumen region	6	5
Krasnodar region	7	7
Voronezh region	8	23
Moscow region	9	21
Ulyanovsk region	10	11

RT as an active subject of the Federation in the field of development of investment activity began to set clear priorities for it and to register them in the Investment Memorandum of the Republic of Tajikistan. Annually, this document includes about 200 projects implemented with the provision of state support worth more than 1 trillion, rubles.

The assessment of the efficiency of the investment climate development institutions in the Republic of Tatarstan is the location of production facilities in its territory by companies such as Ford-Sollers, Rockwool, Hayat Group, Daimler, 3M, Bosch, Lufthansa, Schneider Electric, Fujitsu, Air Liquide, LOVE, Saint Gobain, etc.

The index of development of the investment activity infrastructure is the functioning of the Alabuga Special Economic Zone in the Republic of Tatarstan; the creation of a special economic zone of the technology-innovative type "Innopolis", the territory of advanced social and economic development in the city of Naberezhnye Chelny; intention to create a special economic zone "Sviyazhsk"; the work of the Technopolis "Khimgrad", five industrial parks, nine technoparks, five investment venture funds, the Social Innovation Center, etc.

The institutional basis for state support of investment activities in the Republic of Tajikistan is the Law of the Republic of Tajikistan of November 25, 1998, No. 1872 "On Investment Activities in the Republic of Tatarstan". Forms of state support for investors in Tajikistan are:

- Microfinance loan;
- Leasing-Grant (subsidizing the costs of payment of the first installment

Under the contract of equipment leasing);

- "50 to 50" (subsidizing part of the costs of business entities associated with the acquisition of equipment);
- Factoring (financing of business from 12% with the service of factoring);
- Compensation of the entrepreneur's expenses for the payment of training;
- Organization of participation of entrepreneurs in exhibitions;
- Preferential rent of office premises (Business incubator);
- Assistance in the certification of export products;
- Marketing research of exporters;
- subsidizing the costs associated with the conversion of vehicles to gas engine fuel;
- Subsidizing the costs associated with plant growing, with the acquisition of seeds;
- Subsidizing costs associated with liming, melioration of soil, with the maintenance of cellular fur-bearing animals, maintenance of pedigree cattle breeding;
- Subsidizing costs to start-up farmers;
- Tax privileges and customs preferences;
- Guarantee of the Guarantee Fund of the Republic of Tatarstan:
- Compensation of a part of the interest rate for the use of bank loans;
- Competition "50 best innovative ideas for the Republic of Tatarstan:
- The program of innovative projects "Idea 1000";
- The grant of the Government of the Republic of Tatarstan "Algarysh";
- Insurance of agricultural activities;

- Support of small and medium-sized enterprises, engaged in the development and implementation of innovative products;
- Subsidizing the costs of entrepreneurs on payment for technological connection to power grid facilities, energysaving measures, as well as conducting energy surveys, etc.

#### 4 Conclusions

The result of the functioning of these institutes is the 6th place of RT among the constituent entities of the Russian Federation in terms of gross regional product, the 4th place in terms of investment in fixed assets, the 5th place in terms of industrial production and construction, and the 3rd place in terms of the level of agricultural development (pokazateli, 2017). Dynamics of the values of regional development indicators are presented in Table 2

Table 2. Dynamics of investment performance indicators in the Republic of Tatarstan

Indicator	2015 г.	2016 г.	2017 г.
GRP, bln. rub.	1833,2	1944,1	2115,5
In comparable prices in% to the previous year	100,0	102,5	102,8
Volume of investments in the fixed capital of the Republic of Tatarstan, bln. rub.	617,2	642,5	617,0
In comparable prices in% to the previous year	100,0	100,0	100,0
Labor productivity in the RT, thousand rubles. for one worker	1014,2	1075,9	996,4
In comparable prices in% to the previous year	100,5	102,9	100,0
Depreciation of fixed assets of industrial enterprises of the Republic of Tajikistan,%	50,0	48,0	45,0
Coefficient of renewal of fixed assets,%	12,8	10,1	-

#### 5 Summary

So, the results of theoretical and empirical studies show that the institutional entrepreneurship of the executive authorities of the Republic of Tatarstan and non-profit organizations that support entrepreneurs implementing investments, provides the movement of the regional development vector in an oblique way. However, the cyclic development of the domestic economy, socio-cultural changes that affect the consciousness of modern business executives; the political regulation of international relations in the field of economy, the nature and level of competition, as well as the dynamics of the macroeconomic indicators of the region and the country as a whole determine the need to search for new ways and existing reserves for improving the investment climate in the region as a block of the country's economic development program.

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#### IMPROVEMENT OF BUSINESS PROCESS "DELIVERY"

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Abstract: The tasks of modern companies, involved in trade and service, require mobile solutions in order to automate operations. The development of mobile platform is the priority direction of the modern information systems, because it makes a tangible contribution to the automation of business processes. An employee, working on the road and having a mobile solution, will cope with the task more quickly. He does not need to get to his workplace, in order to enter data into the information base, and view the necessary information, for example, rests in folds and drawing up documents. The following methods for the research of enterprise's activity were defined: the method of comparative analysis, technological approach to business process reengineering. Such methodologies as IDEF0, IDEF3, and WFD were implemented for business processes description. The purpose of the projected information system is the automation of activities, aimed at delivering employees, serving the company, to the client. The defining of subsystems in the information system, using the process-task approach, should be based on business processes. This solution will increase the economic efficiency of information system.

At the moment, there are a large number of companies in the market, which develop

At the moment, there are a large number of companies in the market, which develop mobile solutions, based on 1C: Enterprise. They are the following: Agent Plus, FirstBIT, Agent 5 and others. Despite this, the firms often need special functionality.

Keywords: business process, information system, business process "Delivery", 1C: Enterprise, corporate information system.

#### 1 Introduction

The mobile solution can not completely replace the functionality of the desktop version, but there are many employees on the firms, who do not have full access to all the functionality of the information system, and who spend most of the time on the road, such as couriers, support staff, drivers, etc. These employees can spend a large amount of time and money to get to their workplace, at the beginning and at end of each working day. It can also be noted, that the timely input of data via a mobile device can increase the information content of the company, because the information base will consistently receive data on shipped goods, generated transactions and delivered employees. Thus, the rest of the firm's employees will have more accurate information about stock balances, work done, etc. And this is not the full capabilities of the mobile platform (Eremina, 2015).

#### 2 Methodology

The main task of the CIS is the effective management of all the company's resources (material, technical, financial, technological and intellectual) in order to maximize profits, meet the material and professional needs of all employees of the enterprise.

The Corporate Information System in its composition is a set of different software and hardware platforms, universal and specialized applications of various developers, integrated into a single information-homogeneous system, which solves the unique task of each particular enterprise in the best possible way. That is, the corporate information system is a human-machine system, and a tool for supporting the intellectual activity of a person, who should be able to:

- Accumulate certain experience and formal knowledge;
- Continually improve and develop;
- Quickly adapt to the changing conditions of the external environment and the new needs of the enterprise.

Complex automation of the enterprise implies the transfer to the plane of computer technologies of all the main business processes of the organization. And the use of special software, which provides information support for business processes, as the basis of the Corporate Information System, is most justified and effective. Modern business management systems allow to integrate various software, forming a single information system. This solves the problems of coordination the activities of employees and units, providing them with the necessary

information, and controlling the performance discipline. At the same time, management gets timely access to reliable data on the progress of the production process, and has the means to promptly adopt and implement their decisions. And, most importantly, the obtained automated complex is a flexible open structure, which can be reconstructed on the fly, and supplemented with new modules or external software (Eremina, 2014).

If we are talking about a company, where employees often have to work on the road, even with a full-time driver, very often there may be a problem in which the driver can be overworked or vice versa. To facilitate the work, it is possible to add functionality to the operational configuration for entering information by employees about the time and place, where they must arrive, to perform their work duties, as well as output information to the report of the driver, for easy viewing of applications. But here is a problem, which consists in the need for the driver to regularly review information about new applications for the delivery of employees. Every day the driver has to get to his workplace, to view the report on the necessary deliveries, and at the end of the day, he must to enter the information about the work done. If information is available at the beginning of the day via a mobile device, the driver could immediately obtain the necessary information and start working without unnecessary time and resources (Eremina, et al, 2014; Metlenkov, 2018).

The industry of development of automated information management systems was created in the 50's - 60's of the last century on the computers of the first and second generations, and by the end of the century it had acquired completely finished forms. The materials of this manual are the generalization of a series of lectures on Automated Banking Systems (ABS) and Automated Process Control System (APCS) from the Bauman Moscow State Technical University (Eremina & Faizullina, 2016; Villalobos Antúnez, 2016).

Today, two main entities can be identified in the market of automated systems for large corporations and financial-industrial groups: the market of automated banking systems (ABS) and the information systems market of industrial enterprises. Despite the strong interconnection of these two markets of automation systems, the solutions, proposed for them, are not yet sufficiently integrated among themselves. It should be expected in the near future (Eremina, 2016).

#### 3 Results and Discussion

The mobile application, installed on the device, is a collection of mobile platform and information base. The information base on the mobile device contains an analogue of the file database (for storing the data, with which the user works) and a mobile application (program code, running on the mobile device) (Egorshin, 2003).

For automation of BP "Delivery" it would be correct to take a decision on the completion of the functional 1C. With the help of the application for a car, employees will be able to leave an order for a specific date and time. The application specifies the client, the beginning and the end of the event. The description, participants and territory are added. Further, all these orders are formed in the report for the driver, where he can see the list of tasks in chronological order, indicating the territory, participants, etc. Also, in order that the driver does not have to go to his workplace every time and find out the list of requests for delivery, a special configuration will be written on the mobile platform 1C: Enterprise 8. It will exchange data with the central database.

Fig 1 shows the algorithm for solving the task "Application for a car":

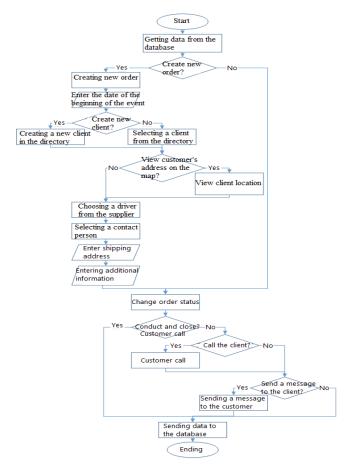


Fig 1. Algorithm for solving the problem

To begin with, you justify the choice of the development environment. According to the experts, now the market for development tools is shifting from specific programs, providing development (compilers, IDE, profilers, etc.), to the systems, which support the entire development life cycle. Put it bluntly, the suppliers tend to invest in their complexes all the tools, necessary for the team of developers, or to ensure convenient connection of other available means. Of course, this is a difficult task, and in its entirety it is almost impossible to solve.

1C: Enterprise, as a subject-oriented development environment, has certain advantages. Since the range of tasks is more precisely delineated, then a set of tools and technologies can be selected with greater certainty. The task of the platform is to provide the developer with an integrated set of tools, necessary for the rapid development, distribution and support of an application solution for business automation. At the same time, individual "details" may be inferior in functionality to universal development tools, and specialized life cycle management tools, used by developers. However, the effect is achieved through the common set of tools and their close integration.

1C: Enterprise platform contains the tools for performing the tasks, such as visual description of data structures, writing program code, visual description of queries, visual description of interface, description of reports, debugging of program code, profiling. It consists of: advanced help system, role-based rights setting mechanism, distribution tools, remote application updates, application comparison and integration, logging and application diagnostics, Web applications and applications for PDAs, support for team development, versioning, etc. Of course, the list of tools, necessary for supporting the life cycle, is not exhaustive, and we have much to develop. For example, in the near future we plan to supply testing management tools (functional and load). By the way, they are created on the platform 1C: Enterprise (Romashova, 2011).

The development in 1C: Enterprise is built on the basis of the general application model, offered by the platform "without fail", i.e. the main and most complex architectural and technological solutions (such as the mechanism of the three-level architecture, the interaction of components, user authentication, etc.) are offered to developers in the finished form.

Also, it should be said about the mobile platform 1C. The mobile platform 1C: Enterprises is a set of tools and technologies for rapid development of applications for mobile operating system iOS, Android, Windows Phone/8.1/10, using the same development environment (configurator) and the same development techniques, which are applied for "ordinary" applications 1C. As a result, offline applications are obtained, but with the ability to exchange information with the outside world, using a wide range of integration tools, provided by the platform: Web and HTTP-services, e-mail, etc. Since the exchange protocols are platform-independent, 1C mobile platform, among other things, is a means of quickly creating a mobile front-end for almost any server solution.

A ready-made solution is a rework for the configuration of 1C and a mobile application. Figure 2 shows the main menu of the mobile application.



Fig 2. Main Menu

To synchronize the data with the database, you must click the "Synchronize data" button. If the synchronization succeeds, the window will appear, shown in Figure 3.



Fig 3. Synchronization

In the "Clients" tab you can see a list of all clients and detailed information about them. You can call them, send sms, and see their location on the map (Figures 4-5).

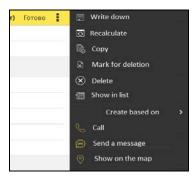


Fig 4. Additional functions



Fig 5. Additional functions

The finished report is located on the tab "Report for the driver" and looks like this (Figure 6).

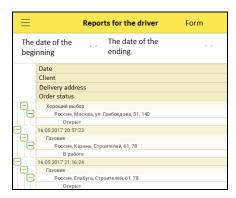


Fig 6. Report for the driver

#### 4 Summary

The organization of business in the modern world increasingly requires the presence of remote users' access to data, and functionality of systems, in order to manage the economic activities of the enterprise.

It can be managers and various executives, who need, without being in the office, to review some important reports and documents quickly, for example, using the smartphone on the way to the meeting (Pletnev & Nikolaeva, 2015).

On the other hand, more and more ordinary employees work on the road with customers - couriers of online stores, sales agents, etc. They should be able to add to the main base the results of their activities quickly (for example, new orders), so that the office does not waited for their return. From the office they can also get some data (documents, reports), which they need in their work

At the same time, such employees do not need access to a fully functional version of 1C: Enterprise. They only need to have a mobile device (smartphone or tablet), with which they will have a limited range of tasks.

#### 5 Conclusions

The developed application can essentially facilitate the work of employees. By eliminating unnecessary elements in the work, it saves time and money for the company.

Mobile platform – is a special technology, which allows to create applications, running on Android or iOS mobile devices (smartphones or tablet PCs).

The mobile application, installed on the device, contains the mobile platform and information base. In turn, the information base includes an analogue of the file information database, intended for storing user data, and mobile application, i.e. the program code, running on the mobile device.

#### Acknowledgements

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#### PERSPECTIVES OF TAX CONTROL DEVELOPMENT FOR INDIVIDUALS IN RUSSIA

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Abstract: The article is devoted to the basics of organizing and conducting tax control over individuals in Russia. The authors clearly presented and analyzed data on the number of individual entrepreneurs registered with the tax authorities for the period 2012-2015. In addition, the volume of additional taxes as a result of conducted on-site tax inspections was calculated and analyzed. Based on the complex analysis carried out by the authors, problems encountered in the process of organizing tax control over individuals were identified, and ways of their solution were suggested. Rational application of proposed improvement directions in practice should help not only to increase tax revenues in budget revenues, but also to increase the discipline and legal culture of taxpayers - individuals.

Keywords: tax, taxation, tax inspection, individuals, entrepreneur, tax control

#### 1 Introduction

International relations, constant changes and transformations in state policy caused by economic reasons, such as economic crises, inflation, as well as other phenomena that lead to instability, can become a serious obstacle to the timely and full receipt of tax payments to the budget. On this basis, the state establishes special bodies responsible for monitoring taxpayers, not only to control the payment of these payments, but also to ensure compliance with tax legislation in general. The need for fiscal control is also evident in the disparity between the interests of taxpayers and the state: the taxpayers do not will to give a part of their income to the state, and it, in turn, tends to fill up the budget with the tax payments. There are three categories of taxpayers: legal entities, physical entities (individuals) and unincorporated private entrepreneurs. Each category pays the taxes specified in the Tax Code of the Russian Federation - the law regulating tax legal matters and taxes.

Tax control is one of the most important areas of tax administration: the organization of control over the tax system which today is one of the most powerful levers for state regulation of socio-economic development.

Tax control in Russia is carried out by specially authorized executive bodies with the help of various forms, methods and techniques, but the tax system of the Russian Federation requires new technologies for the implementation of tax control. Therefore, various studies are conducted continuously to find out the reasons for the ineffectiveness of tax control and the search for ways on its development.

#### 2 Methodology

Tax inspections are one of the most frequently used and effective forms of tax control, which tax authorities resort to in their control activities both for legal entities and for individuals, since it is in tax inspections that the tax authorities' relations with taxpayers are best manifested. Tax inspections can be cameral and on site. If the criterion of effectiveness is taken as a basis for comparison, then the choice will be in favor of on-site tax inspections, since they have more opportunities to identify violations and assess additional tax liabilities, while such checks can additionally involve experts, interpreters, eye-witnesses, and attesting witnesses.

Tax control is impossible without tax registration of taxpayers. When its registering, information on each taxpayer is entered in the database of the Unified State Register of Taxpayers, and the identification number of the taxpayer is assigned to it. According to the Tax Code of the Russian Federation, all individuals must be registered for tax purposes, regardless of whether they are taxpayers or not. The content of tax accounting data, including the data of primary documents, is a tax secret. Persons who have access to the information contained in these fiscal records must keep a tax secret, as stated in Article 102 of the Tax Code of the Russian Federation. Most often, the tax activity is exercised in regard to individuals engaged in entrepreneurial activities. Also Article 103 of the Tax Code of the Russian Federation says that when conducting tax control, it is not allowed to inflict undue harm on the persons under inspection, and on the property in their possession (The Tax Code of the Russian Federation, 2016).

Let us consider how many individual entrepreneurs were registered on the basis of information from the Unified State Register of Individual Entrepreneurs in Russia.

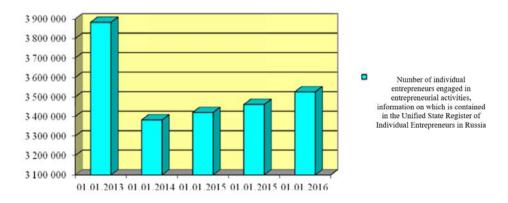


Fig 1. Number of individual entrepreneurs engaged in entrepreneurial activities, information on which is contained in the Unified State Register of Individual Entrepreneurs in Russia

Figure 1 shows a sharp decline in the number of entrepreneurs from 2013 to 2014: from 3,882,225 to 3,382,063. This decrease is mainly due to their deregistration in connection with the termination of activities which is associated with a sharp increase in insurance premiums. By 01.04.2016, there was a slight increase, and the number of individual entrepreneurs was 3,526,213. Individual entrepreneurs are a special category of taxpayers who are individuals, but which combine certain features of legal entities. Their incomes are often much higher

than the incomes of ordinary individuals, however, it is easier to control them than controlling organizations. Therefore, the state should support small and medium-sized businesses represented by entrepreneurs and promote their growth, rather than take actions that lead to the cessation of their activities: today in Russia this is one of the most urgent problems in the economic sphere. The number of conducted on-site inspections of individuals and separately individual entrepreneurs and their effectiveness will be discussed below.

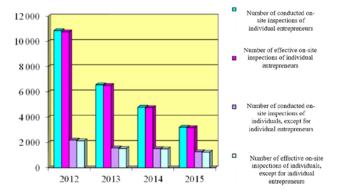


Fig 2. Ratio of the number of on-site inspections of individual entrepreneurs and individuals and their performance in Russia (Federal Tax Service of the Russian Federation [Digital source]: Statistics and analytics. 2015)

Figure 2 shows the ratio of the number of conducted on-site tax inspections to individuals who are individual entrepreneurs, as well as individuals, with the exception of individual entrepreneurs and the number of them that have revealed violations during the period from 2012 to 2015 in Russia. The figure clearly shows that on-site inspections of individual entrepreneurs are conducted much more often than just of individuals. Similarly, the conclusion that can be made immediately by analyzing the data is that every year the number of tax inspections is reduced, this is due to the fact that the tax authorities have begun to conduct a pre-test analysis before assigning an on-site inspection more carefully. In 2012, 10,857

inspections of entrepreneurs were carried out, of which 10 749 were identified for incidents, in 2013 - 6,566 and 6,508, and in 2014 - 4,787 and 4,749, respectively. Speaking about on-site inspections in 2015, that year, there were 3 201 inspections, 3,171 of which were effective. As for non-entrepreneurs, the number of conducted on-site inspections of them and the number of carried out effective inspections of them amounted to 2,183 and 2,133 in 2012, 1,560 and 1,517 in 2013, 1,512 and 1 in 2014 487, and in 2015 the number of inspections fell to 1,296, but almost all of them were effective, namely 1,228 of them. Below are the data on the amounts of additional payments due to the results of on-site inspections of individuals.

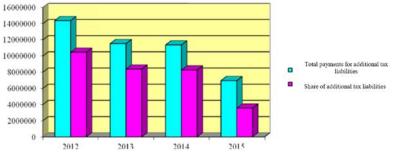


Fig 3. The amount of additional payments as a result of conducting on- site tax inspections of individuals in Russia (Federal Tax Service of the Russian Federation, 2015)

Figure 3 shows the amount of additional payments, including penalties and surcharges, and the share of taxes in this amount based on the results of on-site inspections in Russia for 2012-2015. It is seen that the bulk of these additional charges has been formed due to additionally charged tax payments. In 2012, the share of all additional payments amounted to 14,369 million rubles, of which taxes were 10,472 million rubles. In 2013, these indicators decreased to 11,529 and 8,391 million rubles, in 2014 there was also a slight decline - to 11,364 million rubles and 8,267 million rubles, respectively. In 2015, the share of additional payments amounted to 6,954 million rubles, of which taxes amounted to 3,562 million rubles.

#### 3 Results and their discussion

The existing tax system of Russia needs to be reformed. Every year the state issues new laws, introduces amendments to the legislation, with a view to eliminating imperfections in the taxation system. Constant improvement of the mechanism for collecting debts by the tax authority allows improving the efficiency of inspections in the near future, which in turn will contribute to improving the economic well-being and financial security of the state.

High mobility inherent in individuals who are the main payers of taxes that bring considerable profitability to the budgetary system of the Russian Federation requires effective organization of tax control over them. The tax control also includes control over the expenses of individuals for the acquisition of: real estate, with the exception of perennial plantations; motor vehicles not related to real estate; shares of open joint-stock companies, cultural values; gold bullions. The main method of tax control over the expenses of a person is informing the tax authorities by organizations or authorized persons registering property, deal with it, as well as with the property rights. Such control is carried out with the goal of checking the compliance of the expenses incurred with the incomes received by an individual. The development of tax control can be considered through parallel development of its forms, methods, ways of conducting it.

The main directions of the inspection activities of the tax authorities for 2014-2017 are presented in Figure 4, and some of them, in our view, merit a special attention.

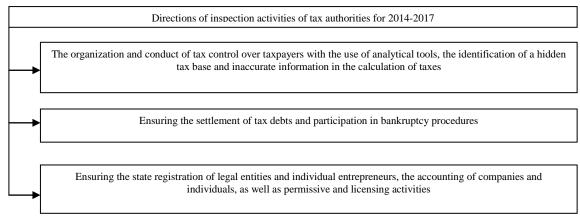


Fig 4. Directions of control activities of tax authorities for 2014-2017, as determined by the Report of the Federal Tax Service of Russia on the results and main directions of activity for 2014-2017 (Federal Tax Service of the Russian Federation, 2014). Report of the Federal Tax Service "On the results and main directions of activity for 2014-2017". - The official site of the Federal Tax Service, 2015)

Among other measures to improve tax administration for 2015-2018, the report has identified the need for legislative regulation of some practical issues relating to individuals:

- Clarification of certain powers of tax authorities in the collection of taxes, including the provision to the tax authorities of the right to suspend or resume the effective period of the order to write-off and transfer to the budget system of the Russian Federation, and also to withdraw their unfulfilled orders;
- Clarify the responsibilities of bodies that perform migration registration of individuals at their dwelling place or place of residence, register acts of civil status of individuals, report to the tax authorities on the facts of registration of an individual at the place of residence, migration registering and migration deregistering at the place of residence of a foreign employee, the facts of the birth and death of individuals:
- Establishment of the obligation of individual entrepreneurs to report to the tax authorities the information on the conclusion, termination of contracts of a simple partnership, and on the parties to these contracts.

#### 4 Conclusions

Thus, at the present stage of the development of the tax control system, it is necessary to note the existence of some shortcomings that can be systematized into two levels: internal and external. At the same time, as a matter of internal shortcomings, it is necessary to highlight problems that are related to the work of the tax authorities themselves. External problems, in turn, are made up of objective circumstances, which include technical and legal problems: the existence of legal conflicts in the norms of tax law and in the norms of other branches of law; Insufficiently precise regulation of control measures, as well as judgmental shortcomings, the lack of rapid communication between government departments for the rapid receipt of information, and, of course, the low legal culture of citizens plays a significant role in committing tax crimes. As for possible problems that may arise in the tax control system in connection with the Russian economy's orientation towards supporting innovation activity, it is necessary to note the problem of shortening the timeframes for implementing control measures, provided that they are carried out qualitatively. Areas for improving these deficiencies are important and steps are necessary to achieve the goal of a transparent and efficient tax system that ensures receipt of tax revenues to budgets with maximum respect for the rights and interests of taxpayers. The organization of measures to overcome the above-mentioned shortcomings is possible using the experience of foreign countries, which should be comprehensive, taking into account the specifics of the Russian economy. It should be noted that the procedure for selection of taxpayers and the relationship between tax authorities and taxpayers are studied by many scientists such as (Alm et al, 2010; Alm & McKee, 2004; Li et

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#### 5 Summary

Based on the results of the study and the problems identified, we propose the following ways to improve tax control over individuals in Russia:

- Due to the lack of control over the expenses of individuals, we consider it expedient to develop a special procedure for determining the tax liabilities of individuals on the basis of their expenses and generalized indicators of the standard of living.
- The transition to full electronic interaction between tax authorities and taxpayers of individuals and individual entrepreneurs is proposed, which will save time for taxpayers and employees of tax authorities when carrying out tax control measures, as well as reducing mistakes made by payers in completing declarations.
- Toughen the tax control over individual entrepreneurs using cash registers by increasing the liability for its absence (failure to use cash registers) in order to ensure the timely and full recording and receipt of the proceeds of individual entrepreneurs.

The practical application of the proposed directions for tax control over individuals in Russia should help not only to increase revenues from tax payments, but also to increase the discipline and legal culture of taxpayers - individuals.

#### Acknowledgements

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# DEVELOPMENT STABILITY OF THE SKULL OF TWO RODENT SPECIES (MAMMALIA, RODENTIA) IN ANTHROPOGENIC AND THE ENVIRONMENT OF CENTRAL CAUCASUS MOUNTAINS

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Abstract. For assessment of individual developmental stability in two species – A. uralensis and M. musculus under different ecologic-geographical conditions of the Central Caucasus the levels of fluctuating asymmetry of skull phenes expression in 4 samples for each species were studied. Impact of both anthropogenic pollution and a complex of environment conditions concerning locality altitude, was also studied. It is revealed that M. musculus as compared with A. uralensis, is characterized by the increased level of fluctuating asymmetry suggesting that the impact on M. musculus sampling is more smoothed because of the species dwelling in human houses. Anthropogenic pollution (pollution by agrocenosis pollutants) is the leading destabilization factor of the skull development in both species. In natural ecosystems weak positive correlation between the increase of asymmetry level and temperature lowering in middle mountains is revealed in M. musculus; positive correlation between the increase of asymmetry level and increase of environment humidity is also revealed in A. uralensis

 $Keywords: A. \ uralensis, \ M. \ musculus, \ non-metric \ bilateral \ skull \ characters, \ the fluctuating asymmetry, correlation and factor analyses, Central Caucasus.$ 

#### 1 Introduction

Increase in the general anthropogenic load of the environment leads to essential change of habitation conditions. In this regard studying of the state of populations of the live organisms which are under the anthropogenic impact and also the research of processes of adaptations is important as live organisms bear the maximum information on their habitats. Similar researches are especially important in the conditions of mountain territories owing to specific conditions and fragility of mountain ecosystems. In most regions of the Central Caucasus the agricultural transformation of territories connected with use of inorganic fertilizers and pesticides acts as the main form of anthropogenic activity as dictates need of control of results of anthropogenic influence.

For assessment of a condition of natural populations the method of assessment of stability of development in the size of indicators of the fluctuating asymmetry of morphological features is widely used (Baranov, 2003).

The fluctuating asymmetry is shown in the insignificant not directed differences between the parties which have no independent adaptive value and don't exert notable impact on viability of individuals. Level of the fluctuating asymmetry increases at a deviation of parameters of the environment from optimum conditions that gives the chance of detection of the populations living in the adverse environment.

The analysis of publications shows that the results received when studying influence of stress factors on level of the fluctuating asymmetry are contradictory. So according to a number of authors this indicator increases at stressful influences (Shadrina et al., 2003; Vasilyeva et al., 2003; Yalkovskaya et al., 2016; Parsons, 1990; Moller, Pomiankowski, 1993; Oleksyk et al., 2004; Øxnevad et al., 2002) whereas the similar effect isn't found by other researchers (Gileva, Kosareva, 1995; Gileva,

Nokhrin, 2001; Owen, McBee, 1990; Kellner, Alford, 2003; McCov, Harris, 2003).

So, we have shown comparison of levels of the fluctuating asymmetry of craniological measurements at house mice from seven localities of Sverdlovsk region with the different level of technogenic pollution that any of the studied craniological characters from the polluted territories doesn't find growth of the fluctuating asymmetry in mice (Gileva, 1997). The analysis of not metric signs of a skull of the pygmy wood mouse occupying in zones of the East Ural radioactive trace is pointed, on the contrary, to increase of the FAnm index at young females of impacting samples in comparison with control whereas at adult females his decrease is noted. With age in impacting sites authors connect decrease in FAnm with more intensive rejection of asymmetric animals in zone EURT (Vasilyeva et al., 2003).

In this regard the research of reaction of two species, widely widespread and numerous in Central Caucasus – pygmy wood mouse (Apodemus uralensis Pallas, 1811) and the house mouse (Mus musculus Linnaeus, 1758) on action as the natural factors connected with area height and anthropogenic factors is of special interest.Research objective – to compare stability of skull development of two species of rodents which are widely extended in the Caucasus, one of whom synantropic, a house mouse (Mus musculus), the second – the pygmy wood mouse (Apodemus uralensis) living under natural conditions middle mountains and highlands in anthropogenic and an environment of Central Caucasus.

#### 2 Methodology

Material by both types gathered at the same time in the same years on Central Caucasus Mountains: middle mountains – the surrounding item Elbrus (1800 m above sea-level), the foothills – the surrounding village of Bedyk (950 m above sea-level), the surrounding village of Psynadakha (700 m above sea-level), surrounding Nalchik (550 m above sea-level). Vicinities of the item Elbrus and Nalchik belong to natural biotopes, and the surrounding villages of Bedyk and Psynadakha to anthropogenic (a biotope near agrocenosis) (fig. 1).



Fig. 1. Sites of sampling: 1 –environs of Elbrus village; 2 – environs of Bedyk village; 3 – environs of Psynadakha village; 4 – environs of Nalchik town.

Some physiographic characteristics of points of origin of material are provided in tab. 1.

Table 1. Some physiographic, climatic characteristics of places of origin of material on small forest and house mice on Central Caucasus Mountains

Material origin place	Above sea height, m	Average yearly temperature, $^{0}C$	Average annual quantity of rainfall, mm	Gamma noise, μSv/h
1.	niddle mountai	ns (1001-2000 m abo	ve sea-level)	
Surrounding     p. Elbrus	1800	3.8	917	0.20
foothills (200-1000 m above sea-level)				
Surrounding     v. Bedyk	950	7.9	785	0.22
Surrounding     v. Psynadakha	700	8.6	630	0.17
Surrounding     c. Nalchik	550	9.6	724	0.17

It is visible that gamma background level in all studied areas low (less than  $0.5 \mu Sv/h$ ) and in the annex to the person is considered as normal, not defiant pathological changes in an organism.

In work adult animals whose relative age was determined by abrasion of molars were used. The volume of the studied material was on a small forest mouse -264, and on a house mouse -192 copies of skulls of small animals.

The most part of the phenes used in work is taken from references (Vasilyev, etc., 1996; Sands, Yemelyanov, 2000; Vasilyeva, etc., 2003). The latin system of coding of phenes developed by I.A. Vasilyeva is assumed as a basis (Vasilyev, Vasyleva, 2009).

Communication of manifestation of phenes with a sex, age, with each other estimated on the basis of calculation of nonparametric coefficients of correlation of Spirmen then a small part of the signs which are strongly correlated with the specified factors was excluded from the further analysis (Vasilyev, 2005). By each look the analysis was carried out on 33 not metric signs of a skull

However a part of the signs characteristic of a small forest mouse had other condition of sign at a house mouse, coincidence is noted on 21 signs from 33. The list of 33 signs is provided in fig. 2.

For assessment of level of the fluctuating asymmetry counted the average population index of the fluctuating asymmetry of S.E. as an average share of bilateral asymmetric manifestations of the hair dryer on sign at different individuals (Zakharov, 1987; Markowski, 1993).

Data processing was carried out by means of the PHEN 3.0 program (Vasilyev, 1995), by PAST (Hummer et al., 2001) and Statistics 10 programs. The importance of differences between selections was estimated by means of a method of nonparametric statistics of Kraskela-Wallice which is similar to the one-factorial dispersive analysis (Vasilyev, 2005).

For identification of influence of factors used the multiple-factor dispersive analysis (ANOVA). Existence of communication was established with use of the nonparametric correlation analysis (Nonparametrics, Gamma).

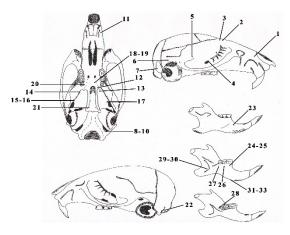


Fig. 2. An arrangement of phenes of not metric signs on a skull of a small forest mouse: 1 - the doubled preorbital opening (FPodu); 2 - an additional frontal opening ahead of main (FFracan); 3 – lack of a frontal opening (FFracan (-)); 4 – single orbital opening (FIO); 5 - single forward opening of a scaly bone (FTmacan); 6 - single opening of the temporal course (MeTm); 7 – lack of a window on a mastoidal bone (FeMs (-)); 8 - single hypoglossal opening (FHg); 9 - the trebled hypoglossal opening (FHgtr); 10 - side hypoglossal opening (FHgla); 11 forward side maxillary opening (FPmla); 12 - a single opening in the basis of a wing-shaped shoot (FPT); 13 - the doubled opening in a wing-shaped pole (FRTI); 14 - single additional round opening (FPD); 15 - the doubled opening on a partition between oval and round openings (FLTIdu); 16 - the trebled opening on a partition between oval and round openings (FLTItr); 17 - an additional opening in the field of an oval opening from the ventral party in a wing-shaped pole (Fasac); 18 - single additional palatal opening (FPI); 19 - more than three openings on a palatal bone ((FPlmx)); 20 - a single small opening at the M3 level (FPLmn); 21 - side openings on the ventral surface of the main wedge-shaped bone (FBsla); 22 multiple openings on an occipital bone in pole (FFsOc(mx)); 23 - an additional subchin opening ahead of main (FMTA); 24 - a single opening from lingval side of an alveolus of M1 (FMtlg); 25 – the doubled opening from lingval side of an alveolus of M1 (FMtlgdu); 26 - a single opening from lingual side of an alveolus of Sq.m (FMblg); 27 - the doubled opening from lingval side of an alveolus of M3 (FMblgpodu); 28 – the doubled opening in the Sq.m area on an internal surface (FPCdu (M2)); 29 – the doubled additional opening in a wing-shaped pole of the lower jaw (in connection-angular cutting) (FMbmst); 30 - more than three additional openings in a wing-shaped pole of the lower jaw (connection-angular cutting) (FMbmst(mx)); 31 - a single opening on "body" of the lower jaw (FOM); 32 - the doubled opening on "body" of the lower jaw (FOMdu); 33 more than three openings on "body" of the lower jaw (FOMtr).

#### 3 Results and Discussion

The lack of significant sexual distinctions when comparing level of the fluctuating asymmetry at both types has allowed uniting the corresponding selections of males and females for the further analysis.

For the purpose of identification of trans-species distinctions, without imposing of influence of various conditions of dwelling comparison is carried out by Kruskal-Wallis test for equal medians method of selections of small forest and house mice of the same habitats. Comparison has revealed reliable intergroup distinctions at multiple comparison (Nanosecond =40.83; d.f. =7; p <0.0001). Apparently from the table 2 the range of variation of the average level of the fluctuating asymmetry at a forest mouse (23.5-28.4) is wider at lower maximum value, than at house (27.1-30.2) that is confirmed by variability of coefficient of a variation.

 $Table\ 2.\ Levels\ of\ the\ fluctuating\ asymmetry\ (S.E.,\ \%)\ in\ populations\ of\ small\ forest\ and\ house\ mice\ of\ Central\ Caucasus\ Mountains$ 

	Selection	N	S.E.	CV%		
	small forest mouse					
1.	Surrounding p. Elbrus	122	$24.2 \pm 0.69$	31.6		
2.	Surrounding v. Bedyk	54	$26.8 \pm 1.04$	28.6		
3.	Surrounding v. Psynadakha	47	$28.4 \pm 1.41$	34.0		
4.	Surrounding c. Nalchik	41	$23.5 \pm 1.62$	44.2		
	house n	nouse				
5.	Surrounding p. Elbrus	51	30.2±0.85	20.1		
6.	Surrounding v. Bedyk	50	26.5±1.02	27.2		
7.	Surrounding v. Psynadakha	49	29.6±0.97	23.0		
8.	Surrounding c. Nalchik	42	27.1±1.31	31.3		

Note: N – volume of selections, S.E. – a standard mistake, CV, % – variation coefficient

When comparing selections of the house and forest mice coming from the same geographical points taking into account height of the area it is revealed that the level of the fluctuating asymmetry practically in all selections of house mice above, than at forest, however, reliable trans-species distinctions have been found only in middle mountains (item Elbrus) (tab. 2, 3).

Table 3. Assessment of the importance of differences on the level of the fluctuating asymmetry between selections of A. uralensis and M. musculus of Central Caucasus Mountains (Tuuki-Kramer's test). The top triangular matrix – values of probabilities of p), and the lower triangular matrix – values of the posteriori pair Q-test of Tuuki-Kramer

Selection		small forest mouse			house mouse			
Selection	1	2	3	4	5	6	7	8
1		ns	ns	ns	***	ns	**	ns
2	2.40		ns	ns	ns	ns	ns	ns
3	3.82	1.42		*	ns	ns	ns	ns
4	0.61	3.01	4.43		***	ns	***	ns
5	5.42	3.02	1.61	6.04		ns	ns	ns
6	2.06	0.34	1.76	2.68	3.36		ns	ns
7	4.94	2.54	1.12	5.55	0.49	2.87		ns
8	2.66	0.26	1.16	3.27	2.77	0.59	2.28	

Note: Small forest mouse: 1. surrounding item Elbrus, 2. surrounding village of Bedyk, 3. surrounding village of Psynadakha, 4. surrounding Nalchik; House mouse: 5. surrounding item Elbrus, 6. surrounding village of Bedyk, 7. surrounding village of Psynadakha, 8. surrounding Nalchik. Significance value of intergroup distinctions: \*p <0.05; \*\*p &lt;0.01; \*\*\*p &lt;0.001.

The following stage for realization of a goal has carried out the correlation analysis for identification of communication of variability of the fluctuating asymmetry with a number of physiographic factors of the environment and existence of anthropogenic influence (pollution by pesticides) in the conditions of agrocenosis.

Assessment of communication of stability of skull development of small forest and house mice with natural and anthropogenic factors of the environment. Existence of communication was established with use of the nonparametric correlation analysis. The fluctuating asymmetry (tab. 2) increases among: at a small forest mouse – 1. Nalchik; 2. Elbrus, 3. Bedyk, 4. Psynadakha; at a house mouse – 1. Bedyk, 2. Nalchik, 3. Psynadakhaa, 4. Elbrus.

Connection of S.E. with temperature of habitats (tab. 4) is established weak correlation for a house mouse, the fluctuating asymmetry of a skull of a look is higher in middle mountains, i.e. at the difference of heights more than 800 m above sea-level.

Table 4. Correlation of the fluctuating asymmetry of a skull of mouse-like rodents with a habitat temperature in the conditions of Central Caucasus Mountains.

Specie	N	Gamma - correlation	p-level
House mouse	151	0.39	0.000
Small forest mouse	96	0.06	0.414

Connection of S.E. with humidity of habitats (tab. 5) is established weak correlation only for a forest mouse, the fluctuating asymmetry of a skull of a look is higher in the middle mountains which are characterized by the maximum humidity (tab. 1).

Table 5. Correlation of the fluctuating asymmetry of a skull of mouse-like rodents with humidity of the habitat in the conditions of Central Caucasus Mountains.

Specie	N	Gamma - correlation	p-level
House mouse	151	0.041	0.452
Small forest mouse	96	0.25	0.000

Connection of S.E. with anthropogenic loading (pollution by pesticides) in places of dwelling (tab. 6) is established for both species of rodents

Table 6. Correlation of the fluctuating asymmetry of a skull of mouse-like rodents from anthropogenic loading (pollution by pesticides) in habitats in the Central Caucasus

Specie	N	Gamma - correlation	p-level
House mouse	151	0.48	0.000
Small forest mouse	96	1.00	0.000

However at a house mouse correlation of S.E. with an anthropogenic factor average while the maximum value of the S.E. level is noted under natural conditions (the surrounding item Elbrus). At a small forest mouse dependence of stability of skull development on existence of anthropogenic loading absolute, the asymmetry of a skull is higher in the conditions of agrocenosis (the surrounding village of Psynadakha and the item Bedyk).

For specification of the revealed correlation of asymmetry with high-rise and anthropogenic factors the two-factor dispersive analysis (tab. 7) has been carried out. Significant communication

of level of the fluctuating asymmetry with a factor "anthropogenic influence" whereas "look" and a combination of these two factors don't exert significant impact is revealed.

Table 7. Results of the two-factor dispersive analysis of influence of factors "look" and "anthropogenic influence" on the S.E. levels of two types

Factor (variability source)	Sum of squares	Number of freedom degree, d.f.	Average square	Fisher criteria,	Importance level,
Specie (A)	250.4	1	250.4	3.2	0.08
Anthropogenic pollution (B)	614.4	1	614.4	7.8	0.006
Interaction (AxB)	63.4	1	63.4	0.81	0.37
Intra group variability	13743	175	78.5		
General variability	14667.9	178			

The lack of selection of middle mountains with similar type of pollution (pesticides of agrocenosis) hasn't allowed establishing influence of this factor on asymmetry of a skull of both types. However the dispersive analysis shows that at a forest mouse the level of asymmetry is almost identical in the foothills and middle mountains at a difference of heights more than 1000 m above sea-level (selections Nalchik and the item Elbrus). Distinctions at a house mouse from the same two habitats are considerable.

During the carried-out comparative analysis it is revealed that significant increase in level of the fluctuating asymmetry under the influence of height factor only at a house mouse, and in the conditions of anthropogenic pollution — at both types is observed. At the same time differences between selections of a forest mouse are expressed more brightly, than at house. Variability amplitude under the influence of height factor at a forest mouse already than at house, and at house opposite variability amplitude under the influence of a pollution factor already than at forest.

The obtained data on asymmetry of a skull house and small forest mice of Central Caucasus Mountains significantly differ from those for Central Russia and South Ural (Vasilyev, etc., 2000; Vasilyeva, etc., 2003) in a pollution zone radionuclides of the territory of the Totsky radioactive trace (TRAS) and the East Ural Radioactive Trace (EURT). At the forest mouse living in zone VURS increase of the index of the fluctuating asymmetry it is noted at young females of a forest mouse (26.02±0.80), with age the index of the fluctuating asymmetry decreases and makes  $-20.86\pm1.75$ . At females from control groups the index of the fluctuating asymmetry is low and doesn't change with age:  $23.22\pm0.77$  and  $23.39\pm1.32$  (Vasilyeva, etc., 2003).

#### 4 Conclusion

- 1. Level of the fluctuating asymmetry at a sinantrop, a house mouse, above, than at forest in spite of the fact that spends the most part of adverse season in more smoothed conditions (temperature, humidity, etc.) in comparison with a small forest mouse, and in middle mountains of Central Caucasus Mountains at the height of 1500 m above sea-level and above a house mouse isn't moved in the nature and all the year round lives in the dwelling of the person. Also rather low coefficient of a variation at the high level of the fluctuating asymmetry attracts attention that indicates destabilization of process of individual development of the majority of individuals in selections of a house mouse. It is possible to assume that the house mouse is to a lesser extent subject to action of selection in connection with dwelling in more favorable conditions. Possibly, a little smaller values of the fluctuating asymmetry in selections of a "wild" forest mouse are connected with more intensive rejection of "asymmetric" animals.
- The most adverse are conditions of middle mountains for both types, at the same time for a house mouse as the destabilizing factor decrease in temperature in middle

- mountains, and for small forest increase in humidity middle mountains acts.
- Pollution by pollutant (use of chemicals in agrocenosis)
  makes an adverse effect on skull development as a
  sinantrop, a house mouse, and "wild living" a small forest
  mouse.

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# PUBLIC SUPPORT FOR SMALL- AND MEDIUM-SIZED BUSINESS IN THE REGIONS OF THE RUSSIAN FEDERATION

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Abstract: The article considers the measures of State support of small and medium entrepreneurship (SME) in particular regions of the Russian Federation. For reference we selected the Republic of Tatarstan, Amur oblast, Kamchatka Krai. Examination of these regions make it possible to compare the development of small and middle-sized business entities in different geographic regions and administrative districts of Russia. Development of small and medium-sized business (SMB) currently seems relevant for Russian regions. Small and medium-sized business put significant contribution into the regional economics, gross territorial product and the budget of the region. Those entities provide advanced competitive environment and improve the quality of goods and services. Besides, small and middle-sized business increases the number of jobs created and partially address the issue of unemployment.

Keywords: small and medium-sized businesses (SMB), region, state support, efficiency

#### 1 Introduction

Nowadays small and medium-sized businesses (SMB) are considered by researchers and politicians as a basement of socio-economic development of the state and its particular regions. SMB generate new jobs, facilitate to reduce unemployment in a region, make a considerable contribution to the regional budget by means of tax payments, attract investment to regional economics, etc. Therefore, many studies are dedicated to the impact of small and medium-sized entrepreneurship (SME) to economics of a territory (Balogun & Ansary, 2018; Memili et al, 2015; Villalobos Antúnez, 2015).

However, the issue of the impact of current socio-economic situation to the development and successful operation of small and medium-sized entities is not less relevant or important (Massón-Guerra & Ortín-Ángel, 2017; Gherhes et al. 2017; Giudici et al, 2017). Since SMB can potentially improve socioeconomic situation in a region, public sector is focused on creating enabling environment for those entities and providing assistance to them. The most common support measures for small and medium-sized entrepreneurship are subsidies from regional budgets (Cin et al, 2017a; Czarnitzki & Bento, 2012; Cerqua & Pellegrini, 2017; Cin et al, 2017b; Czarnitzki & Delanote, 2015; Mateut, 2017). government lending programmes (Ughetto et al, 2017; Miriago, 2018), tax exemptions and simplified taxation (Matus et al, 2017) and other preferences and benefits for such companies (Lewis, 2017; Martí & Ouas, 2017; Butler et al, 2016). Yet not even the examination of these support measures is the most essential issue. Primarily, academics pay special attention to the efficiency of the measures carried out. This article thereby deals with state support measures for SME in particular regions. The main objectives of the study are to analyse these measures as well as estimate their efficiency and prospects for Russian regions. Three subjects of the Russian Federation located in different geographic and administrative districts were selected as the study objects: Republic of Tatarstan, Amur Oblast, and Kamchatka Krai. The study outcome is expected to represent a comparison between these regions in the performance level of public support measures for SME, along with identification of key problems and prospects of regional public policy development in this area.

## 2 Methodology

The work is built upon such scientific methods as analysis of statistical data and regulations along with comparison and ranking the research objects by selected indicators.

The research was conducted in several stages. At the first stage regulatory documents and regional development programmes were examined. On the basis of this documentation we defined key activities and areas of public support for small and mediumsized businesses in the regions reviewed. The work continued with ranging the subjects of Russia according to the level of development and diversity of regional SME supporting policies. The rating was compiled as follows: each region was assigned with a rating value depending on the availability of such a support: 1 – if present, 0 – if absent. The final rank of the region (R) was calculated by the following formula:

$$R = \sum_{i=1}^{n} r_{i}$$

Where  $r_i$  – a rating value for a specific area of support,

n - a sequence number of the area of SMB support.

The second stage of the research was aimed to define the efficiency level of the considered support measures for small and medium-sized businesses. At this stage we analised the statistical data reflecting the SMB development level in selected territorial subjects of Russia. Following that, a rating of regions was compiled. When ranging, a region with the highest rate was assigned with value 2, then value 1 in descending order, and 0 was assigned to a region with the lowest rate. Final cumulative rate was defined, by analogy, as a sum of particular values.

The results of the two ratings of regions (1) for the variety of SMB support measures implemented, and 2) by the level of SMB development) were compared to assess the effectiveness of the public support measures for SME. The comparison resulted in several conclusions about feasibility of the support measures carried out, crucial issues and enhancement prospects of state policy on supporting SME.

Knowledge base of the study was represented by regulatory legal acts and statistics published on official websites of federal and regional authorities.

# 3 Results

In each region under review there is a programme for the comprehensive socio-economic development of the territory, and also programmes or sub-programmes on SME support. These programmes or sub-programmes might be classified upon various grounds: authorities responsible for implementation; sectors of the economy; types of supporting activities (subsidy, concessional lending, entrepreneur trainings, counselling, etc.) The examination of regulatory documents data made it possible to identify 14 key areas of supporting small and medium-sized entities. Moreover, the regions were compared one to another upon presence or absence of such support activities. Based on this comparison, the following rating has been composed (Table 1):

Table 1. Rating of regions for the variety of SMB support measures implemented

NO	Area of support	Amur Oblast	Kamchatka Krai	Republic of Tatarstan
1.	Advisory support of small and medium-sized business entities	1	1	0
2.	Implementation of educational programmes for small and medium-sized enterprises, advanced trainings for small and medium-sized enterprises, single events, internships and workshops	0	1	0
3.	Development of microfinance system	0	1	1
4.	Investment loans provided to small and medium-sized enterprises	0	1	1
5.	Subsidies to small and medium-sized enterprises in order to partly reimburse expenses related to first instalment (advance payment) upon concluding a leasing agreement	1	1	1
6.	Subsidies to small and medium-sized enterprises in order to partly reimburse expenses related to purchase of equipment which is necessary for creation and (or) enhancement or modernization of goods (activities, services) production	1	1	1
7.	Subsidies to small and medium-sized enterprises in order to partly reimburse expenses related to the creation and (or) improvement day-care groups for pre-school children	1	1	0
8.	Subsidies to local commodity producers (small and medium-sized enterprises) in order to partly reimburse expenses related to the creation of retail networks aimed at the distribution of self-produced goods	1	1	0
9.	Grants to small enterprises for creation of small innovative companies	0	1	1
10.	Grants to business start-ups (subjects of small entrepreneurship) for establisment of their own enterpises	0	1	0
11.	Support for the municipal programs of small and medium-sized entrepreneurhip development	0	1	1
12.	Provision of guarantees (safeguards) on obligations (credit, loan and leasing agreements) of small and medium-sized enterprises and organisations which form the support infrastructure for small and medium-sized enterprises	0	1	1
13.	Deployment of nfrastructure facilities for managing and developing small and medium-sized enterprises	0	1	1
14.	Development of guarantee facilities of SME support	1	0	1
	Final rate	6	13	9
	Rating position	3	1	2

From the Table 1 one can see that none of the considered regions implement the full list of possible support measures. The most diverse range of activities focused on supporting small and medium-sized entities is undertaken on the territory of Kamchatka Krai. The outsider of this rating is Amur Oblast. In this region only subsidization to SMB is being realised. At the same time all the activities associated with informing businessmen as well as the measures of providing financial benefits are neglected. However, it might be noted that subsidization of SMB is not always the most efficient measure, since financial assistance is provided to beneficiaries (businessmen) on non-refundable terms without any obligation from their side. The measures such as microfinancing or provision of state guarantees require greater level of responsibility from entrepreneurs' side, because of the obligation to refund the financial resourses provided, that is why these measures might be more effective.

The Republic of Tatarstan falls betwen two other regions in the rating. Diverse measures of financial support are well-developed in this area. However, there are few activities associated with education and awareness of citizens. Lack of information about potential opportunities for small and medium-sized entrepreneurs restricts the number of public support recipients. This may also reduce the efficiency of the whole scope of state support policy for SMB.

It was decided to analyse statistical data which reflect the level of small and medium-sized business development in the regions in order to evaluate the efficiency of the public support measures being implemented. To do so, 10 statistical indicators were selected, then examined, and became the basis for another rating of regions. Statistical data are represented in the Table 2.

Table 2. Development level of SMB in regions of the Russian Federation

NO	SMB development index	Amur Oblast	Kamchatka Krai	Republic of Tatarstan
1	Total amount of enterprises (at the beginning of 2017), ea.	26346	14847	148131
2	Average SMB number growth rate (%)	15	0,1	18
3	Average number of listed employees (at the beginning of 2016), thousand pers.	47,4	31,1	330,4
4	Average enterprise staff headcount, pers.	1,8	2,1	2,2
5	Turnover of all enterprises, million rub.	75338	72637	707300
6	Average enterprise turnover, million rub.	2,85	4,89	4,77
7	Funds allocated for SMB support (budget), thousand rub.	9448,6	21124,9	624935,3
8	Funds provided for SMB support (actual), thousand rub	206,5	13291,6	136580,9

	9	Discrepancy between actual and allocated expenses for SMB support, thousand rub. (% of allocated funds)	- 9242,1 (-98%)	- 7833,3 (-63)	- 488354,4 (-78%)
ſ	10	Number of contracts concluded with SMB, ea.	733	493	825

Based on the statistical data presented in the Table 3, it might be stated that the regions differ significantly in the entrepreneurship level. We can also note that SMB has been developing in all the regions. However, even if the growth rate of small and medium-sized companies in Tatarstan and Amur Oblast quite high (18%  $\mu$  15% respectively), their number in Kamchatka Krai barely changes. Also, it is worth considering budget indicators of SMB support. Initially, rather significant amounts of funds are allocated in regional budgets. In fact, just a small proportion is used. This point reflects inefficiency of budget expenditures for

SMB support, as well as lack of interest shown by entrepreneurs who potentially are recepients of this funding. It is worth noting individually about relative indices of SMB development. Despite the fact that Tatarstan considerably outpaces the other regions under the study in terms of the amount of SMB and gross turnover, the average turnover of an entity here is lower than in Kamchatka Krai.

According to the data reported we compiled a rating of Russian regions by the level of SMB development. Its results are reflected in the Table 3.

Table 3. Rating of Russian regions by the level of SMB development

NO	Region of Russia	Ranking value	Rating position
1	Amur Oblast	5	3
2	Kamchatka Krai	7	2
3	Republic of Tatarstan	18	1

From the Table 3 it is clear that Tatarstan is a leader by the level of SMB development. The underdog is Amur Oblast. The comparison of the rating of SMB supporting policy development level with the SMB development rating prompts the following conclusion. Amur Oblast is the outsider in two ratings. It means that public support measures are sorely lacking, and this directly affects the SMB development in the region. The rating results of the other territories reviewed vary greatly. For instance, Kamchatka Krai became the leader of the first rating. In the second one it placed second. It reflects low efficiency of state support policy for SMB in this region. The number of activities carried out here is rather considerable. However, those measure do not make proper impact in the form of increased economic activity. The opposite is the case of Tatarstan. Not all the measures are provided there, but SMB is developed enough. On the one hand, it is good for for socio-economic development of this subject of the Russian Federation. At the same time we can also notice inefficiency of public support for SMB from the same figures. Small and medium-sized entrepreneurship in Tatarstan have been developing independently. This allows us to state that there is no urgent need in public measures to support SMB, on which a significant amount of budgeting is allocated.

# 4 Conclusion

On the basis of the analysis the following conclusions can be made. None of public policies on SMB support in the regions reviewed can be described as effective. The study let us identify two groups of reasons. The first one consists of administrative reasons. These might include limited number of areas of state support for SMB, similar measures of support, low incentives to use allocated funds efficiently by entrepreneurs (beneficiaries) when providing particular types of SMB support, noncompliance of the measures implemented with the demands of entrepreneurs and socio-economic situation in region, etc.

However, based on the study it may also be concluded that implemented measures do not always lead to direct positive impact. In this regard, it is necessary to pinpoint the second group of reasons of public policy inefficiency on SMB support. These are socio-economic, ecological, geographic and other objective reasons. The article covers 3 regions located in different geographical territories. Geographical, climatic, demographic, transport, social and other conditions in the Republic of Tatarstan are significantly better in many aspects than such conditions in Kamchatka Krai or Amur Oblast. This affects the level of SMB development in these regions. Moreover, public support for SMB in any of them is not focused on improving the environment, and hence does not lead to proper outcomes.

To sum up, we might conclude that not only direct assistance to entrepreneurs should be provided, but also operational environment for business must be enhanced in different regions to comprehensively improve and achieve higher efficiency of the state policy on supporting SMB.

#### Acknowledgements

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# PHILOSOPHICAL SYNERGETIC APPROACH TO THE STUDY OF OLD AGE PHENOMENON

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Abstract. Having emerged as a branch of physics, today synergetics is an interdisciplinary trend, exploring general patterns in various phenomena. Old age is a process that cannot be predicted, like any complex mechanism, prolonged by a multitude of circumstances, both individual and social. In this regard, the potential of synergetics allows us to approach the understanding of aging process and its problems. Philosophical comprehension of old age as the final path of human development includes, first of all, the attitude of a person to the process of aging and to his/her own finiteness. The person's life space is irreversibly curtailed in the old age period. As a result, the body is no longer able to fulfil all the functions and to meet the social requirements of mobility and general health due to the physiological changes, and the soul is "in the teeth of death" facing the necessity of addressing the existential problem of the meaning of life.

Keywords: philosophical approach, synergetics, old age phenomenon, aging process, bifurcation transition, nonlinearity, attractor theory, concept of order parameters.

#### 1 Introduction

Along with the positive moments of well-groomed old age conditions (neat and tidy appearance), the visibility of youth demonstrates infantilism of a person, paternalistic expectations, reluctance to bear responsibility, which are assumed by a mature age. An evident manifestation of behaviour patterns that are not characteristic of old age undermines the authority of anility in the eyes of the younger generation. Thus, there is a risk of increasing such problems like generation gap, destabilization of society and a social tension.

The old age concept in Russia has always been associated with wisdom, period of comprehension of a unique life experience and the highest stage of individualization, so the task of the society is to restore to the authority and respect for anility.

The establishment of a modern society to oust old people as unfit for active life on the social periphery is not relevant and does not correspond to the reality, it must be abandoned.

We made an attempt to comprehend the ways and possibilities of social cultural existence of the phenomenon of old age at the present stage. It is obvious that adaptive strategies with respect to old people should be bilateral: people need to think about the quality of their old age in the process of their development and aging, and society in its turn should create all the conditions so that old age is blessed and respected.

The success of society development in terms of its spiritual potential, preservation of common cultural traditions, interrelations, mutual understanding of generations directly depends on the position of old people in community.

The purpose of the study is to justify the potential of theoretical and methodological apparatus of social synergetics, mediating the philosophical discourse of the phenomenon of old age for constructing the basic models of old age.

The first objective of the study includes the grounding of heuristic productivity of the use of theoretical and methodological apparatus of social synergetics, mediating the philosophical discourse of the phenomenon of old age in the aspect of personal gerontological identification. The second objective is to identify models of old age as ways of personal gerontological identification, give their social and philosophical characteristics, as well as to analyze the process of these models formation in the light of social synergetics.

The object of the research is philosophical comprehension of the old age phenomenon in modern society.

The hypothesis of the research is stated as follows. In young and mature ages, the individual determines his/ her preferential attitude to reality of existence and to him/herself in this reality in two ways: either through external self-determination (in this case the most important premise is the fundamental category of "having"), or via internal self-determination, which is realized through the fundamental category of "being".

In the end, if a person chooses the category of "having" the dominant stratum of which is the "empirical self", the preferential attention is given to the objects of the external world and possession as such.

If a person chooses the category of "being", the dominant stratum of which is the category of "Me" in a very deep sense, the spiritual, inner layer of being unfolds. What becomes the main thing for the person is not active absorbing of the new, but preserving, retaining the old, structuring and transferring it to other generations.

As it was stated before, old age is a bifurcation transition that allows people to learn new relationships and realize, and accept oneself in these relationships. Ideally, the bifurcation crisis has an ascending trajectory when an individual acquires wisdom, staidness, clarity of judgment and a greater ability to act effectively.

# 2 Methodology

The methodology of the research is based on methods specific to sociological and philosophical studies: social, analytical, systemic, critical-reflective, and logical-semantic.

The object of the study is the phenomenon of old age. Being a complex, multifaceted, and transitional phenomenon in a qualitative meaningful plan, it is considered through universal methods of social synergetics. In particular, when constructing models of old age, the synergetic theory of attractors, the concept of order parameters, and other basic synergetic concepts (open system, bifurcation transition, etc.) are actively used.

Philosophical comprehension of old age has passed a long history. The contribution to the development of this problem was made by the classicists of the world and national philosophy and served as the oretical basis of the research: K. Jaspers (Jaspers, 1994), M. Heidegger, I.A. Ilin (Ilin, 1993), I.I. Mechnikov (Mechnikov, 1988; Folarin & Folarin, 2018), V. Frankl (Frankl, 1990), and E. Fromm (Fromm, 2008). They regarded old age not only as a phenomenon inherent in the being of an individual person, but as the main being element of the organism called society. There are also the studies of L.I. Ancyferov (Ancyferov, 1996; Villalobos Antúnez & Bello, 2014) which are popular in modern psychological gerontology.

The works of such foreign and domestic researchers in the field of social synergetics as I. Prigozhin (Prigozhin, 1987), G. Khaken (Khaken, 1999), and E.N. Knyazeva (Knyazeva, 2000) also served as a bases for the current study.

# 3 Results and Discussion

Having emerged as a branch of physics, synergetics became a cross-disciplinary direction of science, exploring general patterns in various phenomena. Its arsenal includes such properties as integrity, nonlinearity, disequilibrium, instability, self-organization, temporality (heigh sensitivity to the passage of time), which have become universal tools in hands of a modern researcher in the spheres of social and humanitarian processes.

Proximate prerequisites for a synergetic interpretation of social processes come from the founders of modern general theory of self-organization suggested by G. Khaken. These researchers

cautiously applied the ideas of nonequilibrium thermodynamics and synergetics to political science, economics and sociology, though originally these terms were developed within the framework of physics and chemistry.

Today the older generation of a small proportion in the population structure turns into a large part of the demos and this fact cannot be ignored, thus attracting attention of researchers to the study of this complex phenomenon. The position of modern society to force out old people as those being unfit for activities on social arena is not relevant and does not correspond to reality, which means that this way of thinking must be abandoned.

When a person determines their identity, various forms of personal existence experienced before do not disappear without a trace, but remain in the inner world in form of drafts, "the sketches" of possible future states and manifestations. There is a reason to believe that in the future these "sketches" will help the person to find himself in a new capacity, to productively adapt to a new life.

Traditionally, old age is associated with the growth of self-reflection, the desire to give an integrative assessment to the whole life path, the loss of illusions, the approach of some finale and, and at the same time, with the attempt to change or compensate something in the remaining time. Thus, according to the opinion of V. Frankl: "A man leading a prolific life does not become a decrepit old man, on the contrary, mental and emotional qualities developed in the course of life remain the same, although the physical strength is weakening".

In our opinion, old age is a bifurcation transition which allows us to learn new relationships and realize accepting ourselves in these inevitable circumstances. Ideally, the crisis of bifurcation passes positively, when the individual acquires wisdom, staidness, clarity of judgments and a greater ability to act effectively, meaning that the crisis has an ascending trajectory.

This crisis is associated with those changes that occur when an individual begins to grow old, as well as with realization of these changes and the subsequent reaction to them. The opposite scenario of old age is associated with degradation, mental disorders, and loss of vital interests.

Prestigious and fashionable values are associated with youth, power, success, and progress. The representatives of older generation do not always keep up for all these benefits of civilization. In any case, such aspirations are frequently perceived by society in an ambiguous way, being either condemned, causing a smile or assessed with a frank negative and aggression ("All in good time").

The theme of the life path in the individual scenario of man was repeatedly comprehended by the classics of philosophical thought. In particular, K. Jaspers pointed out that "genuine old age seeks for forms and implementation, as well as succession in its destiny", in contrast to the infantile old age, the copies the face of youth, thereby undermining its authority among young generations.

He is echoed by a well-known philosopher E. Fromm asserting that "a human nature possesses the features of both consumer and existential orientation". It is not possible for a philosopher to neglect any of these two life needs as they are closely interrelated with each other. The first mode relates to the satisfaction of bodily needs; the second with self-realization of the spiritual natureof ahuman being. When stated a question "What is the most important thing in life: to have or to be?" Fromm answers "To be". In other words, a philosopher is for the person actively manifesting in various spheres of life, for the implementation of all the potentialities of a man, and not just for consuming.

We assume that this process can be described by means of two basic models: fictitious old age (when there is no real alignment of an adequate, qualitatively new social position of the old person) or genuine old age (when physiology, existentiality and sociality are harmonized). We have defined the specific ethos of each of them.

Following the principles of synergy, any unstable system (personality is meant here) moves to certain attractors (in particular, gerontological ones). In the future, the system inevitably evolves to a stable state and can remain as such until it returns to an unstable state due to some reasons. This movement is primarily determined by the domination of one or another order parameter in the life activity of a person.

We will concentrate our attention on the study of invariant, general order parameters controlling the aging process. For this purpose, one must take into account the unique origin of aging process for each individual person, which is determined by individual order parameters.

We believe that both in young and mature ages an individual determines the attitude to reality and him/herself either through external (where the fundamental category of "having" becomes the most important premise) or internal self-determination, which is implemented via the fundamental category of "being".

When a man revealsthe life asdouble-natures phenomenon of "having" and "being", one person chooses possession, the other becoming.

In the first case, the order parameter governing the movement towards the gerontological attractor of a fictitious aging is an empirical "Me". This order parameter defines an empirically horizontal layer of human being, focuses on the data that is delivered by the outside world. In this case, the behavior of a person with a dominant empirical "Me" is subdued to the influence of other persons and things. The preference is given to the objects of external world and to their possession.

In this case, the individual deliberately "runs away from old age", competing with the younger generation and proving to both others and to him/herself that it is possible to escape from aging process. The consciousness of a fictitious old man perceives this life stage as a tragic one because of all sorts of transformations that inevitably accompany it. It is difficult for a person to adapt to new circumstances like illnesses, custody, narrowing of living space, dependence on people around him/her. A person lives either in a chronological past, appealing to the fact that "it used to be good before" or lives by the future understanding it through the idea of a soon coming of deathwhich will solve all the problems without any gain.

A small digression: we can assume that physical transformations are most acutely perceived by women due to the visual characteristics of changeand maintaining the competitiveness of the body that is keeping fit becomes more and more difficult. In general men experience the loss of attractiveness with less degree.

In the other case, the order parameter, which controls the movement towards the gerontological attractor of an original aging is "Me" in a very deep sense.

The focus of this attractor guides the person to eternal, supernatural senses and values; a person lives metaphysically in the present tense "here and now", saturating the life with meaning; one can seethere rethinking of life priorities. A man ceases the interests in worldly goods, realizing their transience and temporality. The soul is,as never before, "in the teeth of death", facing the need to address to the existential problem of the meaning of life.

The prime task of the elderly is to take the path of life as it was. This means accepting oneself in their new age, building their behavior, relying on the advantages of an old age, the main of which is the ability of a holistic perception of the world. Genuine old age differs with the person's orientation towards active work with his/her "Me" in a very deep sense. And this trend is formed long before the venerable age itself, during one's young and maturity years.

In this case, old age becomes the bearer of fertile fruits, as it evaluates the experience of lived years from the height of humility, abandoned passions and close breathing of eternity.

At the beginning of the 20th century, an outstanding biologist and philosopher I.I. Mechnikov (1988) in his works, primarily in "Studies of Optimism" (Etyudy Optimizma), proclaimed an "optimistic philosophy", arguing that "the sense of life" can be developed. "... Therefore, young people who are prone to pessimism must always be persuaded that their state of mind is just temporary and that, according to the laws of human nature, there will come the times when this state will have to give way to a more lucid world outlook" (1988, 223). The meaning of human life, according to the philosopher, is to discover and develop his natural abilities as fully as possible, thereby achieving a harmonious human existence (1988, 209). Successful soul searching, assertion of one's own values, allows a person at the stages of youth and maturity to see an ideal (goal) in his/her old age that he/she would like to correspond to, having reached a venerable age. Then a positive evolution of an elderly person is possible, ensuring the safety of their connections with society.

This is the opinion of not only philosophers, but also of researchers in the field of psychology: "People whose life path is characterized by daring, creativity, and success constructively refer to the old age contributory factors like deterioration of the physical condition and appearance of various diseases" (Antsyferova, 1996). Science has proved that creative activity is the most important factor that opposes the involution of the individual.

History knows wonderful examples of creative longevity: "I.E. Repin worked to a very old age and only death at the age of 86 interrupted his service to art". "Verdi composer wrote one of his operas Falstaff at the age of 80". The great sculptor Michelangelo completed the decoration of St. Peter's church in Rome at the age of 80. French scientist Shevrel completed his scientific work in chemistry whe he was 102 years old. Russian commander Alexander Suvorov carried out his famous cast across the Alps at the age of 70" (Barashney, 1976).

Creative activity leads a person into a timeless space, thus one can talk about metaphysical rejuvenation of a person. In this light, the growing interest of gerontosophy (philosophy of old age) to study social psychological well-being of older people, the needs of an individual person, the ability to implementa unique creative potential becomes understandable.

Russian philosopher I.A. Ilyin wrote: "A man has a healthy need by nature to reach something in life, to weigh something on the scales of being. To enjoy recognition and respect... Each of us should gain something in life; the person should be "acknowledged"; must acquire a calm self-confidence ..." (1993, 318). In this sense, the goal of old age is to achieve the integrity of "Me" concept: the acceptance that all the previous goals have been achieved and there are no debts to society and oneself.

# 4 Summary

Summarizing the philosophical study, we can say that the use of synergetics with regard to the phenomenon of old age is appropriate and counterproductive, in connection with the following circumstances. First, the reception of metaphorical borrowing allowed approaching to the understanding of a problem that rational means cannot be explored at the initial stage. Secondly, synergetics allowed us to unite existence and becoming, owing to which we could trace the formation mechanisms of genuine and fictitious old age.

The above mentioned models of old age i.e. fictitious and genuine old age do not exist in pure form, in reality they are quite interrelated and intertwined. The elements of both models can be presented in one person at the same time. However, for a better understanding of old age phenomenon in contemporary socio-cultural realities, it is important to have a general idea of

choice spaces, the spaces of self-determination of a person who is in the final stage of life.

The model of anility is conditioned by the previous evolution of a man. Prerequisites and conditions that accompany and form a person during his life will certainly influence on the process of aging.

Aging is viewed as a result; the consequence of what a person was at the age of youth and adulthood. Old age is a bifurcation transition that allows us to learn new relationships realizeand accept ourselves in these relations. If a person has accumulated various structural elements (like profession, sport, art, general creativity) during the lifetime, he or she has the opportunity to choose different adaptive strategies. Which of the possible strategies will work depends on randomness, which will help to update the dormant structure.

Bifurcation crisis is associated with the changes that occur to a person beginning to age, as well as how these changes are realized and how the individual reacts to these changes.

Ideally, a person emerging from the crisis is enriched with a sense of inner unity, with clear judgments and a greater ability to act effectively. In this case, old age will be filled with essential meaning.

In conclusion, it should be noted that the problem of old age is far from being resolved by now, and it is impossible to solve it to the end. The phenomenon of old age as well as the phenomenon of a human is refracted in its essence at least in two ways: through appeal to the eternal, on one hand, and to the transient, temporary, on the other.

Perceiving the eternal is apophatic, transient is revealed mainly through cataphatic path of knowledge that is by means of society, culture, personality, etc. Therefore, the mere reference to all these moments makes the problem of old age actual, continuously actualized, turning it into a fertile research topic.

# 5 Conclusions

The integrity of "Me" concept is usually reached by those people who successfully established themselves in life and resolved the conflicts that were associated with the search of themselves in the previous age periods.

How can one explain that one person achieves a substantial, wise old age, filled with special meanings, the other loses the old age form that he/she once had, but does not acquire a new one? In the opinion of the French philosopher and poet C. Peguy, "this happens under the condition that a being who experiences aging, humbly accepts it". Adoption of aging inevitability, as the author writes, allows a person to reveal his "luminous possibilities". "A deep understanding of life must necessarily include this metaphysical (and physical) fatigue as a positive condition of human existence" (Vizigin, 2007). We agree with the philosopher as it is pointless to struggle with what is inevitable, since anyway physical extinction will occur sooner or later. It is important to be ready for obvious transformations, so that old age does not become a tragedy but only a new full stage of life existence, filled with spiritual meaning.

The previous researches on the studied issue of an old age problems in terms of philosophical and sociological aspects were viewed by such scientists as K. Jaspers, M. Heidegger, I.A. Ilin, I.I. Mechnikov, V. Frankl, E. Fromm and L.I. Ancyferov who introduced a lot of ideas on anility and how to resolve the problems that people come across with while aging period. However, the analysis of scientific works devoted to the above mentioned problem demonstrate lack of ideas helpful for resolving the investigated issue.

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# ACTUALIZATION OF ANTHROPONYMIC VOCABULARY USING THE EXAMPLE OF TEXTS BY D. HARMS

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Abstract. Anthroponymic vocabulary representing author's concept of the world and main in this world is presented in this article as object of the study. Artistic space of avantgardist writer Daniel Harms is takes as the basis. Structure of this work predetermined use of the following mutually complementary methods: descriptive, interpretative, contextual, linguo-stylistic analysis, method of text selection. Explication of proper nouns (anthroponyms) in speech discourse of eccentric writer Daniel Harms, brightly expressed at all language levels - phonetic, vocabulary, grammar, semantic - represents an unconditional scientific interest. Anthroponymic vocabulary of artistic works of D. Harms has a substantial potential for cognition of method of individually-author arrangement of text artistic space. Anthroponymic unit in text of D. Harms is a full-fledged linguistic sign capable to enter in syntagmatic and paradigmatic connections, have specific semantics and diverse pragmatics. Rich illustrative material detects specific peculiarity of linguistic and cognitive strategies of author - manifestation of peculiar concept - "absurd", both in plan of content and in plan of expression. Absurd as a hub semantic-syntactic category in texts of Daniel Harms leads to destruction of normal communication principles. Therefore, anthroponyms in combination with other language units become involved in experimental game process of formal and, hence, content destruction of text.

Key words: anthroponym, artistic form of work, function, vocabular and semantic transformation, D. Harms.

#### 1 Introduction

At present time, studying of language phenomena in lone of anthropocentric approach constitutes of of the most actual directions of the modern linguistic. Studying of interconnection of language and man as subject of cognition and thinking attracts attention of large number of scientists. In this connection, especial significance is obtained by studying of artistic text as product of speech activity of a man, reflecting reality via its refraction in individual's consciousness (Bochina & Starostina, 2016; Miftakhova et al, 2016; Spiridonov, 2017; Erofeeva, 2017).

In the second half of XX century, in frames of artistic text study, a big attention was paid for representation of onomastic units, first of all - anthroponyms. In opinion of M.V. Golomidova, anthroponum "represents that language sign that may be named extremely anthropocentric, maximum close to human" (Golomidova, 1988; Alekseeva & Chernov, 2017). In artistic work, anthroponymic vocabulary serves as mean of expression of conceptual sphere connected with characteristic and activity of a a man; it also serves as mean of direct and indirect characterization of characters that is usually disclosed in context (Frolov, 1994; Villalobos Antúnez, 2001).

Concept of a personal name, e.t. attitude of language collective members to their names is constantly changing and this leads to reconstruction of anthroponymic systems. For instance, for artistic literature of XVIII-XIX centuries, charactonyms are typical: Vralman (liar), Skotinin (brutal man), Pravdin (true man), Prostakov (simple man) in works of D.I. Fonvisin;; Molchalin (silent man), Skalozub (pun on the word meaning "mocker"), Famusov (derivative from "famous) in text of A.S. Griboyedov; Tigriy L'vovich Lyutov (tiger, son of lion, angry), Arkadiy Schastlivtsev (lucky man) - in works of A.N. Ostrovskiy; non-commissioned officer Prishibeyev (dispirit man), civil servant Cherviakov (maggot), actor Unylov (sad man) - in works of A.P. Chekhov.

In Russian satiric literature of XIX century, charactoryms have comic sense, see, for instance, how it happens in texts of M.Ye. Saltykov-Schedrin: Zhivoderov (flayer), Podkhalimov (lick-spittle), Ugryum-Burcheev (gloomy grumbler). These often are directed at mockery of society vices, personal qualities.

XX century brings significant changes in anthroponymy of artistic worlds.

In course of studying of creative work of internationally acclaimed writer, member of OBERIU (the Unuon of Real Art, literary group), representative of avantgarde style of XX century, Daniel Yuvachev-Harms, one cannot avoid paying attention to vast number of various proper nouns (onyms): second names, personal names, patronymics, nicknames. These names, being included in text structure, in system paradigm, demonstrate a complicated technique of vocabulary-grammar and semantic nomination. All levels of artistic idiostyle of D. Harms are engulfed by language game as a specific principle of linguistic uniqueness. In light of said above, we think that consideration of conceptual actualization of proper noun (anthroponym) on example of artistic world of this author's works is rather interesting.

#### 2 Methodology

Poetic and prosaic works of D. Harms Representing author's technique of form and word creation served as material for this study. In course of study the following methods were used: descriptive, interpretative, contextual, linguo-stylistic analysis, method of text selection.

#### 3 Results and Discussion

Anthroponyms represent a peculiar vocabulary-grammatic category: they are not striving to express a concept or any meaning. And namely this property used properly may become a source of peculiar transformations and changes of proper noun role. Proper noun is an integral part of artistic work. Writers give to name an intentionally defined sense. Proper noun obtains a perfectly clear meaning, and reader (because we are speaking about using of such names in artistic work) perceives it not as just a name, i.e., the mean for distinguishing of this object among others, but also as a mean to put a part of one's intention in proper nouns. "In general, the main function of names is to identify, and their meaning is the object they signify" (Frege, 2014). In artistic work this possibility is manifested in the most concentrated, artistically completed form, because an artist typifies life and, consequentially, names. The life itself gives a reach material for selection and generalization of the most interesting and characteristic cases of proper nouns use.

Proper nouns of various types, widely used in artistic literature, act as integral element of artistic form of works.

When speaking about anthroponyms in works of Daniel Harms, it is necessary to take into account the language of a text, style of narration and "specific harmsish individuality".

It is necessary to note that Daniel Harms had a number of pseudonyms and he, with artistic manner inherent to him, changes them frequently: Harms, Haarmse, Daniel Dandan, Charms, Carl Ivanovich Shusterling, Ya. Bash, D. Shardam, Ivan Toporyshkin, writer Kolpakov and other. However, name "Harms" with its duality (from French "charm" and English "harm") reflects the essence of writer's attitude to life and creative work most accurately: he processed the most serious things with a high skill and found sad moments in things that seemed to be the funniest. It is characteristic that abnormal language structures in his works are not so much as opportunity to involve the recipient into cognitive space; it is rather a method of explicit expression of the idea of negation of existing social establishments.

When speaking about functional peculiarities of proper nouns in artistic text, we mark the main function of names, nominative one. But the fact that a proper noun in artistic speech, same as in language, performs nominative functions speaks little, rather practically nothing about its role in poetics of literary work. In

literature, proper nouns preserve their differential (nominative or identifying) function. However, here it stops to be the main one. The main functions of proper nouns in artistic literature may be called stylistic ones. This function is manifested in dual way, appealing to human "ratio" and "emotio". In first case a certain information is conveyed via proper noun, thus this variety may be defined and informational-stylistic. In second case, proper noun causes the feeling, form an attitude to a depicted one, and this variety is rational to call emotionally-stylistic. At this, without conduction of identifying or differential function, proper noun in artistic text would simply not be perceived as name. On this function (main in language) many other are layered, allowing to use proper noun for depiction purposes.

In structure of Harms's artistic work, name obtains a special meaning. Peculiarity of Harms's style we see in his disconnection from traditional designation of functional perception of onym: name points at "subject", names it, presence of nominative function is observed, but there is no sense, content filling is absent. Most frequently the name is underlined senselessly. A cycle of stories "Cases" is very illustrative in this plan. It consists of thirty shirt stories and scenes. In "Cases" we observe a large number of anthroponyms: Petrov and Kamarov, Puskin and Gogol, Woodworker Kushakov, Nathematic and Andrey Semyonovich, Case with Petrakov, Pakin and Rakukin, Fedya Davidovich and other. Cycle structure detects a recurring theme of depersonalization of a man, mechanisation of the surrounding world: "as the piece develops we are shown that the existence of any hero is based only on a series of conventions, the referent being completely absent" (Brandist, 1997). This we can tell that anthroponyms loss their major functions: nomination, personalization and differentiation. Here is a characteristic example of how, due o external changes (character's face is covered by adhesive bandage) "at home they did not recognize him and did not let him in". Identification via anthroponym does not occur because the name had lost the function of personalization, distinction from multiple:

I am a woodworker Kushakov! - woodworker shouted.

Go tell your tale! – they answered from apartment and locked the door on hook and chain (Harms, 2000).

It should be noted that in works of Harms, operating by proper noun is intended to point namely at lack of attention to a man, to his inner world and his existence: "Even more striking is the recurrence of Kharms's strange and extreme obsessions: with falling, accidents, victimizations, mindless violence and sudden death" (Cornwell, 1991: 15). It is characteristic that characters are described beyond thoughts and deed; plenty of examples of mechanical reprise of remark is related to this:

Mathematic

(While pilling a ball from his head)

I pulled a ball from head,

I pulled a ball from head,

 $I \ pulled \ a \ ball \ from \ head,$ 

 $I\ pulled\ a\ ball\ from\ head.$ 

Andrey Semyonovich:

Put it back right now.

Put it back right now.

Put it back right now.

Put it back right now (Harms 2000).

Frequently, anthroponyms are described in a system of mutual exclusive thoughts, words and deeds:

Kozlov: And where is Oknov?

Oknov (tearing away Kozlov's leg):  $\Gamma m$  here,  $\Gamma m$  near! (Harms 2000).

Peculiarity of Harms's artistic manner is built on principle of absurd and language game. While defining absurd as alogic category, one should speak about exclusive interconnection of elements of form creation and sense birth, since absurd is inextricably linked with a concept of "norm". For instance, in composition of specific structure, at each level, language units enter system relations (paradigmatic and syntagmatic), while alogic units, e.g. disconnecting from "proper", "generally accepted", "statutory" units, destroy traditional concepts of communication laws. In this connection should be told that peculiarity of author manner of Harms is concluded in use of unusual, disconnected from classic understanding methods of artistic work creation: "Sometimes via absurdity of described situations, sometimes via absurdity of characters behavior, and sometimes via absurdity of text structuring" (Fedosyuk, 1996). For example, in fifth case of cycle "Cases" under the title "Petgro'v and Kamaro'v" we observe playing with rhymes:

Petro'v: Hey, Kamaro'v!

Let's catch some mosquitoes<sup>1</sup>!

Kamaro'v: No, I am still not ready for that;

Let's go catch some cats instead!

In story "On Phenomena and Existences" we meet anthroponym *Mikkel Anzhelo*, representing a play with a name of Italian artist, Michelangelo Buonarotti, or in the text "God gave peace..." we observe a sound transformation of Tutankhamon onym, pointing at formal and semantic derivation of name:

Pharao Tut Ankh-Aton:

I'll rise in time

I'll lay in time

I'll have a time to die and be born again

I hold a throne, an apple and a sword,

I'll manage to barricade myself from any devil (Harms 2000)

Semantic derivation is traced in the field of naming of cultural characters – *Pushkin, Gogol, Rousseau* and other, who also are disconnected from their historical "singnificance" and are boiled down to formal designation of a certain body:

<...>I cannot sleep because of fame of Jean-Jacques Rousseau. Why did he knew everything? How to swaddle a baby, how to marry maidens! (Harms 2000).

History is boiled down to fictions comical episodes and connection with history is given only via correlation with historical personality. In essence, name is only an indicator, designate but not a sense bearer. Absence of direct correlation between denotation (character) and signification (conceptual content) lead to occurrence of sign function in Harms's work - deconstructive, disclosed completely within all duration of writer's creative work.

In text "Once one man named Andrian, Matveevich by patronymic and Petrov by surname...", an accumulation of names occurs; each one of them claims individuality but in fact does not bring any specificity, clarity into narration, making it just more confused. Name, with which a memory about man is connected first of all, exists almost at border of amnesia in this case. Accumulation of names and their numerous variants make memorizing impossible. In result, memory fails and characters turn into some depersonalized functions:

<sup>&</sup>lt;sup>1</sup> Here and further orthographic and punctual inaccuracies have individual authorship (D. Harms); the pun is built on similar sounding of a surname of the character and Russian word for "mosquitoes" - "комары, komary".

Some Panteley hit Ivan with heel.

Some Ivan hit Natalya with wheel.

Some Natalya hit Semyon with muzzle.

Some Semyon hit Selifan with washtub.

Some Selifan hit Nikita with taunt.

Some Nikita hit Roman with board.

Some Roman hit Tatyana with shovel.

Some Tatyana hit Elena with jar.

And fight began (Harms 2000).

That is how, according to words of M. Yampolskiy, "name in Harms's work is not loaded with sense to such degree that it is the first to fall into oblivion" (Yamposlkiy, 1998).

Along with rather common names, quite unusual names that never personalize characters are represented: *Mafusail Galaktionovich, Pantekey Ignatievich ("Once a man named Andrian")* etc. We will not leave without attention the following example with piling of surnames unusual in phonetic aspect:

A man with stupid face ate rib steak, hiccupped and died. Waiters brought him out into the corridor leading to kitche and put him in the floor, along the wall, covering him by a dirty tablecloth.

Brabonatov

Senerifactov

Kuldykhonin

Amgustov

Chercherikov

Holbin

Akintenter'

Zumin

Gatet

Lyupin

Sipavskiy

Ukivakin (Harms, 1991).

For anthroponymics especial significance is obtained by categories of diminutive (reducing) and hipocoristic (endearing) names that sometimes are united. In writer's works these categories are used mainly for naming of children: Marfushka ("Theater"), Pet'ka ("Game"), Van'ka and Vas'ka ("Adventures of Hedgehog"), Vania Mokhov ("Everybody os running, flying and jumping") and many other. The fact should be declared that in works for children anthroponymic vocabulary conducts, first of all, game function and does not actualize a destructive one.

#### 4 Summary

Creative works of Daniel Harms represents literature of absurd (paradox). We can make the following conclusion via anthroponymic system represented by it: a clear logical and sensual connection between anthroponym and named man is absent, absence of named man's stable image leads to loss by anthroponym its major functions of nomination, personalization and differentiation and manifestation of destructive function, which, in turn, is realized as a symptom of destruction of human "I", of person.

#### **5 Conclusions**

Daniel Harms is undoubtedly a bright personality perceived ambiguously. His reluctance to live by law established by society, is transformed in text field into refusal of everything called linguistic norm. Peculiar, Harmsish experimenting with language units, including anthroponymic vocabulary, represents a stable connotation of alogism; this allows to make conclusion about functionally-stylistic awareness of the author. Proper nouns, being involved in relevant relations with other text elements, for, one large space - hypertext, with its own clear structural composition, functional syntaxis, semantic sphere of language.

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# SCIENCE AND TECHNOLOGY COMPLEX OF THE RUSSIAN FEDERATION IN THE TRANSITION PERIOD

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Abstract :on the basis of previously unpublished archive materials, the problem of the survival of the science and technology potential of the russian federation is explored immediately after the collapse of the ussr. The conclusion is that in the early 90's emergency measures to preserve the most important components of the science and technology complex, fundamental science, education and the remaining part of the human resources were taken. The main directions of this policy were targeted support directly to scientists and scientific groups; there were attempts to distribute extremely limited budget funds through competitive mechanisms. But these measures provided only the survival of a small part of the stc, focused on getting rid of "ballast", on training the young generation at the level necessary for the market and "knockdown production." the government's strategy, ignoring the recommendations of the scientific community, could not ensure the development. As a result, many world-class science schools disappeared, the process of "brain drain" intensified, the share of enterprises and organizations engaged in the development and use of innovations decreased. Sectoral science collapsed.

Key word: Collection of Science and Technology, Federation of Russia, Transition period

#### 1 Introduction

Global challenges, which Russia faced, require a technological breakthrough and an activation of innovative processes. The sphere of science and technology is among the national priorities. Hence, the importance of science-based and consistently implemented by the government scientific and technological policy (GSTP) is growing. This requires the accumulation of all the most positive moments from the historical experience of its implementation and the formulation of lessons for the purpose of non-repetition of the previous miscalculations.

An analysis of the scientific literature shows that not all researchers believe in the possibility of the Russian Federation to modernize at the present time. For example, V.S. Martyanov is very skeptical about Russia's ability to "jump from the dilapidated industriality of classical modernity to the bright future of post-industrialism" (Martyanov, 2008). The Modern Stage of Modernization of the Russian Federation V.B. Pastukhov considers as the second edition of "transformation period", because in his opinion "the essence of the concept of "modernization" is reduced to the fact that without any crucial changing in the fundamentals of political and economic systems, with one strain of political will and the proper goal-setting it's possible to give a fresh impetus the development of society as a whole and the economy, in particular " (Pastukhov, 2011).

We investigated the main problems of the evolution of GSTP at various stages of national history in a number of publications (Kalinov, 2011). However, the relevance of the topic, previously unexplored aspects, the analysis of unpublished archival documents led us to the decision to consider the subjects connected with the functioning of the science and technology complex in the early 1990s in the context of the reforms implemented during this period, to evaluate their results and consequences for the fundamental and applied science, the personnel potential of the STC of the Russian Federation.

# 2 Methodology

As a basis for our research we defined the theory of modernization. The peculiarities of the model of multi-line modernization include: recognition of the possibility of modernization on its own path, taking into account and based on national characteristics; the exceptional importance of

sociocultural, external, subjective factors and the factor of historical randomness.

The historiography of the problem includes studies that analyze the main directions of the scientific and technological policy of the Russian Federation during the transformation period (Gusarova, 2013). The excessive negativity was typical for researches in the early 1990s. In our opinion, a significant role in this has been played by the social pessimism of a significant part of society regarding the implementation of policy in the scientific and technical sphere, its declarativity and incompleteness of projects. This period of the historiography of the topic differs in the variety of the problems studied and at the same time with insufficient attention to the problems of developing and implementing the GSTP, assessment of its efficiency, searching for inhibitory factors, and studying domestic and foreign positive experiences with the goal of developing practical recommendations.

A significant part of works of recent decades is devoted to a general analysis of radical changes in Russian society in the 1990s (Bykovskaya, 2005). A large number of publications are devoted to the problems of implementing economic policy (Kodin, 2002). In the works of A.G. Agadzhanyan, S.V. Kulakova, E.E. Mironets, N.N. Razuvaeva certain aspects of the topic of interest to us were studied: the results of the chosen version of social and economic modernization, the collapse of high-tech industries, stagnation in science and the education system, the "brain drain"; the results of a sharp social stratification of society, due to nomenclature privatization, the relationship between government and business.

The authors of this study attempted to consider one of the most important and still little studied reasons for the inhibition of modernization processes and at the same time to reveal the factors of the survival of Russian science at the very beginning of the implementation of reforms. We managed to significantly expand the source of research, primarily due to the introduction into the scientific circulation of unpublished documents of the State Archive of the Russian Federation (SARF), the Archive of the Russian Academy of Sciences (ARAS).

# 3 Results

A significant number of documents of 1992 indicate a crisis situation that has developed in the science and technology complex of Russia after the collapse of the USSR. On February 11, 1992, parliamentary hearings "Science and Education in Conditions of Price Liberalization" were held. After the reports and assessments of experts and deputies, the Committee on Science and Public Education of the State Duma appealed to the President of the Russian Federation, B.N. Yeltsin, asking to approve the Decree "On Urgent Measures to preserve the scientific and technological potential of Russia ...." (Gordon and Klopov, 2001). on the basis of projects developed by the Ministry of Science, Higher School and Technical Policy of the Russian Federation. This document, signed on April 27, 1992. formed the basis for the establishment of a multi-channel financing system (budgetary and extra-budgetary funds). It was envisaged through the competitive mechanisms to allocate extremely limited budget funds. Scientific organizations were exempted from paying taxes on land and property, enterprises ordering R&D got privileges for income tax, privatization of pilot production was prohibited.

With the characteristic of the critical state of the scientific and technological potential of the Russian Federation, given in early 1992 by experts from the Ministry of Science, Higher Education and Technical Policy of the Russian Federation, it is difficult not to agree that in reality, a powerful science and technology complex (STC), created in the USSR, entered the stage of decay. However as we now know, all the hardest moments were yet to come. And at that time organizations and enterprises of the

Russian Federation engaged in scientific and technological work amounted to more than 60% of all organizations and enterprises located in the territory of the former USSR and performing such work. In defense and academic science this share was 70-80%.

The number of workers in the main activity in scientific organizations of Russia decreased by 265.6 thousand people only during 1991. And as of January 1, 1992, there were 1,678,000 people, including 16,300 doctors and 119,200 candidates of science. By this time, the Russian R&D sector was characterized by features that were negative in nature: significant differences in the quality and results of R&D of the defense and civil branches of science, "metropolitan" and peripheral science. Most of the scientific organizations had a weak experimental base. 60% of scientific research institutes and more than 80% of universities did not have any experimental base at all. The need for scientific instruments was satisfied by 20-25%. The country received less than 1/3 of the world scientific and technical information.

In 1992 centralized purchases of foreign scientific literature practically ceased. There was a lack of stable funding for science, which made it impossible to conduct serious comprehensive studies and update the experimental base. In the first half of 1992, it was envisaged to allocate only 32% of the minimum amount of necessary funding, as it was estimated by the Russian Ministry of Science, from the republican budget for civilian R&D.

In February 1992, the Presidium of the Russian Academy of Sciences was forced, taking into account the inadequate allocation from the state budget for the first quarter of 1992, to take measures to concentrate resources on the main directions of basic research; to consider the reorganization of the institutions that make up its branches; eliminate specific research areas and inefficiently operating units; to allocate the divisions occupied with works in interests of separate branches, the enterprises, and to transfer them to financing at the expense of customers; to revise plans for holding scientific conferences, seminars, schools, commemorative and other events. The publication of previously planned scientific literature was stopped, the expenses and apparatus of scientific councils and commissions were reduced.

The measures aimed at saving all types of resources, reducing the costs of maintaining the management apparatus, and representative and other events were taken. It was intended to concentrate financial and material resources on the main directions of fundamental research, to provide support to established scientific schools.

Speaking at the meeting of the Presidium of the Russian Academy of Sciences, the physicist, academician of the Russian Academy of Sciences, V.M. Tuchkevich had to admit: "I believe that we are on the brink of the death of the Academy of Sciences. ... The most valuable in the Academy of Sciences is the creativity, which is contained in the team of scientists of the Academy of Sciences. What can we see now? What is being done with this creativity? It decreases catastrophically. Qualified people, who are not provided with material or sufficient conditions for work, go abroad, where they are provided with completely different working conditions, and the material existence is perfectly secured there. We do not have any of this ... I believe that retaining cadres is our task number 1, and we must direct all our efforts to retain the present cadres and educate new ones ".

As a result of the continuing increase in the prices of goods and services, especially municipal ones, during 1992, the repeated increase in the wages of workers, not fully compensated by the growth of budgetary allocations, the reduction in the volume of contractual work, the financial situation of the Academy institutions continued to deteriorate. According to the accounting reports, only for the first half of 1992 the institutions and organizations of the Academy actually stopped buying equipment, drastically reduced current expenses for scientific

work. An expeditionary work, including marine, was practically eliminated in many institutions, and the acquisition of materials, reagents, and scientific literature decreased.

The average salary of employees of scientific institutions of the Russian Academy of Sciences in August was about 4 thousand rubles, which was significantly lower than the average salary for the national economy of the Russian Federation (more than 5 thousand rubles). The level of medical, housing and household provision of the RAS staff was decreasing. This caused the outflow of the most qualified, creative part of scientific and engineering workers abroad and in other areas of activity. The actual reduction in the number of workers in the RAS, mainly for these reasons, amounted to 9.8% for the half-year.

In the current situation, the leadership of the Russian Academy of Sciences appealed to the Government of the Russian Federation with requests to increase the amount of funding for its institutions, but, in fact, did not expect to receive additional appropriations, since they were aware of the state of the budget of the Russian Federation for 1992, at deficit of 906 billion rubles (about 30% of all budgeted expenses).

The situation, indeed, became threatening. And the questions about financing were put forward on the foreground. A number of institutes, organizations and enterprises of the Russian Academy of Sciences leased out premises and other property of the RAS on a large scale, receiving considerable additional funds. At the same time, other academic institutions were forced to spend huge sums for renting the premises they occupied.

This put the leadership of the Academy in front of the need to "make very tough decisions on the reorganization of scientific institutions and organizations, the restructuring of financial policies in order to maximally retain the most highly qualified personnel, key assets, primarily unique research facilities and equipment that formed the basis of the high scientific potential of the Russian Federation Academy of Sciences ". As additional potential sources of funding were called: Foundation for Fundamental Research, scientific and technical and other government programs, budgets of republics and territories, means of industry and commercial structures, expansion of mutually beneficial scientific cooperation with foreign countries, active work of institutions, scientific groups and individual scientists on the conclusion contracts for research and supply of R&D deliverables to foreign consumers, grants and subsidies of international and foreign scientific foundations organizations.

A particular concern was caused by the slow introduction of certain new forms of scientific activity that gave rise to certain hopes, including the contract form for attracting scientists and specialists, and the plans and expectations related to the activation of foreign economic relations were not realized. Many of the concluded contracts and contracts with foreign partners did not correspond to the prevailing world prices for R&D deliverables and services, which undermined the prestige of domestic science, causing economic damage.

However, in the spring of 1992 among other representatives of the scientific communities of the countries of Central and Eastern Europe, the leadership of the RAS was invited to the NATO Science Committee. Considering it inadmissible for the Russian Academy of Sciences to act as a petitioner, its representatives suggested that Western scientists take part in serious projects. Germany promised to help Russian scientists pay for travel, participation in conferences, when invited to individual centers. The leadership of the German Research Society believed that it was possible to partially finance the movement of German scientists in Russia.

The Secretary-General of the Humboldt Foundation, Professor Faer, confirmed the agreement on the allocation of 200 scholarships specifically for Russia in the humanities. He also assured that our young scientists (physicists, biologists, mathematicians) who were scholars of the Humboldt Foundation will be supported in the future, when they return to their

homeland, in the form of delivery of instruments and literature. Special attention was paid to the Russian Academy of Sciences by French scientists, suggesting the organization of trips of their researchers to our institutes and laboratories in order to search for topics for cooperation, new projects or expansion of existing projects, and support this financially.

The French academy has promised to send to RAS all published scientific works. France demonstrated great interest in the space research that was being carried out at that time in Russia. In addition, a memorandum of cooperation between the Russian Academy of Sciences and UNESCO was signed. UNESCO allocated 300 thousand dollars to the RAS. From the Soros Foundation the Russian Academy of Sciences received one hundred thousand dollars to subscribe to foreign journals.

Discussing the financial problems, the leadership of the Russian Academy of Sciences simultaneously counted on the Soros Foundation, which proposed not only allocating funds for science (8 billion rubles), but also recommended the most optimal mechanisms for the distribution of these funds. A specialist in Nuclear Power and Thermophysics, Academician of the Department of Energy, Mechanical Engineering, Mechanics and Control Processes of the Russian Academy of Sciences, V.I. Subbotin, however, did not believe in disinterestedness and characterized such a gesture as follows: "This means buying everything from us for cheap stuff, that's what it really is".

At a meeting of the Presidium of the Russian Academy of Sciences on March 17, 1992, the director of the General Physics Institute of the USSR Academy of Sciences, the Nobel Prize winner, Academician A.M. Prokhorov admitted that the British sent him a clipping from a French newspaper that the Institute of Atomic Energy was purchased by the Americans, while offering him to sell one of the laboratories. "They are going to buy "in the harshest possible way", - he concluded.

The necessity of adjusting the tax policy and introducing tax incentives that facilitate the development and commercialization of new science-intensive and complex technologies was proved in the proposals received from ministries, departments, RAS, scientific organizations, enterprises and entrepreneurs. Experts rightly warned the Government: "The lack of funds for science in 1992 creates a real threat of irreparable destruction of scientific and technological potential. This would mean the transition of Russia to the category of states incapable of independent development ".

On February 17, 1992 the Department of Science and Technical Policy of the Government Office of the Russian Federation was forced to inform Deputy Prime Minister A.N. Shokhin "... about the mass receipt of appeals about the need for urgent state support of branch science".

On February 28, 1992, the Ministry of Industry of the Russian Federation also recorded a particularly difficult situation with pilot production and with testing centers and organizations: "In an effort to maximize profits and increase wages, these organizations sell expensive test and research equipment, including imported equipment; refuse from the production of labor-intensive experimental products and switch to the production of conventional serial products, which practically excludes the possibility of creating and mastering the production of new types of equipment developed by research institutes and development organs.

These and other facts allow us to state that the liberal reformers lack a clear and justified program of transformations in the scientific and technical sphere. It took, indeed, urgent measures to save what had not yet been disintegrated. The Ministry of Science, Higher School and Technical Policy of the Russian Federation proposed a concept of reforming the country's scientific and technological potential, the main provisions of which were the following: rejection of the slogan of saving science in general: the principle of selectivity for supporting both research and scientific organizations was one of the fundamental; preservation of the best Russian scientific schools

in the field of fundamental research, which needed to maintain stable budgetary financing; demilitarization and conversion of the R&D sphere of Russia, which constitute the main strategic directions of its structural reorganization; denationalization of the sphere of R&D and its adaptation to market principles of management; transition from the financing of scientific organizations to the financing of targeted projects and programs; providing multiple sources of funding; the creation of regional funds to support scientific and technical development, formed mainly from local budgets with relatively little federal support; ensuring the social protection of scientific-and-technological community.

It was planned to integrate the scientific and industrial potential of Russia into world economic ties, for which it was necessary to ensure the openness of the domestic science, the development of mutually beneficial scientific and industrial cooperation, the development and implementation of measures to stimulate the transfer of high technology, favorable tax and other conditions for foreign investors.

The solution of these problems required, from the point of view of the authors, the implementation of a number of urgent measures (partly specifically designated, and partly un-written and declarative). Among them are the creation of the Russian Foundations for Fundamental Research and Technological Development, the Foundation for the payment of scholarships to talented young scientists, the implementation of measures to prevent the withdrawal from the Research Institute for Experimental Production (subsequently, an appropriate decree was issued, but somewhat belated); preparation of a package of laws and regulations governing the activities of scientific organizations and relations in the field of intellectual property (only partially implemented); the definition of individual tax incentives for scientific and innovative activities (so far, they are clearly not enough).

The authors of the concept believed that such measures in the field of R&D would create "... background for preventing the irreversible destruction of the scientific potential of Russia." It was recognized that, in general, this potential "... will be temporarily weakened", but the possibility that "the losses would not be so great and at the same time a basis would be created for the future technological revival of Russia" remains. "The tasks of the next (following the normalization of the socio-economic situation in the country) stage that will be accompanied by the restructuring of the scientific and technological potential," - the reformers believed - "should be: a new level of resource saving, increased labor productivity, the achievement of high product competitiveness and, as a consequence , a radical transformation of the structure of the national economy, a rise in production and a qualitatively new level of life for the population ".

It is a bitter to quote these words in 2018, but probably the authors were full of optimism and, perhaps, believed that only 2-3 difficult years were ahead.

The study allows to state that the real support to the scientific community during this period was provided by the Russian Foundation for Basic Research. Its director was an academician, A.A. Gonchar. In the statute of the RFBR, along with supporting initiative research projects of fundamental research, other forms of activity were envisaged: the possibility of supporting institutes and universities conducting fundamental scientific research in the development of their material and technical base; support of young scientists; international cooperation; information and publishing activities in the field of basic research.

The Foundation for Fundamental Research helped, in particular, to survive the institutions and scientists of the Russian Academy of Sciences. In 1992 on a competitive basis about 2 billion rubles were received from its funds. (Presidential Decree, 1992). An extrabudgetary Russian Fund for Technological Development was also created, it was formed by transferring by ministries, departments, concerns, corporations and associations of 25% of

the money of special funds for financing scientific-research, design and experimental works and development of new types of science-intensive products formed by allocations by enterprises the amount of 1.5% of the prime cost of goods (works, services).

It was decided to form a special fund for the payment of personal scholarships to talented young scientists, having allocated in 1992 50 million rubles of the total amount of allocations for funding science on the republican budget of the Russian Federation.

However, such measures only allowed to stay afloat, but, quite often, they turned out to be a declaration. The Presidium of the Russian Academy of Sciences in March and September 1992 adopted two resolutions in which the heads of specialized departments and scientific institutions were invited to undertake a number of rather tough measures to reorganize the institution of the Russian Academy of Sciences, to restructure the financial policy in order to maximally retain the most qualified personnel and fixed assets, in the first place - the unique research facilities and equipment. But many institutions sought to postpone the implementation of these very painful decisions aimed at preserving only the most important and promising research works and supporting individual scientists (Presidential Decree, 1992).

In this situation, the Presidium of the Russian Academy of Sciences on September 22, 1992 invited the president of the Russian Academy of Sciences, academician Yu.S. Osipova, to address the President of the Russian Federation and the Supreme Council of Russia with a request to consider "... the critical state of institutions and organizations of the Academy" in the IV quarter of 1992 and instruct the Government of the Russian Federation "... to take the necessary measures to save the scientific potential of the Russian Academy of Sciences, in the first place, to increase the material security and social security of scientists and specialists of the Academy's institutions and to preserve the unique scientific objects of the Russian Academy of Sciences, which are the national treasure of Russia".

In the resolution of the leadership of the RAS, the departments and presidiums of regional centers of the RAS were asked to approve the amounts of funding for scientific institutions that make up the corresponding departments and centers without using the actual number of employees of institutions as a basis for determining the amount of their funding, but proceed from the urgency and priority of research directions, their conformity to the modern world level. It was necessary to take a decision on the reorganization of scientific institutions, "... bearing in mind the preservation of particularly priority scientific areas, units and scientific schools with the highest scientific potential, and the liquidation or transfer to legal and economic autonomy and economic calculation of the other structural units"; prepare proposals on the consolidation of the placement of institutions that make up the offices and centers, in order to reduce the volume of rent of buildings and premises, and more efficient use of areas. It was proposed to create labor exchanges specifically for researchers who lost their work.

As for the authorities, the Ministry of Science insisted on prioritizing and supporting only the national centers created on the basis of this list. The position of the RAS was reduced to the fact that the formation of national centers within the Academy of Sciences was possible only with full control over them by the Academy of Sciences.

Minister B.G. Saltykov, speaking at the RAS in September 1992, identified two forms of implementing priorities for science. The first was a program-targeted approach, the concentration of resources on relatively large scientific or scientific and technical problems. The second way of implementing priorities was institutional, when scientists declare certain institutions to be the most priority, important in science. Referring to the experience of the United States, he explained that the centers for priority state support were created primarily in the sphere of state support for defense, space, nuclear research, where, of course,

only state support could facilitate the implementation of longterm studies and, even more the implementation of scientific and technical large-scale developments. The minister assured that the goal of the government "is not to sow discord within".

We were moved to this idea by life itself, by the need either to die together slowly or quickly (depends on life), or to preserve the core of the scientific potential that would transfer knowledge, know-how, if it is about to applied works, etc. through these difficult years ". At the meeting of the Government, the status of scientific centers was given to two institutes: the Obninsk Institute and the Institute of Nuclear Reactors in Dmitrovgrad. According to the speaker, the discussion of such projects was intended to "... shake up an academic atmosphere of relative peace". It seemed expedient to create expert groups, expert commissions, which would determine which scientific centers at that time were the reference centers. The Government's ability to raise the salaries of the remaining scientists would also depend on their number.

V.E. Sokolov, an academician-secretary of the Department of General Biology of the Russian Academy of Sciences, director of the Institute of Ecology and Evolution named after A.N. Severtsov RAS, asked the minister a question that was not quite convenient but precise in nature: can we say "we do not have enough money, let's cut the Academy by one-third and reduce institutions".

The physicist, member of the Presidium of the Russian Academy of Sciences, academician, G.A. Mesyac, was against the creation of a system of scientific centers offered by officials in the Russian Academy, believing that such an approach "will lead to the seizure and collapse of it. The best institutions will be withdrawn from the Russian Academy, they will be financed centrally; cadres will be determined by quite different people." He also objected to the pressure of the authorities on the Academy: "We are always told: let's urgently undergo transformation, otherwise we will not pay you money.

Relations between the scientific community and the new government were very complex. Academician N.G. Basov, for example, in December 1992 expressed dissatisfaction with the nature of these relationships: "In fact," he declared, "all decisions of the Ministry of Science are against the Academy today. Vice-President of the Russian Academy of Sciences, mathematician, academician, AA. Gonchar, suggested still avoiding harsh statements and take into account that the government "strained and sought" means for the RAS. In this situation, he believed, "all those emotions that we throw out, all those complaints, all those cries for help that we pronounce ..., you can not continue to say exactly with the same emotions and with the same experiences continuously, as this will cause only a negative reaction". They were offered to state all appeals to the Government in a more constructive way (Folarin & Folarin, 2018)

N.G. Basov objected to A.A. Gonchar: What's going on? Today we in comparison with America have allocations for science thousands of times less than in America, and this is not mentioned anywhere. That's the main thing. This is the salary, because of which our people leave our country; this is the lack of funds, the destruction of the defense industry. We can not live like that. There are two ways out of this situation: either have some "islands" and feed them to full saturation, and thus preserve science, or ask for full support. There is no third option. We can not have a good science in these conditions, and our leadership should know about this. We barely make ends meet our researcher gets a thousand times less than in America. This must be reported to the government. As far as I know from conversations with high authorities, no one really understands this

Speaking at the General Meeting of the Russian Academy of Sciences on December 22, 1992, President of the Russian Academy of Sciences, academician, Yu.S. Osipov, acknowledged that the past year was a very difficult period in the history of our country: "It was a year of hopes and disappointments, reforms, creation and destruction, a year of acute economic crisis and impoverishment of the people. We experienced a deep political crisis, when the country, according to the President, was on the brink of a precipice ... It was bad for almost everyone in the country, including us. " Yu.S. Osipov acknowledged that the main positive result of the activity could be recognized as the survival of the Academy, due primarily to the dedication of scientists to their cause.

But all forms of expeditionary work were curtailed. The inflow of the experimental material caused by this decrease was equivalent to the curtailment of works in a number of scientific areas. As a result of the nationalization of the property accumulated on the territory of the former republics, many stationary stationary stations, test sites, points that played a supporting role in various fields in the Earth sciences were closed or lost. The scientific institutions of the Academy of Sciences, leading fundamental and applied research related to the study of various natural and anthropogenic processes occurring in the hydrosphere collided with great difficulties in 1992 (Osipov, 1993).

The president of the RAS was forced to talk about... a real impoverishment of science and our Academy." Stating that this tendency began earlier, in 1990, he believed that "... the real collapse occurred in 1992, when the funds were allocated monthly, usually with a long delay. Even taking the most modest conversion factors, and taking into account only official, centralized wage increases, the volume of financing in comparable prices decreased by at least 2.5 times in 1992 compared to 1990. The most serious problem of this year for the Academy's institutions was the cost of heat and electricity, water, rent, security of premises and other mandatory costs, without which the very functioning of institutions, the maintenance of housing and social facilities, and the maintenance of the infrastructure of academic towns were impossible. For specified uses the agencies began spending up to a third of the funds allocated to them. The deterioration in the economic situation of institutions and organizations was manifested most in the provision of their instruments, materials and scientific literature purchased abroad. There was no money for international cooperation (Villalobos Antúnez, 2016).

The cooperation with the academies of sciences of the countries of the Near Abroad also became a problem. In many scientific areas, the RAS communications with them were practically interrupted; they were preserved only at the level of individual institutions and scientists (Osipov, 1993), There were objects of the Russian Academy of Sciences on the territory of the former republics which were destroyed. But some agreements on the joint use of these facilities were signed. To solve this problem, the President of the Academy of Sciences of Ukraine, academician, B.E. Paton, initiated the establishment of an association of academies with the goal of coordinating overall activities. The goal was the restoration of a single open scientific space for academies of sciences of all CIS countries. This proposal was supported by most academies of the republics.

As one of the most important goals of the leadership of the Russian Academy of Sciences, it was determined that it was necessary to carry out an examination of reforms within the country and foreign policy actions. It was pointed out that independence and absolute freedom from the influence of the ruling structures would be an indispensable condition for the activities of our scientists. It was planned that the Academy of Sciences and its institutes would propose various new programs and projects aimed at the benefit of the Fatherland and the most important among them was the Program of the National Revival of Russia. It was also pointed out that it was necessary to protect and ensure the rights and existence of the RAS in relations with the authorities: The government should have a clear understanding at all levels of government, that the support of science and the academic community is not charity and favor, it is the mission and function of the state that exists in the whole civilized world.

Yu.S. Osipov rightly warned: "New Russia inherited from the USSR world-class science, and only the science of the United States could compete on equal terms with it. The creative potential of the Russian Academy of Sciences is not only a huge universal value, but it is the most important strategic resource of the Russian State. An appeal to Russian history shows that science in Russia has traditionally been one of the foundations of statehood. If our state does not take quick and decisive measures to support science, it will lose this strategic resource. Destruction of the scientific potential and its core-fundamental science - will throw Russia into the category of third-rate states " (Osipov, 1993).

Unfortunately, the academician was right. The disintegration of the USSR led to a break in the existing scientific and technical ties with scientific, educational and production organizations developing in the former union republics, the loss of structures and personnel in many areas of science and technology. There was not only a significant reduction in the funding of the scientific sphere. The transition to the planned post-industrialism, liberalization and criminal privatization was constantly accompanied by the problem of survival and preservation of the active part of the country's scientific and technical potential. As a result of liberal reforms, processes of deindustrialization and demodernization of post-Soviet Russia were unfolded.

#### 4 Discussion

In connection with the inhibition of modernization processes in the last decade, issues related to the development and implementation of state scientific and technical policy, choice of priorities both in the period under study, and in subsequent years have become the subject of heated discussions. In the opinion of N.I. Kutepova, a sharp decline in R&D funding in the 1990s was associated not only with the crisis processes in the economy. It was justified theoretically. There was the conclusion from the "economic determinism" (and it was implemented in practice in Russia), about the need to reduce budgetary spending on education, medicine, science and other sectors of the social sphere, on the adequacy of compulsory seven-year education for the population of our country, etc. During two years after the beginning of reforms there was a reduction in the number of employees by 32% only in academic science. It was associated with a decline in production in the 90's, and was due to structural shifts in the economy (reduction in demand for high-tech products) (Osipov, 1993).

Director of the Institute of the USA and Canada RAS, S. Rogov, wrote that as a result of ill-conceived reforms in the 1990s, a significant part of the branch science was privatized and disappeared without a trace. The budget financing of R&D was sharply reduced. The number of scientific researchers has decreased almost three times. There was a loss of whole scientific schools. The current situation, according to the author's point of view, is the result of the implementation of neoliberal economic concepts in Russia, according to which any state intervention in the economy leads to negative consequences. According to S. Rogov "the last twenty years we lived at the expense of the scientific and technological backlog created in the Soviet Union" (Kutepova, 2009)

According to A.E. Warsawskiy and O.S. Sirotkin, in 1990-1997 years the country's scientific potential has decreased by 35-40%. The monetary estimation of its losses in this period amounted to at least \$ 60-70 billion. The number of design, engineering, and planning and surveying organizations decreased 2.8 times. The share of expenditure on R&D (internal costs) in Russia's GDP in 1999 was in line with the level of the 1950s, while the absolute value of total expenditure on R&D was close to the level of the early 1960s. In general, the share of R&D spending in Russia's GDP during the period of reforms has dropped to the level of Egypt, India, Portugal, although in the late 1980s this indicator was consistent with the level of the USA, Germany, Japan and Sweden, where the science spent 2.5 to 3.1% of GDP (Gazeta, 2010).

Political scientist, A.A. Zhdanovskaya, confirms that the neoliberal reforms that have been implemented in Russia since the early 1990s were the standard reforms of the IMF and the World Bank: "Development through external loans" is an illusion - Russia is increasingly drawn into debt dependence, despite the fact that the reforms themselves, for which loans are allocated, do not bring development of the country, but consolidate and deepen the position of Russia as a periphery in the world capitalist system and the redistribution of resources outside the country from the poor to the rich " (Varshavsky and Sirotkin, 1999).

#### 5 Summary

Agreeing with a number of the above judgments, the authors of this study believe that the crisis situation in the scientific and technical complex was caused not only by the general paralysis of the socioeconomic sphere, but also by the absence of a conceptually elaborated state industrial, scientific, technical and innovation policy, the weakness of the legal framework and completely different priorities of the Government.

In general, evaluating the development of the 1990s conceptual documents relating to the scientific and technical sphere, we formulate the conclusion that the task of modernizing the country was not even declared there, there was talk of saving only a small part of the STC, getting rid of "ballast", educating the younger generation at the level necessary for the market and SKD, but not a technological breakthrough. Where there is a disintegration of strategy, there is still a decay strategy. It was possible to stop the deindustrialization and the collapse of the NTC, having a scientifically based and clear program of action. Unequal projects were offered to the Government, but were discussed only in a scientific environment. Domestic experts were not honored by the reformers.

As a result, the demand for production for scientific and technical products fell sharply, the collapse of orders created a dramatic situation in defense science. The outflow of scientists and specialists from the scientific research institute and design bureau was growing noticeably. The social status of the scientist was steadily declining, the prestige of science was falling, the liberalization of prices caused a sharp (by 10-15 times) increase in material costs and overhead costs for maintenance of R&D. In fact, the creation of new objects of science was stopped; the amount of unfinished construction in the scientific and technical sphere of Russia was 1.5 billion rubles. (in the prices of 1991).

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# ALBIGENSIAN (PROVENCAL) CODE IN THE NOVEL STRUCTURE OF "THE MASTER AND MARGARITA" BY M. BULGAKOV

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Abstract: The article explores the problem of the functioning of the Albigensian "code" in the artistic structure of M. Bulgakov's novel "Master and Margarita". The unity of artistic and Western European cultural discourses in the author's narrative is reflected in the system of codes, archetypes, character images, motifs, citations and reminiscences that permeate the entire novel structure. The Albigensian code defines the philosophical component of the novel, forms its spatial model and is one of the important codes of the text, into which the writer "embeds" other European codes, ciphers through parody and "double play". The key to the Albigensian "code" is the image of Korovyev-Fagotto to, who at the end of the novel is transformed into the figure of a purple knight. The meaning of the knight's pun is explored, which is the key to understanding the philosophical code of M. Bulgakov, and the symbolism of color, which also refers to the Albigensian "heresy". Purple color is associated with the Cathari idea of repentance, the transition to a different world. M. Bulgakov uses the religious and philosophical views of the Albigensians in order to actualize their own philosophical ideas, which are defined by dualistic principles in explaining the universe. The inclusion of Albigenses code in the text occurs through the principles of the pun, the theatrical carnival game borrowed from the troubadours.

Keywords: code, albigensianism, Cathari, dualism, pun.

#### 1 Introduction

Roman M.A. Bulgakov's Master and Margarita, of course, has been studied from various aspects by literary scholars, among which are A. Boborykin, I. Belza, V. Nemtsev, B. Sokolov, M. Chudakova, E. Yablokov and many others. other (Boborykin, 1991; Belza, 1978; Sokolov, 1997; Yablokov, 2001). The concept of "the mystery of the novel" The Master and Margarita "was formed, which is deliberately supported by Bulgakov scholars (A. Smelyansky, M. Chudakova, etc.). It is emphasized that this is a novel-cipher, a novel-crossword. Undoubted interest until now represents the work of I. JI. Galina "Riddles of famous books" (1986), which analyzed the philosophical positions of the writer, his views on the world and the place of man in it. The book describes the results of decryption implicit ideological and aesthetic foundations, the "dark" places of the novel.

Certainly, the ciphers of M. Bulgakov can be decoded through the actualization of certain cultural codes, and, first of all, the Western European, and not only Dante, Goethe, Hoffmann, etc. Already in the book of I. L. Galinsky denotes access to the Albigensian code: M. Bulgakov could well know the teaching of the Albigensians, was familiar with the "Song of the Albigensian Crusade", and, thus, actualize the ideas of the Cathari in the novel.

In Western literary criticism, the philosophical and aesthetic analysis of the novel "Master and Margarita" is presented in the works of E.K. Wright, TRN Edwards, E. Erickson, Jr., Ellendei Proffer, Nadine Natov, Julie Curtis, D.M. Bizi, Eh. Barrett et al. (Ericson, 1974; Natov, 1981; Bethea, 1982; Alekseeva & Chernov, 2017). From the point of view of E. Colin Wright (Canada), Bulgakov's man seeks to free himself from the tyranny of knowledge of good, and this process leads to Gnosticism and even to the worship of the forces of evil, and "from here one step to the Manichean heresy with its dualistic view of good and evil". M. Bulgakov's dualistic views of the researchers were raised to Manichaeism, Bulgarian Bogomilism. However, the Albigensian tradition remained outside the scope of the study. The purpose of this article is to identify certain aspects of the artistic functioning of the Albigensian (Provencal) code in a novel, which we consider to be one of the basic ciphers of the

#### 2 Methodology

The methodology of the study suggests an integrating analysis that takes into account the mythopoetic, hermeneutic, historical-genetic methods of studying the artistic text (Afanasyeva, et al, 2017; Golikova, et al, 2015; Zueva, 2017; Blinova & Vasilieva-Shalneva, 2015; Villalobos Antúnez, 2015). The hermeneutical method allows deep penetration into the artistic fabric of the text. The historical genetic method, which presupposes the isolation of the essential properties and functions of the object under study, makes it possible to trace the connection between the novel "The Master and Margarita" with all the richness of artistic and philosophical searches in Russian and foreign literature.

#### 3 Results and discussion

#### 3.1 Korovvev-Fagotto

The starting point of the Albigensian code can be considered the image of a purple knight, in which Korovyev-Fagotto turns at the final of the novel. He is a jester, a joker, and his transformation into a gloomy purple knight is paradoxical. The knight was punished for punning about the Light and the Darkness, for which he had to wear a mask of jester. The second name of the hero - Fagotto - sends us to the Albigenses, representatives of the civilization of Provence, where the poetry of the troubadours was born. The very word "Fagotto" (bassoon) is not a musical instrument, but is translated as a "bundle of firewood". Literally, the Fagotto is one from which a bundle of firewood is smells, that is, a heretic who was burned at the stake during the Inquisition (13-th century). "... the complex of the dictionary meanings of the modern French lexeme "fagot" ("bundle of branches") has lost its relation to a musical instrument - literally "a bundle of pipes" ("fagot" - in French "basson") - and among these meanings there are such phraseological units, as "etre habille comme une fagot" ("to be like a bundle of firewood", i.e., to dress tastelessly) and "sentir le fagot" ("stink of heresy", i.e. smells like bonfires, bundles of branches for a fire). Bulgakov did not pass and past the related lexeme "fagot" of the single-rooted French word "fagotin" (fool).

At the same time, the semantics of the word "fagot" ("faggot") may be associated with the non-traditional orientation of men. Thus, "fagot" already at the level of the original meanings can refer us to the Albigensian "heresy."

Very few people tried to explain the image of Korovyev-Fagotto: "Unless E. Stenbock-Fermor (USA) in 1969 suggested that in him, apparently, is embodied in an original way - as a companion of the devil - Dr. Faust, and in 1973 E. K. Wright (Canada) wrote that Korovyev-Fagotto is a minor character, a pass-through, "just an interpreter". I. Galinskaya also raised Korovyev-Fagotto to the Albigensians and Troubadours. Proceeding from the theme of the pun produced by him about light and darkness, the researcher sends us then to Peira Cardenale (about 1210 - the end of the 13-th century) - the fierce enemy of Rome and one of the Cathari by convictions, then to Guillaume Figueira (1215 - about 1250). She finds the pun itself, which the purple knight could compose: "The pun "l'escurs esclarzic" ("the light was created from the darkness") adequately in Russian, unfortunately, can not be translated. In Provençal, from the point of view of the phonetic game "l'escurs esclarzic" sounds beautiful and very elegant. So the pun of a dark purple knight about light and darkness was "not quite good" (Woland's assessment) by no means in form, but in meaning. And indeed, according to the Albigensian dogmas, darkness is an area completely separated from light, and consequently, from the darkness the light can not be created, as the god of light can not be created from the prince of darkness. That is why the content of the pun "l'escurs esclarzic" equally could not suit neither the forces of light nor the power of darkness. "The pun is "not good" precisely because it mixes "different departments", in the words of M. Bulgakov. The knight (at home - Korovyev) has transgressed the dogmas of the Albigensian doctrine, which is why he was punished by the overthrow to Moscow-Hell.

As we see, the writer gave the keys to his future "descriptors" in the text of the novel, and we just have to find them. Korovyev thus appears as a hero-sign, the key to the code, clearly indicating the Albigensian (Provencal) code through the name and pun. The novel, therefore, must be read at the end, since the purple knight is the starting point for at least decryption the Albigensian code.

#### 3.2 Albigenses and troubadours: poetics of the cipher.

So the author refers specifically to the Albigensian "heresy"? The answer seems to be obvious. The Cathari fought Catholic Rome, with its totalitarianism (which is also consistent with the ideas of M. Bulgakov). The "hereticism" of the Cathari-Albigensians was a direct expression of the position of the struggle against the domination of the papal curia, its departure from the divine ideals, the idea of asceticism. In the struggle against Rome, an important role was played also by the poetry of the troubadours, who were not only the creators of the extensive system of poetic genres in Europe. Most of them participated in the Albigensian wars, fought with orthodox religion (for example, troubadour Jaufre Rudel was a supporter of Cathari). Their special poems were filled with a double meaning, where the play and pun, the poetic, semantic ciphers, alliteration and assonance were updated (Andreev, 1987). Thus, the satire of the Moscow chapters can be fully understood through the mirror of the history of the Albigensians and Troubadours, and M. Bulgakov's ciphers can be related to the Provençal play aesthetics.

The connection between troubadours and Cathari is not proved. However, "the phenomena of troubadours and courtly love almost exactly fall on the period of the Albigensian heresy, perhaps not by chance. The movement of the troubadours was greatly undermined by the siege of Toulouse in 1218 and the conclusion of the Paris Treaty in 1299. At the beginning of the XIV century, it was practically destroyed by the growing forces of the Inquisition". The songs of the troubadours openly undermined the authority of the Pope and most likely contained the Albigensian interpretation of being, which was distinguished by a harmonious system of philosophical and mystical views and contradicted official Catholicism. Putting the idea of the eternal struggle of Good and Evil at the head of his teaching, the Albigenses essentially redefined the Catholic dogma by declaring that the visible material world is the product of Satan, while the Christian God created only a spiritual world (proximity to Manichaeism).

"In Rome, the Cathari were regarded not as reformers, but as malevolent dualists who resurrected the ancient teachings of the Manichee, for the doctrine of the Cathari was based on the principle of confrontation between two antagonistic principles: Good and Evil, Light and Darkness. The Cathari attributed the creation of the material world to the evil demiurge, the Devil, giving God the spiritual realm of Good and Light "(Osokin, 2000). This philosophical position in Bulgakov is fully manifested: Woland reigns only in the earthly world - Moscow and Yershalaim, and has no access to the Light. The traditional European being code and the philosophical code of G. Skovoroda, implemented in the text, is corrected by M. Bulgakov with dimensional space model of the Albigensians -Cathari world and their dualistic views. The space of the novel is organized in much the same way as in the medieval "heretics" -Light and Darkness, Hell and Paradise, which can exist only in parallel, but do not mix. Between the two worlds, however, there is a kind of "layer" - the world of Peace (taken from G. Skovoroda), which is associated with M. Bulgakov with the category of Creativity. Peace at M. Bulgakov stands as the border between Hell and Paradise. The world of Yershalaim and the world of Moscow - the world of Hell, is determined by the main motive - the motive of Darkness, which is constantly updated ("darkness descended on Yershalaim").

The Albigenses are lofty idealists: worshiping the immortal spirit, they despised the mortal body. According to their teaching, the main task of man is to release from the mortal shell as soon as possible and to ascend his immortal soul into the divine spheres. Thus, they believed that wearing a body, staying on earth is the hell that the Scriptures frighten. In the final of the novel, this is clearly seen in the death of the Master and Margarita, as well as in the transformation of individual heroes from the Woland suite. The death of the main heroes of the novel is, in fact, liberation from the mortal corporeal shell. The souls of the Master and Margarita are in the world of Peace, and their bodies we see in a Moscow apartment.

#### 4 Summary

So, the Albigensian ideas, ciphered through the figure of Fagotto, influence the specificity of the tops of the novel, define the poetics of the game in the Moscow chapters and the object of authorial attacks - the third Rome - Moscow. For MA Bulgakov, the very idea of encrypting meanings through play poetics was important, which he borrows from the troubadours. A purple knight (in Moscow he's a joker Korovyev) is not an Albigensian, not a Cathari in the full sense of the word, but there is a sign of the Albigensian "heresy" in her chivalrous hypostasis, the incarnation of troubadours who share the Albigensian dogma with its dualistic interpretation of peace and being, evil, and fighting with the evil social. Symbolically, in view of all that has been said, Korovyev is an "interpreter", that is, one who translates from one language to another - from the cipher language to the literal language.

In the update of the Albigensian code through the image of the knight M. Bulgakov turns to the detail, primarily the color one. The Fagotto turns into a purple knight. I. Galinskaya explained this by the fact that the French historian of the XIX century. Napoleon Peira, who studied the struggle of Catholic Rome with the Albigenses according to the manuscripts of that time, informs in the book "The History of the Albigenses" that in a manuscript containing songs of the knight-troubadour Cadenet, who was in the retinue of one of the Albigensian leaders, he found in the vignette of the capital letter the image of the author in purple dress.

At the same time, purple, having an obvious symbolic meaning, is rather ambiguous. This color symbolizes restraint, moderation, spirituality and repentance. This can be directly related to the Cathari teachings and, above all, to prayer consolamentum - consolation, as well as austerity. Purple also symbolizes the transition from the active to the passive, from life to death, which we clearly see in the line of the character of Korovyev: from the ironic foolishness in the concrete-transient in the Moscow chapters - to gloomy passivity in the situation of eternity. In the liturgy, this color is associated with the idea of repentance, with atonement and self-absorption, which is logically associated with the image of the knight.

In general, the purple color contains something extinct, it symbolizes death. No wonder Woland comments: "The knight paid his account and closed it!" Thus, having served his sentence in Moscow, the Albigensian knight accepts death as atonement and a long-awaited liberation from the evil world in accordance with the Cathari "heresy". The final chapters, of course, are determined not only by the idea of paid bills, the atonement of guilt and the motive of death in the spirit of the Cathari-Albigensian doctrine, but also by traditional apocalyptic motives. Bulgakov, it seems, intentionally mixes the two branches of Christianity. Which of them is true, and that the parody is the author's riddle for the reader.

# 5 Conclusion

So, M.A. Bulgakov in his novel gives the reader special "keys" for decryption the numerous codes of the novel. One of these codes is the Albigensian (Provencal) code, which is indicated, first of all, through the sign figure of Korovyev-Fagotto. In the final text, the latter turns into a purple knight, whose pun of light and darkness is connected with the Albigensian dualistic

interpretation of Genesis. Light and Darkness are two different worlds that can not mix. In the pun, Korovyev was mixed "two departments." Hence the motive of the hero's reckoning and punishment. These motifs are indicated not only at the level of the plot, but also at the level of color symbolism. The purple color of the knight is also interfaced with the Cathari idea of repentance, death-consolation, and transition to another world.

The significant figure of Korovyev is the key to the special toposes of the novel. Bulgakov corrects the universe, using Albigensian ideas in addition to the interpretation of G. Skovoroda. At the same time, the Albigensian idea of moral purity, the deliverance from the body is clearly manifested in the finale of the novel through the transformation of the "band" Woland and the death of the Master and Margarita.

Albigensian code clearly affects not only the philosophical, moral, but also the social problems of the novel: it identifies the idea of fighting the third Rome through the implementation of the principles of play, pun, carnivalism, which the writer borrows from the troubadours.

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# FACTORS INFLUENCING INNOVATION OF FEMALE MANAGERS ON THEIR BUSINESS PERFORMANCE

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Abstract: Management is one of the key pillars of commercial corporations as though it could also be designated as the executive organ of the commercial corporation. In the meanwhile, the creativity and innovation of managers is of paramount prominence for the survival of any organizations, otherwise the firms would be dwindled and faded in the business arena. The purpose of the current study is to scrutinize and detect the factors influencing the innovation of female managers on their business performance in Zanjan city's companies through the implementation of the Delphi method. In terms of purpose type and qualitative-descriptive method, this study is conducted via the implementation of Applied research and Survey Research methodologies respectively. Through the utilization of comments and feedback provided by a number of female executives of Zanjan city companies, after the distribution of three rounds of Delphi surveys and analysis of the results acquired from 30 respondents, 6 cases were eventually identified and validated using Mimac software. The results of the study indicate that from the perspective of the companies' female executives partaking in the research, the exhilaration, innovation, risk appetite, assiduity and availability of expert human resources as well as tension reduction, are the six factors influencing the innovation of female managers on their business performance. In the end, according to the results obtained from the research, practical recommendations are provided.

Keywords: Innovation of Female Managers, Business Performance

#### 1 Introduction

Management is one of the key pillars of commercial corporations as though it could also be designated as the executive organ of the commercial corporation. This pillar is in charge of the administration of the company's affairs and subsequently, according to the law, a number of duties, authorities as well as privileges and bonuses are defined for the executives appointed for this office which are essential preconditions for this cause. Albeit, the managers enjoy some benefits thanks to their position, they are subject to liability as if the decisions and actions they take deriving from their authorities and command may result in capital and financial loss of the company, in this case, the managers are the ones responsible for the compensation (Issaei Tafaroshi et al, 2013). The environments where individuals can easily express themselves play a crucial role in developing innovative ideas as innovation is rooted in people's flexibility and dynamic mind (Ozmutaf et al, 2015).

Creativity and innovation are essential for the survival of any organizations for the non-creative organizations would be dwindled and faded in the business arena through the passage of time. Even though such an organization may overwhelm an operation in which it is entangled at some certain point during its life, it will be eventually coerced to shut down or alter its system (JahanShahi et al, 2015; Villalobos Antunez et al, 2013).

In the meantime, the innovation performance could also be defined as the opportunity and right given to the female managers along with male ones in terms of professional development within the organization (Ozmutaf et al, 2015). Today, the issue of women management is one of the challenges encountered by societies and governments. This is considered as one of the criteria required for the countries' expansion and advancement, in fact, it is a criterion for development assessment, establishment of gender equity within societies, the way governments cope with women's issues and tackle the barriers they face so as to gain better opportunities. According to the latest statistics, women constitute half of the active population of the country out of which merely 16.14 per cent are in charge of economic activities and from this percentage, only 3.1% are active in managerial positions indicating that women in our country are less active in managerial positions (Karahi Moghadam et al, 2014).

# 2 Literature Review

While referring to numerous texts and references to acquire a comprehensive definition for management, various definitions

concerning it will be encountered each of which possess their respective commonalities and differences. In other words, in terms of management, a definition universally accepted and approved does not exist. Varied definitions are presented by management experts and authors according to their own different objectives and orientations as though with respect to management, it could be averred that the quantity of definitions provided for it are as many as the number of books complied by authors concerning this matter. Some of the explanations referred to management's definition in various managerial references are as follows:

Management could be defined as a comprised science and art, coordination of leadership and control of collective activities in order to achieve the desired goals with maximum efficiency (Ansari et al, 2011).

#### 3 Female Managers

The manager is the person responsible for the company's entire management affairs (Acca, 2009). The term "gender" is employed in various forms to help people examine the facets of work-related interactions between ladies and men. This issue has often been considered by women in order that they could enhance their social status and change the vision through which their status is regarded by the community. There are blatant differences in the structures of relationships and interpretations regarding the role of women in social and organizational activities taking the cultural components, social classes, religious beliefs as well as many other factors in various societies into consideration. Many experts, particularly in the United States and England do not believe in dissents regarding the activities of ladies and men as they maintain that the perceptions of inequality are primarily raised by women who seek to prove that they are able reconcile themselves with men (Marshall, 1998; Dorzhu & Ondar, 2018).

In the conventional division of human resources within organizations, whether consciously or unconsciously, women are marginalized as though their ascent and advancement are deemed trivial to other people and even their elevation to higher degrees is occasionally considered eccentric and intolerable since the prevailing premise is that women ought to be marginalized and they should never reach the pinnacle of their career (Wirth, 2002). Human resources are one of the most vital and precious reserves in the developing countries. Providing that these countries could train their human resources towards the promotion of their excellence and expertise, they would be able to vie with the industrialized countries. In the conventional division of the human resources in organizations, whether consciously or unconsciously, women are marginalized as though their ascent and advancement are deemed trivial to other people and even their elevation to higher degrees is sometimes considered eccentric and intolerable since the prevailing premise is that women ought to be marginalized and they should never reach the pinnacle of their career. According to the study conducted pivoting upon the latest official statistics proclaimed by Statistical Center of Iran, there is a significantly blatant difference between the economic participation rate of men and women in Iran. Based upon the results obtained in the spring of 2011, the economic participation rate in the population of 10 and higher was 38.2% throughout the whole country. The variables estimated for men and women are 62% and 14.3% respectively. On the understanding that the population aged 15 or more was assumed to be the working age, the economic participation rate would be 41.9% throughout the entire country. The variables estimated for men and women are 68.2% and 15.7% respectively. The presence of women in management arena encompasses a variety of contentions, challenges and complications in regard of which a lot of investigations is required (Ahmadi KohanAli et al, 2013; Gimadieva et al, 2017).

#### 4 The Challenges Women Face in Management Positions

Respecting this issue, Dr. Ali Asghar Saeedi (sociologist and university professor) claims that women are under greater surveillance compared to men when they are appointed to management positions as not only such deeds do not stand to reason in the society, but also, they are quite contrary to the perception commonplace amongst the public. Female managers need to be more vigilant so as to keep their position, while men do not tackle such issues. Fallacies such as the superiority of men over women in terms of managerial authorities, the tendency towards patriarchy in the appointment of managers, believing that women have developed a circumspect stance in decision-making or they are more emotional and emotive than men and so forth are among the beliefs influencing women to be in charge of management positions, while serious activities of this sedulous stratum of society could also be regarded and contemplated differently. Such vantage points manifest the point beyond the activities of female managers. A procedure which has been deliberately neglected and taken for granted. In this regard, beliefs such as women's equity, devotion of a greater deal of time to the work, women's more tolerance as well as their attention to ideals, goals and mindsets maneuver (Karahi Moghadam et al, 2014). In the past, managerial opportunities for women were limited to administrative jobs. Several studies indicate that women ought to undergo more challenges to obtain managerial positions in comparison with men. These challenges are, in fact, the obstacles women encounter during their career promotion to managerial positions. Arikan spoke of several reasons regarding the point that why women are not promoted to managerial positions. His arguments go as follows:

- Sex-Role Stereotypes
- Responsibilities a woman holds toward her family
- Low level of self-assurance in women
- Women are left out of the network created by men
- The negative attitude that senior managers hold toward female managers
- Employment Discrimination (Ozmutaf et al, 2015, 222).

In some studies, these challenges are classified into four general categories including individual, organizational, cultural and social barriers (Taqizadeh et al, 2013, 38).

# **5 Features of Innovative Thought and Action**

To examine innovation, scientists used to accentuate science and technology, while today, it is verified that science and technology are merely one of the ways to attain innovation. Innovation is a multifaceted phenomenon owing to which it is preferred as the subject of study in various branches of humanities. From behavioral sciences standpoint, the type of conduct that occurs during an innovative action performed by individuals is of prominence. From an economist point of view, economic motives and conditions facilitate the innovation touching the performance of numerous enterprises and industries. The way whereby firms and enterprises are directed is of pivotal consequence for exploiting the creative and innovative capacity of the staff from managers' vantage point. In order to investigate all these issues, the characteristics of innovation and its varieties should be identified at the outset (Keshavarz et al, 2010).

Some of its foremost characteristics are briefly argued as follows:

1. Novelty and Authenticity; any idea, thought and notion authentic and peerless is deemed innovative. Monotonous, analogous, and mixed thoughts varying barely in terms of appearance and look are not regarded as creative ideas. On the other hand, a consistent notion encompassing the principles of reason and science which abides by such principles is designated as creative thinking as though it gives rise to problem solving or invention and innovation of a solution or an untapped discovery that leads to the production of science, tools and the like.

- 2. Appropriateness and Functionality; not only are not creative opinions fictitious and futile, but also with respects to dilemmas, essentials and problems they are considered as the source of profit enjoying a satisfactory percentage of advantage as if they are able to resolve a wide range of complications or requisites and in truth, its productivity level is high.
- 3. It ought to either solve an issue or meet the scientific and practical needs; a creative thinking should be able to provide varied solutions pivoting upon the circumstances and facilities when it comes to confronting issues and to opt for the one possessing the most positive points so as to resolve the problems or meet the scientific and practical essentials in the desired subject as though the presented solutions are not only subjective, but they are realistic and rational.
- Durability; creative thinking should hold a relative stability and durability when it comes to practice. Instantaneous, impermanent, and superficial thoughts which do not even comprise innovation and invention are not regarded as creative opinions (Jahanshahi et al, 2015).

#### **6 The Innovation Process**

Innovation is a complex process and system whose phases or sequences could vary hinging upon the circumstances and organization type. Nonetheless, the overall process of innovation in its general form embraces the phases going as follows:

Apprehending the market needs (client/user) or innovative opportunity.

Changing the existing technology or adopting the technology which meets the essentials or opportunities.

- Devising a new product or service (invention) if necessary.
- Providing technologies (and new products or services) through commercialization (Saida Ardekani et al., 2013, 139).

Schumpeter distinguished between innovation categories including new products, new methods of production, new supply sources, exploitation of new markets and ways to organize business.

However, most of the economists concentrate on the first two items. As an instance, Schumpeter maintains that the distinction between "production technology" and "product technology" is pivotal to grasp innovation. He defines the product technology and production technology as knowledges of how to create or upgrade products and how to produce products respectively. Through the same approach, the terms "product innovation" and "innovation in production processes" are also explained as the emergence of new products or their upgrades and the enhancements applied to production modes respectively (Keshavarz et al, 2010).

The innovation process merges the design, invention, development and transfer of technology with each other. In each phase, ideas and concepts are created. Yet, the innovation process fulfills when these phases lead to the exploitation and commercialization of a product in due course. The key stages of the innovation process are usually defined within the framework of a scheme for this type of organization, widely employed in innovation from 1980 on, is a more efficacious approach. Each innovation scheme usually commences with an idea that often involves some sort of a technical solution for the current or future essentials of the client. After proposing the idea, next stage is called resource search phase where ideas are fulfilled. Each idea, hinging upon its complexity, may require several days to several years of work and endeavor to flourish. This flourishing stage of the idea is called product development. Once a product is developed, its production and supply are determined subsequently and further, post development activities (product improvement, etc.) might be necessary (Nazari Zadeh, 2003).

Therefore, innovation is also defined as the desire and ability of the organization adapt or develop innovation in the form of a product, service, process or business system (Ariss et al, 2012).

Today, virtually the entire nations throughout the world are seeking to ascend their productivity level and boost their economic status in the wake of creativity and innovation. One of the chief grounds for the soaring importance of creativity and innovation is the emergence of competition amongst the developing countries. Through the utilization of creativity and

innovation techniques, we will be able to reach our goals efficiently and effectively along with enjoying a developed and leading society. Creativity and innovation are prerequisites for the excellence and advancement of an organization or society and knowledge of its techniques is an indispensable essential for the managers, students, researchers and enthusiasts of this field. (Siadat et al, 2013). In general, the grounds for the prominence of innovation within an organization as well as the essentials for taking heed of it could be summarized in the following figure:



Fig 1. The Prominence of Taking Heed of Organizational Innovation (Siadat et al, 2013, 76)

#### 7 Descriptive Statistics

#### 7.1 Age of Respondents

Table 1 displays the frequency distribution of respondents participating in the Delphi group based upon age category. As it could be observed, 2 of the respondents (5.7%) are under 25 years old, 7 of them (20%) are in the age range of 25-30, 22 of the respondents and participants in the Delphi group (62.9%) %) are in the age range of 30-40 and 4 of them (11.4%) are over 40 years old. Therefore, the majority of the respondents are in the age range of 30-40 whose frequency distribution as a diagram is displayed in Fig. 1

Table 1. Frequency Distribution of Respondents Based on Gender

Cumulative Percentage	Percentage	Frequency	
5.7	5.7	2	Under 25
25.7	20.0	7	25-30
88.6	62.9	22	30-40
100.0	11.4	4	Over 40
	100.0	35	Total

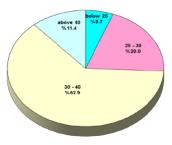


Fig 1. Frequency Distribution of Respondents Based on Age

# 7.2 Career Experience

The second enquiry of the questionnaire was concerning the respondents' career experience. The frequency distribution of respondents based on their career experience is manifested in table 2. The career experience for 9 of the respondents (25.7%)

is under 5 years and 3 of them enjoy career experience range of 5-10 years. Moreover, 17 (48.6%) and 6 (17.1%) of them hold 10-15 and over 15 years of career experience respectively whose frequency distribution as a diagram is displayed in Fig 2. The majority of the respondents possess 10 to 15 years of vocation experience.

Table 2. Frequency Distribution of Respondents Based on Career Experience

Cumulative Percentage	Percentage	Frequency	
25.7	25.7	9	Under 5 Years
34.3	8.6	3	5-10
82.9	48.6	17	10-15
100.0	17.1	6	Over 15
	100.0	35	Total

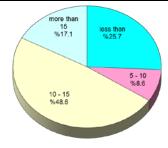


Fig 2. Frequency Distribution of Respondents Based on Career Experience

#### 7.3 Education Level

The frequency distribution of respondents based on their education level is shown in table 2. As it could be observed, 24

(68.6%), 9 (25.7%) and (5.7%) of the respondents hold bachelor's, master's and doctoral degrees respectively whose frequency distribution as a diagram is displayed in Fig. 3

Table 3. Frequency Distribution of Respondents Based on Education Level

Cumulative Percentage	Percentage	Frequency	
68.6	68.6	24	Bachelor's Degree
94.3	25.7	9	Master's Degree
100.0	5.7	2	Doctoral Degree
	100.0	35	Total

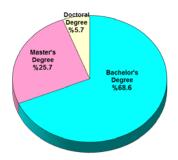


Fig 3. Frequency Distribution of Respondents Based on Education Level

# 7.4 Implementation of Delphi's First Round

As it was declared earlier, One of the methods employed for group knowledge acquisition is the Delphi technique, a structural based process for predicting and helping decision-making during surveys, data collection and eventually group consensus. Albeit the previous studies were always in dearth of a theoretical framework for the Delphi technique, with regards to the large number of studies conducted, reaching a simple theoretical framework is straightforward. A group comprised of 35 experts with different expertise, age and education partook in this research. In two rounds of questionnaire distributions, their opinions regarding the factors influencing the innovation of female managers on their business performance were gathered. In the first questionnaire, initially, the 20 factors which seemed to affect innovation of female managers were presented to the members of the Delphi group on a 5-degree scale to which they were asked to assign a score according to their importance. These comments were finally summed up and, after initial calculations, were re-submitted to the group memebers during the second-round questionnaire so as to determine the importance.

The consensus among the group members concerning the factors in the first round

Via the utilization of Kendall correlation coefficient, the consensus amongst the group members concerning the effective factors was calculated. Kendall rank correlation (Kendall's tau coefficient) coefficient is a statistic used to measure the ordinal association between two measured quantities. This coefficient is employed when we encounter more than two sets of ranks and we are pursuing to fathom the extent to which the ranks given by m arbitrator to n agent, individual, or object are agreed upon.

The formula of this coefficient is as follows:

$$w = \frac{s s^{\frac{2}{3}}}{\frac{1}{12} m^{\frac{2}{3}} (n^{\frac{3}{3}} - n)}$$

In this formula, ss2 is the sum of squad ranks, m is the number of arbitrators and members of the group, and n is the number of factors or objects ranked. Kendall's tau coefficient was computed via SPSS software. Table 4 shows the correlation coefficient as

well as other statistics. As it could be beheld, 35 experts commented on the factors influencing the innovation of female managers on their business performance. The experts' Cohen's kappa coefficient on the factors equals 0.188 which is considered to be weak given the range 0 to 1. As a matter of fact, it could be uttered that the experts partaking in the study did not hold a potent and decisive consensus on the factors influencing the innovation of female managers on their business performance. Besides, the calculated Chi-square for the average rankings of the investigated factors equals 125.351, with <sup>3</sup>19 as degrees of freedom at the probability value of 0.001. Hence, it could be asserted that the ranks obtained from the Delphi group's comments on the factors influencing the innovation of female managers on their business performance in the first round were significant and the computed ranks and preferences are different from the viewpoint of Delphi group members. The average ranks of the factors in the first round is manifested in Table 4.

Table 4. Statistics Related to Kendall Correlation Coefficient in the First Round

the I list Round		
35	Quantity	
0.188	Kendall Correlation Coefficient w	
125.351	Chi-square	
19	Degrees of Freedom	
0.000	0.000 Significance Level	

In Table 5, the average ratings of the factors influencing the innovation of female managers on their business performance in the first round of polls from the Delphi group is displayed. As it could be discerned, the ranking of the top 10 factors is as follows: the leading factor according to the standpoint of Delphi group members in the first round belongs to the exhilaration of female managers with an average rating of 16.2 and the ownership-centricity factor is ranked second with an average rating of 13.6. Furthermore, the average ratings for the 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup>, 7<sup>th</sup>, 8<sup>th</sup>, 9<sup>th</sup> and 10<sup>th</sup> rankings are 13.07, 12.29, 12.04, 11.97, 11.37, 11.36, 10.61 and 10.24 respectively.

Also, the 5 factors having moderate ranks are as follows: The  $11^{\text{th}}$ ,  $12^{\text{th}}$ ,  $13^{\text{th}}$ ,  $14^{\text{th}}$  and  $15^{\text{th}}$  rankings belong to the factors thoughtfulness with an average rating of 10.21, opportunism with an average rating of 9.54, bravery with an average rating of 9.20, solutionism with an average rating of 9.00 and

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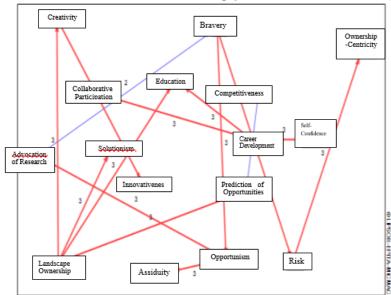
collaborative participation with an average rating of 8.84 respectively.

Ultimately, the 5 factors having less importance compared to other factors are as follows: The 16<sup>th</sup>, 17<sup>th</sup>, 18<sup>th</sup>, 19<sup>th</sup> and 20<sup>th</sup> rankings belong to the factors high level of communication with an average rating of 8.71, education viability with an average rating of 8.49, creativity with an average rating of 8.46, prediction of opportunities with an average rating of 8.33 and assiduity with an average rating of 6.46 respectively.

Table 5. Average Ratings of Factors in the First Round

Ranking	Average Rating	Factors	
1	16.20	Exhilaration	
2	13.60	Ownership-Centricity	
3	13.07	Advocation of Research	
4	12.29	Peacefulness	
5	12.04	Landscape Ownership	
6	11.97	Risk Appetite	
7	11.37	Care for Career	
′		Development	
8	11.36	Innovativeness	
9	10.61	Competitiveness	
10	10.24	High-Level of Self-	
10	10.24	Confidence	
11	10.21	Thoughtfulness	
12	9.54	Opportunism	
13	9.20	Bravery	
14	9.00	Solutionism	
15	8.84	Collaborative	
15	0.04	Participation	
16	8.71	High-Level of	
	0.71	Communication	
17	8.49	Education Viability	
18	8.46	Creativity	
19	8.33	Prediction of	
		Opportunities	
20	6.46	Assiduity	

# Direct influence graph



Weakest influences

Weak influences

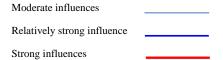
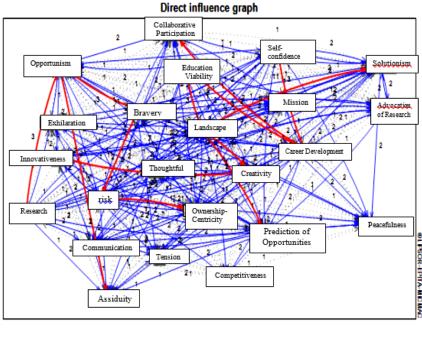


Fig 4. The Plan of the Foremost Direct Influence of the Variables (The Source of The Researcher's Calculations)

As it could be perceived, The Landscape Ownership variable directly influences the prediction of opportunism, solutionism, education viability and exploration. Moreover, the care for career development variable directly influences risk appetite, bravery, education viability, high-level of self-confidence and

collaborative participation. In fact, the two cores affecting the implemented structural model are care for career development and landscape ownership, both of which influence the other variables.



Very Little Influence

Little Influence

Moderate Influence

Relatively strong influence

Strong Influence

Fig 5. The Plan of Rirect Relations of All the Variables (The Source of The Researcher's Calculations)

## 8 Conclusion

In the last chapter of this study, the findings of the research were concluded and the necessary proposals were presented according to the test results of the hypotheses. At first, the findings obtained from the research literature were described and then the findings of the descriptive statistics as well as the hypothesis test were examined. The overall discussion and conclusion of this study were the other issue that was discussed in this chapter. In the following, suggestions were made according to the results of testing the hypotheses. Given that naturally any research has limitations during its implementation, the limitations of this study are described and suggestions for future research are presented.

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# INTERRELATIONS BETWEEN THE REGIONAL ECONOMIC SYSTEM AND THE DEVELOPMENT OF THE PETROCHEMICAL CLUSTER (ON THE EXAMPLE OF THE REPUBLIC OF TATARSTAN)

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Abstract: The development of the economy of the Russian Federation in modern conditions is based on the development of the economic systems of the regions. The decentralization of political power and the denationalization of the economy that take place in the process of reforms objectively lead to the shift of the center of gravity in making decisions on key economic and social problems of the territories directly to the regions. In the economic system of each country there are always branch blocks that play the most important role in shaping the trends of socio-economic development. In Russia, they include a complex of resource use sectors, electric power industry, as well as petrochemical industry. At present, they are the basis for the development of new industries and the basis for the modernization of traditional branches of the economy. The petrochemical complex of the country, representing one of the most complex complexes of the national economy, since it is to a certain extent connected with national economic security, as well as with environmental protection and a number of other socio-economic indicators of the sustainable development of economic systems. One of the main features of the development of the petrochemical industry at the present time is a sharp increase in its scale. Over the past five years, the production of chemical and petrochemical products has grown more than 1.5 times. The petrochemical complex is the base segment of Russian industry, which lays the foundation for its long-term and stable development and has a significant impact on structural changes in the economy, which have a significant macroeconomic effect and affect the level of national competitiveness and the growth rate of the economy as a whole. In this regard, the task of development and has a significant impact on structural changes in the economy which have a significant macroeconomic effect and affect the level of national competitiveness and the growth rate of the economy as a whole. In this regard, the task of dev

Keywords: regional economy, oil and gas chemical complex, network arrow diagram of precedence.

#### 1 Introduction

The study of the theory and practice of the interrelation between the functioning of industries and complexes, including petrochemical, and the development of the economy of territorial systems began relatively recently. Certain aspects of the functioning of the petrochemical complex and related problems have been reflected in the work of domestic and foreign experts. However, the study of the problem under consideration remains insufficient for comprehending certain specific interrelationships between the functioning of the petrochemical complex and the development of the region's economy under market conditions and the limitations of rational natural and resource use.

The aim of the study is to substantiate theoretical provisions and develop practical recommendations for the development of a strategy for the development of the petrochemical complex within the region in which the hydrocarbon and mineral resources are extracted and processed. The goal was to solve the following problems:

- investigate the structure of the petrochemical complex and its role in the development of the territories;
- to identify the most significant interrelations between the development of the petrochemical complex and the regional socio-economic system; - to propose and substantiate the priority directions of the development strategy of the regional petrochemical complex;
- develop a methodical toolkit that allows to carry out a socioeconomic assessment of the efficiency of the use of the region's resources and the substantiation of priority areas for the development of the petrochemical complex.

The object of the study are the enterprises of the petrochemical complex located on the territory of the Republic of Tatarstan. The subject of the study is the organizational and economic

relations that arise in the process of functioning of the enterprises of the regional petrochemical complex. The theoretical and methodological basis of the research is the scientific works and developments of domestic and foreign experts on the problems of regulating regional development, organization and improvement of the functioning of the petrochemical complex, methodological materials, standards used in practice by the enterprises of the chemical and industry, theoretical and petrochemical practical recommendations of scientific conferences and seminars on the research topic. The main methodological approach of the study is a comprehensive approach that allows one to approach the development of the petrochemical complex with the greatest efficiency and determine its impact on the economy of the region under market conditions. To solve specific problems, methods of financial analysis, economic-mathematical modeling, and statistics were used.

#### 2 Methodology

The critical path method assumes the calculation of a single deterministic schedule for the execution of the project. In this case, early and late start and end dates for the project's operations are defined, which means that the reserves are intervals for which operations can be shifted without violating the restrictions and the project completion date.

The main calculations for the application of the PERT method are carried out by the formulas (1 - 5).

The expected time is calculated by the formula (1):

Expected time = 
$$(O+4\times M+P)/6$$
, (1)

where O is the minimum (optimistic) duration of work, that is, an estimate of the duration of work under the assumption of the most favorable coincidence of circumstances;

M - the most probable estimate of the duration of work - an estimate of the duration under the most frequently encountered conditions for the performance of work;

P is the maximum (pessimistic) duration of work, that is, the duration of work under the assumption of the most unfavorable combination of circumstances.

Dispersion of the critical path is calculated by the formula (2):

$$\sigma^2 = ((P-O)/6)^2$$
. (2)

The standard deviation is calculated by formula (3):

$$\sigma = (P-O)/6$$
(3)

Private reserve work time is calculated by the formula (4):

$$B = P - T_{e}$$
. (4)

After calculating the total time reserve by the formula (5):

Total time reserve = 
$$\sum (P - T_e)$$
.

#### 3 Results and Discussion

The place of the regional petrochemical complex in the development of territories is determined by its entry into the national economic system as an element of the regional production system (Table 1).

Table 1. The location of the regi	Table 1: The location of the regional petrochemical complex in the national economic system	
Macro level	National economic system	
Meso level	Regional economic system	
	Regional Production System	
	Regional industrial complex	
	Regional petrochemical complex	
Microlevel	Economic entities (enterprises, firms, organizations)	

Table 1. The location of the regional petrochemical complex in the national economic system

The regional petrochemical complex is a subsystem of a higher order system - a regional economic system - of the entire social system of the region, functioning for the production of material and non-material goods, and meeting public needs (Khmeleva & Bulavko, 2016; Khmeleva, et al, 2005; Villalobos Antúnez, 2016). At the same time, RNA is an industrial component of the

regional economic system that characterizes the spatial structure of the region's petrochemical production, as well as production-technological, material-material, information, economic, institutional, infrastructural links between individual economic entities in the region's production system (Fig 1).

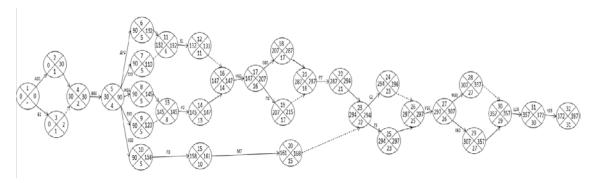


Fig 1. Industrial-technological, material-material, information, economic, institutional, infrastructural connections between individual economic entities of the production system of the region.

The role of the petrochemical complex in the development of the regional economy is determined by the functions performed and the following provisions:

- 1. The potential importance of the petrochemical complex of the Republic of Tatarstan is determined by the unique deposits and reserves of hydrocarbon and mineral resources located on its territory and a complex of producers unique not only for Russia but also on a global scale (Ostergaard & Park, 2015; Beilin, 2016; Beilin, 2017; Okriashvili, 2017). In this regard, the main function of the petrochemical complex of the Republic of Tatarstan is the involvement of the natural and resource potential of the territory in the system of social reproduction and its transformation into social, infrastructural and financial regional capital.
- 2. Due to natural features and territorial distribution of resources, most of the economic entities of the petrochemical complex of the Republic of Tatarstan are the city-forming and budget-forming enterprises of large and medium-sized cities (Deberdieva & Vechkasova, 2015; Khazova, 2015; Deberdieva & Shterbova, 2015). Thus, the petrochemical complex fulfills an institutional function ensuring the development of industrial infrastructure and social institutions in the region (Beilin & Arkhireev, 2006; Beilin & Arkhireev, 2009; Beilin & Arkhireev, 2005). the formation and development of competition, the formation of a favorable investment climate.
- 3. Petrochemical complex of the Republic of Tatarstan is one of the most dynamically developing sectors of the region's economy (Beilin & Arkhireev, 2011). Petrochemicals make up a significant share in the GRP of the republic, it makes a significant contribution to the republican and federal budgets, in

particular, the share of foreign exchange earnings from exports of products prevails, provides employment for the population, which is especially important for small republican cities.

4. Forms and maintains the image of the Republic of Tatarstan, both at the Russian and global levels, as a national center for high-technology petrochemical products (Beilin & Arkhireev, 2011; Alfares & Al-Amer, 2002). The regional petrochemical complex assumes a certain objective economic unity of the economic entities that constitute it and the economic community of the territory that arise and develops on the basis of objective endogenous and exogenous factors that determine the time, pace, scale and direction of development of both the complex and its individual elements and the regional economy as a whole. (Beilin, 2017).

The development of the system of training and retraining of personnel for the chemical and petrochemical industry includes (Figure 2):

- Improving the training of highly qualified personnel and the re-establishment of an industry-specific system for upgrading the skills of specialists for chemical and petrochemical enterprises (A);
- Development of human resources in the scientific and research field (b).

The subjects of management in the petrochemical complex are the mass of joint-stock companies. Their interaction with authorities is carried out in accordance with the current legislation in the tax, tariff-customs, investment and other spheres. Imperfection of the regulatory and legal framework governing the activities of petrochemical enterprises significantly hampers their development.

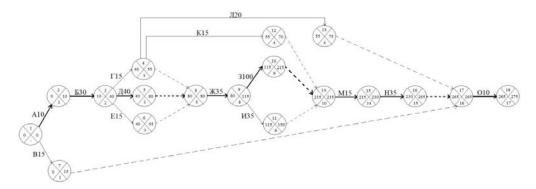


Fig 2. Development of the system of training and retraining of personnel for the chemical and petrochemical industry.

#### 4 Summary

The petrochemical complex, being an organic part of the national economy of the region, in the process of its development fulfills the following economic functions that contribute to the development of the social and economic system of the region:

- Resource. Provides the economic complex of the region (country) with the appropriate resources and products.
- Economic. It makes a significant contribution to the formation of regional and state revenues (including payments for the use of the territory's resources), the development of enterprises of the complex and the increase in production and production, naturally contributes to the development of the entire economic system of the region.
- 3. Social. Enterprises of the petrochemical complex play a significant role in the development of the life support systems and social sphere in the region, developing, mastering new technologies, establishing and expanding the production of RNA enterprises ensure employment and efficient use of labor resources in the region, social security of personnel.
- 4. Foreign economic. The growth in exports of petrochemical products, contributes to the increase in foreign exchange earnings in the economy of the region.
- Investment. The development of the petrochemical complex helps to increase the interest of domestic and foreign investors and, accordingly, to attract additional funds to the region.

# 5 Conclusions

Thus, it is necessary to take into account the negative consequences of the development of the petrochemical complex for the social and economic system of the region. First of all, these are the results of increasing the share of geological exploration, leading to the transfer of land to industrial land, the activation of subsoil use processes, the consequences of which are depletion of subsoil with low efficiency of field development, the environmental consequences of environmental pollution. The consideration of positive and, primarily, negative effects of the relationship between the development of the petrochemical complex and the regional socio-economic system will allow predicting and timely preventing the occurrence of negative consequences, coordinating the development of the regional petrochemical complex and socio-economic system of the region.

#### Acknowledgements

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# DIRECTIONS FOR THE DEVELOPMENT OF THE OIL AND GAS CHEMICAL COMPLEX AS THE MAIN SECTOR OF THE ECONOMY IN THE REGION

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Abstract: The information base of the research was provided by the data of statistical bodies, actual materials characterizing various aspects of the functioning of individual enterprises and the oil and gas chemical complex as a whole. Scientific novelty consists in the development and substantiation of a number of theoretical and methodological provisions and practical recommendations for the development of the oil and gas chemical complex within the region in the territory of which hydrocarbon and mineral resources are extracted and processed, aimed at socio-economic development and enhancing the competitiveness of the region. The practical significance of the research is that the recommendations contained in the work allow us to develop the main provisions of the strategy for the development of the regional oil and gas chemical complex, increase the level of use of raw materials and will contribute to the development of the regions social and economic system in a market economy. The materials of the article can serve as the basis for improving the functioning of the oil and gas chemical complex in the regions of Russia. The stable functioning and development of the oil and gas chemical complex is constrained by a number of factors, but at the same time, the Russian regions have all the conditions for the development of the oil and gas chemical industry in the future. The current state of affairs makes it difficult to solve the most important social and economic problems of the regions and the country as a whole and requires clarifying the priorities for the development of the oil and gas chemical complex, both regions and Russia in general, and the state's tasks in the field of its development. In connection with this, the Ministry of Industry and Energy of the Russian Federation presented the "Strategy for the Development of the Chemical and Petrochemical Industry of Russia".

Key words: regional economy, oil and gas chemical complex, network diagram, PERT method.

#### 1 Introduction

The objective of the energy policy of Russia is to maximize the effective use of natural energy resources and the potential of the energy sector to sustain economic growth, improve the quality of life of the population and promote strengthening of foreign economic positions of the country.

The Strategy determines objectives and goals of the Russian energy sector long-term development for the up-coming period, its priorities and guidelines, as well as mechanisms of the state energy policy at the implementation phases of the Strategy ensuring realization of the stated objectives. As a result of consideration and analysis of the "Strategy for the development of the chemical and petrochemical industry in Russia", we can conclude that it is possible and appropriate to adapt its main provisions to the level of the regional petrochemical complex, taking into account the specifics of a specific region, the level of its development and the state of the petrochemical complex. Proceeding from the all-Russian problems, the specifics of the region, and the main provisions of the Strategy for the development of the industry, it is possible to identify the formation of a regional territorial production system of an international level with a high quality and range of products and services that provides a sustainably favorable ecological situation as a priority objective of the development strategy for a regional petrochemical complex, a high level of social comfort, within the framework of rational nature and resource use (Table 1).

Based on the development goal of the regional oil and gas chemical complex, the following priority directions of its development strategy can be formulated:

- Development and development of the mineral and raw materials base of the region for increasing the efficiency of raw materials supply to enterprises of the oil and gas chemical complex (Hassan & Alfadala, 2009; Villalobos Antúnez et al, 2013).
- Development of competitive productions on the basis of modernization and introduction of the latest technologies and scientific and technical achievements within the framework of rational nature and resource management and environmental safety of production.

- 3. Development and formation of the potential of highly qualified scientific and technical personnel for the enterprises of the oil and gas chemical complex of the region (Beilin, 2016).
- 4. Harmonization of interaction between regional authorities and the subjects of the oil and gas chemical complex in terms of rational involvement of the mineral and resource base of the territory in the process of production and economic activities with the aim of developing the entire social and economic system of the region (Beilin, 2017; Dashkin, 2017).

The main directions of the development strategy for the regional oil and gas chemical complex described below are detailed and justified.

- Development of raw materials for the production of chemical products and improving the efficiency of raw materials supply to enterprises of the regional petrochemical complex (Beilin, & Arkhireev, 2006; Beilin & Arkhireev, 2009; Beilin & Arkhireev, 2005). To ensure intensive growth of petrochemical production, it is necessary, first of all, to have the appropriate raw materials base, for the creation of which it is expedient to implement the following
- implementation and monitoring of the implementation of the activities of the program aimed at the balanced development of the mineral resource base of the Republic of Tatarstan, ensuring the stabilization of revenues when using subsoil, taking into account the current and future needs of the territory for sustainable social and economic development of the region;
- introduction and development of technologies for deeper processing of raw materials and secondary resources using knowledge-intensive, resource-saving and environmentally friendly technologies (Qstergaard, 2015; Porter, 1998; Porter, 2003);
- to contribute to the solution of the problem of efficient use of natural resources, introduction of progressive forms of resource use, compliance with environmental norms and requirements.
- Creation of new competitive productions, technical reequipment and modernization of existing enterprises and industries on the basis of advanced scientific and technical achievements (Beilin & Arkhireev, 2011; Beilin & Arkhireev, 2011).
- technical re-equipment and modernization of the existing and creation of new production facilities, in order to ensure the release of marketable petrochemical products;
- stimulation of innovative and investment activity in the petrochemical complex, presupposes the concentration of financial and material resources aimed at supporting advanced scientific developments, the introduction of advanced technologies;
- increase the share of knowledge-intensive and high-value added products, implement qualitative changes in the sectoral and specific structure of the petrochemical complex in the direction of reducing the share of raw materials industries;
- to promote the development of a high-tech transport infrastructure in order to increase the volume and safety of the transport of chemical goods (Sölvell, 2008).
- 3. Development and organization of production of new types of competitive chemical products:
- saturation of the market with competitive products, formation of export potential and development of importsubstituting industries, mainly due to deeper processing of

- raw materials using knowledge-intensive, resource-saving and environmentally friendly technologies;
- expansion of the range and improvement of consumer properties of socially-oriented products;
- ensuring the need for strategic materials;
- implementation of customs and tariff policy to protect domestic producers in the domestic and foreign markets (Stewart, 1983; Levidow et al, 2016; Hirsch, 2014).

Table 1. The main driving factors and constraints that inhibit the development of the oil and gas chemical complex

Constraints and limitations.	Driving factors and development prerequisites.
Insufficient level of scientific and technical developments and their implementation in the petrochemical industry.	The Russian Federation has a fairly strong raw material base.
High degree of physical deterioration of equipment, backwardness of technologies and low competitiveness of products.	Favorable conjuncture in the world market of petrochemical products. The uniqueness of some productions and products on the world market.
Disparity of prices and tariffs for products of natural monopolies.	The presence of a rapidly developing domestic market and the demand potential for petrochemical products.
Deficiency of investment resources.	Availability of inexpensive and skilled labor.
Reduction of demand for products of low-tonnage chemistry in the domestic market, first of all, from high-tech industries and defense complex.	The presence of a number of scientific and technical developments, the introduction of which will ensure the modernization of existing and the creation of new competitive productions.
Sustainable development of the chemical and petrochemical industry is impossible without solving the problem of providing enterprises of the industry with hydrocarbon raw materials, on the basis of which up to 80% of production is produced.	The presence of a large production infrastructure at the enterprises of the petrochemical complex, the physical wear and tear of which is much lower than the wear of the main technological equipment.

# 2 Methodology

The PERT method is often used in project management and process analysis. The PERT method is a tool that calculates the expected duration of a project or a single process. The PERT method and the critical path method are fundamentally different in their application. The critical path method is used to estimate the completion time of the entire project or groups of interrelated tasks, and the PERT method is used to estimate the duration of individual tasks.

The very idea of the method is very simple - in order to assess the time of the task or process, you need to know the optimistic, pessimistic and most probable estimate of the duration of this task. The PERT formula looks like this:

$$E = \frac{(O+4M+P)}{6}$$

- O an optimistic estimate of the duration of the task,
- M the most probable estimate of the duration of the task,
- P a pessimistic estimate of the duration of the task.

This equation is a weighted average, where the most probable estimate of duration has a weight four times greater than an optimistic and pessimistic estimate. This approach prevents too much distortion in one direction.

In order to better analyze and predict the duration of tasks, it is possible to calculate the standard deviation and variance of the PERT estimate by adapting the usual formula for statistical dispersion:

$$D = \frac{(O-E)^2 + 4 (M-E)^2 + (P-E)^3}{6}$$

$$STD = \sqrt{((O-E)^2 + 4(M-E)^2 + (P-E)^3)/6}$$

Dispersion, in this case, speaks about the level of scatter of optimistic, pessimistic and most probable values from their average. To quickly calculate the standard deviation, a simpler but less precise formula is often used:

Standard deviation = 
$$(E - O) / 6$$

The smaller the standard deviation, the closer together optimistic, pessimistic and most probable estimates of the duration of the problem are grouped together.

# 3 Results and Discussion

The petrochemical complex has a high degree of cooperation of production from the extraction of hydrocarbon and mineral resources to the output of finished products is the optimal environment for vertical integration (Beilin, 2017). Large petrochemical enterprises are the "points of growth" of the entire oil and gas chemical complex, as they have all the possibilities to concentrate the resources necessary for the proportional development of production, to effectively solve the social and environmental problems of the territory within the framework of the development of their enterprises (Qing, 2007). Large enterprises with state participation should be regarded as the main agents of power in the practical implementation of the regional strategy for the development of the oil and gas chemical complex and state industrial policy (Fig 1).

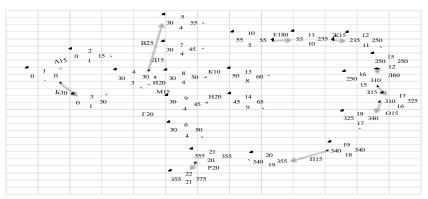


Fig 1. Network schedule for the practical implementation of the regional strategy for the development of the oil and gas chemical complex and state industrial policy

The mechanism of interaction between regional authorities and large industrial petrochemical enterprises should provide for:

- conducting institutional reforms for more efficient management of the petrochemical complex and enhancing its competitiveness;
- improvement of regional legislation in order to create favorable conditions for the development of the petrochemical complex, introduction and development of market economic regulators (tax and customs regulation);
- conclusion of long-term strategic agreements with large oil and gas chemical companies that determine the ways, conditions and terms for achieving socially-directed goals and special agreements in the case of large-scale investment projects and providing for state guarantees for attracting foreign investments, benefits for using land, hydrocarbon and mineral resources (Fig 2).

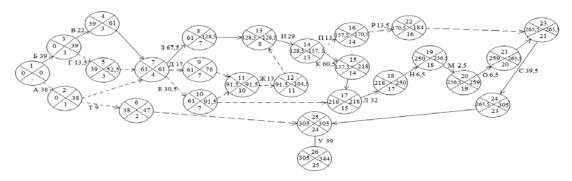


Fig 2. PERT diagram of the mechanism of interaction of regional authorities with large industrial oil and gas chemical enterprises.

#### 4 Summary

The expected effect from the implementation of the proposed areas of strategic development of the regional petrochemical complex is considered as a multi-level (Table 2).

Table 2. The expected effect from the implementation of the priority areas of the development strategy for the regional petrochemical complex

At the macro level	At the micro level
Increase in the contribution of the petrochemical complex to GDP growth due to outstripping growth in production and sales of products in relation to the dynamics of the country's economic growth.	Provision of regional market demand in petrochemical products by volume, assortment and quality.
Improving the structure of foreign trade turnover, weakening the dependence of the country's economy on the import of science-intensive oil and gas chemical products, expansion of high-tech exports.	Formation in the oil and gas chemical complex of the region of effective market-oriented, business-structures of the new generation that have the potential for self-development.
Increase in tax revenues in the consolidated budget of the Russian Federation.	Increase of innovative activity and level of renewal of fixed assets of enterprises of oil and gas chemical industry and related industries.
Increase in export earnings.	Increase in labor productivity.
Reducing the dependence of the national economy on the supply of petrochemical products from foreign countries.	Preservation of jobs, prevention of outflow of talented, qualified part of scientific and technical personnel to other industries, regions and abroad.

## 5 Conclusions

The implementation of the set of proposed activities within the priority areas of the strategy for the development of the regional petrochemical complex will allow in the coming years to strengthen the positions of Russian producers in the world markets for petrochemical products, enhance the competitiveness of industry enterprises in the domestic market of Russia, increase labor productivity, create favorable conditions for investment inflow and subsequent sustainable development of both regional petrochemical complexes and the industry as a whole in the long term perspective.

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# CLASSIFICATION OF REGULAR METAPHORIC TRANSFER OF ENGLISH PHRASEOLOGICAL UNITS RELATED TO AREA OF MUSUCAL INSTRUMENTS

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Abstract: The article deals with the analysis of a fragment of a conceptual worldview of the native speakers of English. It determines the conceptual areas of the designated group of functional units which have acquired the figurative meanings and names. The nature of linguistic view of the world is investigated, the correlation between metaphor and linguistic world image illustrated through the examples of the phraseological units that are considered among the phraseosemantic field "Musical Instruments" in the language under study. All the phenomena of the real world encompassing both material and ideal essences are involved into the process of metaphorization, by so doing metaphoric transfer is carried out in certain directions in a sufficiently consecutive sequence. Such transfers are called regular. In our article we differentiate seven types of regular metaphorical transfers that participate in formation of PhU with a component belonging to the topic "Musical Instruments" in the English language. The obtained distribution of the figurative meanings of PhU according to thematic groups is not final and the only possible, but it enables us to estimate the potential of this group of PhU in forming the linguistic world image of the speakers of English. The area of metaphorical meanings of this group of PhU does not fall for thorough division into basic and prototypical metaphors, there exist also individual metaphoric transfers into various conceptual spheres which are based on different features.

Keywords: regular metaphoric transfer, linguistic world image, phraseological unit, phraseosemantic field, musical instruments, the English language.

### 1 Introduction

The topicality of the problem under analysis is governed by the necessity of studying the phraseological units related to the semantic field of musical instruments in the English language within semantic and cognitive approach. Besides, there is a want for analysis of the phraseological locutions with the aim of defining their both common, universal characteristics and differentiating, peculiar features, typical for a language. "Phraseological semantics has always been the main way to transfer subjective information about the object category by bringing up the mechanisms of rational and sensory perception of the reality" (Bezuglova et al, 2016).

Every language has specific phraseological units which correlate with speakers' background knowledge, traditional forms of labor, peculiar way of life and ethnic features in general. It is the content plane of linguistic units that embrace basic stereotypes laying the foundation for ethnic culture and cognitive structures predetermining the adaptation to the extralinguistic reality.

# 2 Methodology

There exist numerous theories concerning the nature of metaphor. In our research we have chosen two of them: stylistic and cognitive. The first, *stylistic* approach, treats metaphor as a poetic phenomenon. The *semantic* approach, which identifies metaphor's structure as a connection of the two ideas into one shape. Finally, the *cognitive* approach deals with mental activities studies. In this paper, we provide a review of some of the seminal and ongoing literature discussing each of the three approaches in the context of metaphor study (Ryzhkova, 2001; Farkhoutdinov & Isavnin, 2017).

# 3 Results and Discussion

Almost every phraseological unit of the area under study reflects historical, cultural and ethnographic context. All phenomena of real world, comprising both materialistic and idealistic entities, are involved into the process of metaphorization, meanwhile metaphoric transfer is performed through particular directions in consecutive sequence. Such transfers are called regular ones.

We distinguish five regular metaphoric transfers, engaging in formation of phraseological locutions referring to the area of musical instruments.

The first marked type of metaphoric transfer is UNIT → UNIT transfer. Concept of a "unit" Sklyarevskaya G.N. equates to concept of an article, object of material world. A "unit" subdivision unites diversity of material objects, accessible by sensory perception. In that semantic sphere, items, created and used by people, can be distinguished (Cambridge International Dictionary of Idioms, 1998).

The second type of regular transfer is UNIT  $\rightarrow$  HUMAN transfer. Musical instruments are being transferred to the HUMAN semantic area in order to characterize some peculiar human traits.

The third class of regular metaphoric transfer is ANIMAL → HUMAN transfer. It must be noticed that transfers from ANIMAL sphere are directed to HUMAN sphere only (in this case we can talk about animal species and gender-based animal names)

The fourth type of regular metaphoric transfer is HUMAN→ HUMAN one. In this particular semantic area, metaphor is being formed by means of characteristics, derived from variegated human attributes, such as society status, occupation (for example, piper, trumpeter, violinist, drummer, etc.) and others.

The fifth class of metaphoric transfer is UNIT→ PSYCHIC WORLD type. Semantic sphere of PSYCHIC WORLD comprises lexis, which is not perceived directly within real life sensations. In the specific case, the names of musical instruments are being carried into the sphere of psychic activity.

The sixth type of metaphoric transfer is UNIT → PHYSICAL WORLD one. Semantic area of PHYSICAL WORLD embraces vocabulary, which deals with naming acts, processes, phenomena, occurring in reality and perceived by sensory organs including the result of the procedures, events and phenomena (like music, refrain, song and others). The material under study proves musical instruments' titles having an effect on physical activity objects (Gairns & Redman, 2011; González & Villalobos Antunez, 2016).

The seventh type of regular metaphor transfer is PHYSICAL WORLD  $\rightarrow$  PSYCHIC WORLD structure. The lexis belonging to the sphere of PHYSICAL WORLD, in the process of metaphorization is almost entirely being transferred into the sphere of psychic and social phenomena, introducing to the corresponding nominations sensual element and visibility, as the following elements of emotions, mental activity, spiritual life, social events, etc. are considered equivalent to physical and physiological processes and mechanical actions (Longman idioms dictionary, 2002).

E. McCormack, G. Lakoff, M. Johnson distinguish notion of basic or conceptual metaphor which is connected to metaphoric idea as an interaction between two conceptual spheres. In this regard, the terms which structure the ideas about area, already being developed by conscious, are being used for presenting new, not yet elaborated cognizable area of experience (Kajumova et al, 2017).

Conceptual information from initial area is being transferred into a new sphere. The example of basic metaphor is IDEA← MUSICAL INSTRUMENT structure, which is found as mental objects representations within denominations of musical instruments (Fernando, 1996).

M.N. Lapshina and E.V. Ryzhkova introduce the idea of prototype metaphor during analysis of metaphoric entities' names (Khasanzyanova et al, 2017). Prototype metaphor serves a result of generalization of regular monotype associations, or, to

be exact, the actions of cognitive models, determined by a cultural context to a considerable degree (Lapshina, 1998).

Generating separate metaphoric ideas, prototype metaphor becomes an episteme, via which peculiarities of the worldview of the era and of the language community can be defined. An example of prototype metaphor there can serve metaphoric transfer of FIDDLE $\rightarrow$  FACE one, which is being implemented in the form of metaphoric transfer of the musical instrument's name – fiddle. Schematically, both metaphoric transfers under discussion are being presented as A  $\rightarrow$  B pattern. To distinguish them, we should adhere to the following scheme of metaphoric transfer: OBJECT FIELD  $\leftarrow$  SOURCE FIELD, for example, HUMAN  $\leftarrow$  MUSICAL INSTRUMENT, according to denominations, proposed by G. Lakoff and M. Johnson [5]. As for prototype metaphors, the scheme is SOURCE FIELD HYPERONYME  $\rightarrow$  OBJECT FIELD HYPERONYME, for example, MUSICAL INSTRUMENT  $\rightarrow$  HUMAN.

The sphere of metaphoric connotations, of the analyzed phraseological units defies complete segmentation to basic and prototype metaphors, because along with them we can find single metaphoric transfers into different conceptual spheres, based on varied attributes. Consequently, analyzing some phraseological units with metaphorically reinterpreted component, related to the phraseological semantic field of musical instruments, a conclusion can be drawn that within the framework of anthropological sphere the following conceptual areas can be distinguished:

1. An area, where human is conceived as a biological and physiological being, with the references to his appearance, growth, health and physical senses.

Within this scheme, a basic metaphoric transfer of HUMAN  $\leftarrow$  MUSICAL INSTRUMENT is being identified. A human physiological degree in the English language is transferred through the images of bell and fiddle: sound as a bell, or as fit (fine) as a fiddle.

The studied group is also productive when characterizing human appearance. These phraseological units can help comprehend not only the structure of human body, but its separate parts as well. On naming a new object, an individual has associations with something most familiar, and primarily, a person starts comparing the surrounding objects with himself or herself, with his or her body parts. This proves the presence of prototype metaphor of MUSICAL INSTRUMENT  $\rightarrow$  HUMAN BODY PART. The metaphor is being materialized via more peripheral prototype metaphoric transfers, for example, FIDDLE (of prolate shape)  $\rightarrow$  FACE: a face as long as a fiddle.

- 2. An area, where an individual is appearing as an intellectual being. This area comprises characteristic of human's mental activity and ideas belonging to its objects. In this sphere, cogitative faculties undergo metaphoric perception. Here a metaphoric transfer of COGITATIVE FACULTIES  $\leftarrow$  MUSICAL INSTRUMENTS is distinguished, for example, some idea can be suggested by a bell ring image: to ring a bell.
- 3. An area of perceiving an individual as a subject of emotional experience, including emotions and feelings proper. For a long time, linguistics paid more attention to intellectual issues in language, but the fact that emotions are responsible for the processes of a man's behavior and his interpretation of the surrounding world should also be considered. The concepts of feelings and emotions are metaphoric by nature, because these sides of human nature are inaccessible for direct observation. Lakoff, G., Johnson, M. have also noted, that the language means for describing emotions are excessively metaphoric. Existence and functioning of emotions are different and unique for each people Emotion is never expressed explicitly, but always imitates something (Sibaeva, et al, 2017). (That is why a description through metaphors, in which emotions are conceptualized in the language, is considered to be the most adequate, according to the authors. In this very group there can be identified a basic metaphor of FEELING MUSICAL ←

INSTRUMENT. In obedience to the English metaphor, after joy, it is always melancholy: hang up one's fiddle when one comes home or hang up one's harp (or harps) on the willows.

Happiness is sometimes associated with a pipe, on which fortune blares: he dances well to whom fortune pipes.

Anxiety is conceived as a bell ringing: ring/sound the alarm bells

4. An area, where there is representations about a person as an individual and his or her moral qualities (McCormack, 1990).

In the English language, human nature's vulnerable side can be presented through a chord (string): sensitive chord or to touch/strike a string/chord (touch smb. on a string or on a tender string). This conceptual sphere contains basic metaphor of INDIVIDUAL— MUSICAL INSTRUMENT relations, which forms representations of the structural arrangement of a person's moral qualities. This metaphoric transfer can be presented in the English language through, for example, a boastful, vainglorious man, blaring a horn, blowing a trumpet or ringing a bell: to blow/toot one's horn; to blow one's own trumpet; to ring one's own bells. A loveable, but not so young lady is compared to an old violin, on which one can still play some good pieces of melody: there's many a good tune played on an old fiddle.

5. An area, in which representations of a man as a member of society, family and interpersonal relations are conceptualized. The analyzed material shows, that this conceptual sphere is characterized by a metaphoric transfer of INTERPERSONAL RELATIONS ← MUSICAL INSTRUMENTS, for example, a man, holding a leading position in the society or at work can be referred to as playing first fiddle, and, accordingly, a person holding less important position may be referred to as playing second fiddle, or playing third fiddle.

The role of conceptual base for understanding commodity monetary relations is presented by metaphoric transfer of INTERPERSONAL RELATIONS ← MATERIAL OBJECT (MONEY) scheme. The analysis of the language data testifies that commodity monetary relations serve in contemporary conditions as the core of human existence. In the English language monetary relations can be associated with a musician (a piper or a fiddler), who is given money for music: he who pays the piper calls the tune or if you dance you must pay the fiddler.

6. An area, where a man is presented as a subject to some physical, language or creative behavior.

In the conceptual sphere of BEHAVIOR as the basic elements the following three types of regular metaphoric transfer can be identified: UNIT  $\rightarrow$  PHYSICAL WORLD, PHYSICAL WORLD  $\rightarrow$  PSYCHOLOGICAL WORLD, and UNIT  $\rightarrow$  PSYCHOLOGICAL WORLD. Thereby, we can speak of the conceptual metaphor of BEHAVIOR  $\leftarrow$  MUSICAL INSTRUMENT transfer. In the English language, a man achieving success in some activity, is compared to a little rang bell: to ring the bell.

Leaving one's position, retiring or resigning is associated with hanging of a fiddle on the wall: to hang up one's fiddle.

The conceptual sphere of BEHAVIOR also comprises phraseological units connected with LANGUAGE BEHAVIOR. In this group the following metaphoric transfer of LANGUAGE BEHAVIOR ← MUSICAL INSTRUMENT can be distinguished. For example, to declare something publicly, loudly, gossip or repeat something no end is perceived as "ringing all bells": set all the bells aringing or ring the changes (on)

A bustling publicity is associated with the sound of a big drum: bang/beat (or thumb) (the big) drum(s).

### 4 Summary

The analysis of phraseological units with metaphorically reinterpreted component, related to the phraseological semantic field of musical instruments is conducted on the basis of the following conceptual areas:

- An area, where human is conceived as a biological and physiological being, with the references to his appearance, growth, health and physical senses.
- An area, where an individual is appearing as an intellectual being.
- 3. An area of perceiving an individual as a subject of emotional experience
- 4. An area, where there is representations about a person as an individual and his or her moral qualities.
- An area, in which representations of a man as a member of society, family and interpersonal relations are conceptualized.

# **5 Conclusions**

Metaphor functions both in mind and language, appear to be wider than that of just of a trope. We distinguish five regular metaphoric transfers, engaging in formation of phraseological locutions referring to the area of musical instruments.

The acquired distribution of transferred meanings of the phraseological units with the component, related to the phraseological semantic field of musical instruments in the English language, is not complete and the only possible, but it allows to judge the potential of this group of phraseological units in establishing the linguistic world image of the English native speakers.

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# CODE-GENERATION AS THE EFFECTIVE TOOL OF ADAPTATION OF PROGRAM PRODUCTS FOR BUSINESS-PROCESSES OF ENTERPRISES

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Abstract: In the work one way to adapt boxed software products for the business processes of enterprises is considered. A method of implementing scenario in the form of graphical block diagrams is proposed. User creates a visual flowchart of the process. Then on the basis of this flowchart the code is automatically generated and executed, scenario variables are transformed into local variables, each component of the flowchart represents a call to a function, and expressions become classical language expressions. It is valid and effective to use the goto operator to ensure logic of transitions between components. A scenario of automatic service of contact center for reception of meter in text that is considered as an example. Despite the relatively labor-intensive development of such a code generator, debugging is reduced to checking the correctness of the resulting code. Adding new components requires no modification of the basic module of a code generator. Performance of such scripts is maximal and practically does not differ from changes made in the source code of the software product.

Keywords: code-generation, adaptation of program products, business-process of enterprise

## 1 Introduction

Currently, it is impossible to imagine the work of the enterprise of any level without software products. Even small companies use in their daily work those or other means for the conduct of the customer base and the history of relations with them, automate the processing of appeals through various channels of communication, introduce modern technologies of automatic and semi-automatic service. Representatives of medium and large business usually solve these problems more effectively. They use the unified corporate information systems (Oleinik, 2012; Oleinik, 2001), or arrange the close integration of several specialized software products. All software solutions for business can be divided into two categories:

- solo (developed for the specific needs of one enterprise and initially taking into account all the specifics of its processes);
- boxed (universal, designed for a sufficiently broad business industry and involving adaptation for the specifics of concrete enterprise during the implementation phase).

This article focuses on adaptation technologies of boxed software products for the business processes of enterprises (Fedorova, 2016). The scope of a software product in this case has no special meaning. It can be a classic CRM (customer relationship management system), contact center (call center for the reception and processing both phone calls and referrals via email, mobile messenger, chat, social networks, etc.), Service Desk (ticket system of technical support service), ERP (enterprise resource planning).

Developer of the boxed software always is teetering between the two extremes. On the one hand, it is desirable to establish a universal and flexible product that can solve problems of any enterprise. On the other hand, the modern market needs simple products that do not require significant implementation costs on the introduction and adaptation (Sneller & Lineke, 2014; Okriashvili, 2017)

# 2 Different approaches to adaptation technologies

In some cases, adaptation of the software product is limited to configuring settings and filling manuals. For example, it can be the nomenclature of goods and services, category of clients, social networking accounts and email for automatic processing of the application, etc. Design of system parameters and implementing of custom handbooks is fairly simple and is not considered in this article.

A change of the logic of the software product, depending on the specific business processes of the enterprise, is the most interesting to us. An important condition is the independence from the developers, i.e. we do not need to change the original product codes and to assembly its new version with the participation of the developer.

From the user's point of view, there are three approaches to adapting the software product for business processes:

- scripts (code written on one of the programming languages);
- special configuration files (typically, prepared on the basis of the XML format to suit the specific requirements of the developer);
- graphic scenarios (representations of algorithms in the graphical editor in the form of block diagrams) (Scienna, 2011).

Practice shows that the most convenient for the user is the third approach. You can select the obvious advantages of graphics scenarios:

- graphical block diagrams are clear and intuitive;
- creating and modifying block diagrams does not require the skills of a programmer;
- the cost of training new specialists and transfer to them the tasks of the development and support of graphic scenarios are minimal.

Further, we consider one way to implement the scenario in the form of graphical block diagrams, as well as two approaches to their subsequent execution. As an example, scenario of automatic service contact center that accepts the testimony of one tariff energy meter in the text chat (online consultant on site, mobile messenger or social page network) will be considered.

## 3 Formalization of algorithmic scenarios

In programming terms, the scenario (script) is a function that is called some event occurs (for example, when an incoming phone call takes place, when you receive an email, when you change the status of the client, etc.). In our case, the script runs when a new message arrives from the user. The script function can have a set of input parameters, can refer to some of the objects of the software product, and, sometimes, can return a result. The script can be performed long enough (for example, if it contains the call of waiting functions), so normally it should be performed in a separate thread. This allows you to avoid locking the modules of the system for the all script execution time. In our example, the script can be executed for two minutes, because the user is given twice the time to enter information (Herlihy & Shavit, 2012; Villalobos Antúnez, 2016).

The scenario is a block diagram consisting of interconnected components directed transitions. It means that the component performs some actions and then the script executing on one of the transitions continues.

The script has one entry point («Start» component) and completes by the component «Stop» or «Return the result». Generally speaking, these components can be as many as you want.

To provide basic logic, components «Condition» and «Options» are provided that allow scenario branching depending on those or other conditions. Also scenario branching can be implemented when there are multiple transitions from a single component (for example, if a «success» occurs or «failed» when you run a SQL-query).

To work with variables, components «Declare the variable» and «Assign the value» are used. In the same way the component «Cycle» can be implemented, although it's just enough to

organize it by combination of components «Condition» and «Assign the value».

Components for integration with third-party services like «SQL-query» and «HTTP-query» enable you to perform any queries for further use of the result obtained in the scenario.

Other components depend on the purpose of the scenario. For text message processing scenario three components are used: «Reply», «Wait for the message» and «Put the message in the queue to the operators». For the scenario of interactive voice menu there are significantly more components usually. The main of them are: «Pick up», «Hang up» «Play file», «Play value», «Record a voice message», «Speech synthesis», «Switch to the number», «Speech recognition», «Input DTMF-data», «Switch to the number», «Switch to turn operators».

An important part of any script is the «Expression». The expressions can be passed as parameters to components, and it is possible to assign variables with their values. The main types of

the expressions are the following: a constant, a variable, a parameter of a script, an operator.

In boxed software product developer implements the module « scenario Editor». This module enables the user the following options:

- to create scenarios
- to generate visually scenarios as algorithmic block diagrams
- to check scenarios for errors
- to assign scenarios to run automatically upon the occurrence of various events of the software product

Technology realization of graphical scenario editor, as well as data storage format can be absolutely arbitrary. It makes sense to develop a scenario editor, guided by State standards (in Russia) or generally accepted notations (Herrera, 2015).

The scenario of reception of meters in this formalization is shown in the figure.

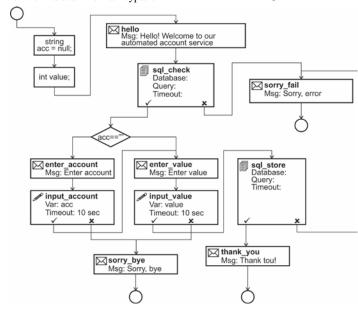


Fig 1. Script of receipt of counter indications

# 4 A simple interpretation of the scenarios

To interpret scenarios, developer of software product implements the module «Interpreter». This module loads the scenario into memory and executes the components, manages the contents of variables, provides logic of conditional operators and cycles, calculates the values of expressions, etc. This approach has the following disadvantages:

- labor expenditures on developing and debugging this interpreter are very high;
- adding new components into scenario editor would require finalization of the interpreter;
- performance will be quite low;
- the overall functionality of extensibility of scripts is also low.

# 5 The conversion of scenario in code

Taking into account the scenario is a function, we offer a different approach. The software product developer implements the module «Code generator». This module based on graphical scenario generates the code for the function (Hack et al, 2017). Depending on the platform and programming language used in the development of a software product, code may require compilation (for example, for languages (Stroustrup, 2014) C++ or C# (Troelsen & Japikse, 2015)), or immediately be passed to the interpreter.

When code generation, script variables are transformed into local variables, where each component represents a call to a function, and expression becomes classical language expressions. We believe that it is valid and effective to use the goto operator to ensure logic of transitions between components.

The example of code generated by the scenario of the counter reception, in C#:

public void RunScenario(MessengerScenarioCore Core, string Message, string IDClient)

```
{
    string Account = null;
    int Value = 0;
    goto label_hello_103;
label_hello_103:;
```

Core.SendMessage("Hello! Welcome to our automated account service");

if (Core.SQLQuery("Select account from data where idclient=%1 order by time desc limit 1", IDClient, out Account)) goto label\_check\_account\_131;

```
goto label_check_account_131;
else
goto label_sorry_fail_121;
label_sorry_fail_121:;
Core.SendMessage ("Sorry, error. Try later")
return;
label_check_account_131:;
if (Account == "")
```

```
goto label_answer_enter_account_153;
  else
    goto label_answer_enter_value_166;
label_answer_enter_account_153:;
  Core.SendMessage ("Enter account");
  if (Core.WaitForMessage(60 * 1000, out Account))
    goto label_answer_enter_value_166;
  else
    goto label_sorry_bye_168;
label_answer_enter_value_166:;
  Core.SendMessage (("Enter value" + Account));
  goto label_ZHdat_soobshhenie2_198;
label_sorry_bye_168:;
  Core.SendMessage("You did not input data. Bye!");
  return;
label_ZHdat_soobshhenie2_198:;
  if (Core.WaitForMessage(60 * 1000, out Value))
    goto label_sql_store_201;
  else
    goto label_sorry_bye_168;
label_sql_store_201:;
  if (Core.SQLQuery("insert into data (account, idclient, value,
time) values (%1, %2, %3, now())", Account, IDClient, Value))
    goto label_answer_thank_you_203;
  else
    goto label_sorry_fail_121;
label_answer_thank_you_203:;
  Core.SendMessage ("Thank you!");
  return:
```

Despite the relatively labor-intensive development of such a code generator, debugging is reduced to checking the correctness of the resulting code. Adding new components requires no modification of the basic module of a code generator; because it is enough just to put a call to the desired function in compliance with the component. Performance of such scripts is maximal and practically does not differ from changes made in the source code of the software product.

In addition, code generation technology allows you to add into script editor code component «Code fragment». This allows you to not only to complete the scenario with any functionality not provided in the form of components, but also completely replace the graphical block diagram. Thus, we have combined two previously described approaches to adaptation (the first and the third).

Sample code to implement identical script in C# without using graphical block diagram:

public void RunScenario(MessengerScenarioCore Core, string Message, string IDClient)

```
string Account = null;
int Value = 0;
Core.SendMessage("Hello! Welcome to our automated account service");
if (Core.SQLQuery("select account from data where idclient=%1 order by time desc limit 1", idclient, out Account))
{
   if (Account == "")
   {
      Core.SendMessage("Enter account");
      if (!Core.WaitForMessage(60 * 1000, out Account))
      {
            Core.SendMessage("You did not input data. Bye!");
            return;
      }
    }
    Core.SendMessage(("Enter value" + Account));
    if (Core.WaitForMessage(60 * 1000, out Value))
```

```
if (Core.SQLQuery("insert into data (account, idclient, value, time) values (%1, %2, %3, now())", Account, IDClient, Value))

Core.SendMessage("Thank you!");
else

Core.SendMessage("Sorry, error. Try later");
}
else

Core.SendMessage("You did not input data. Bye!");
}
else
```

Core.SendMessage("Sorry, error. Try later");

### 6 Summary

The code that you write manually, of course, is more clear and understandable. But writing it requires a highly skilled programmer. But the code generated by code generator, despite the complexity and redundancy of unconditional transitions goto provides identical functionality and performance.

## 7 Conclusions

The authors participated in the development of several software products, in which the graphic scenarios have been applied. In the first generation of products the second approach was applied, and in subsequent generations the third approach was applied. According to our estimates, the labor expenditures on developing and debugging were reduced by more than twice, and performance has increased.

Application of code generation is not limited to the execution of graphical block diagrams. Code generation can be applied for symbolic computation, to build a comfortable and productive object models (ORM) or even for realizing approach "program that improves itself".

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## COMMUNICATIVE-ORIENTED TRAINING OF THE TATAR LANGUAGE

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Abstract: The success of training of the Tatar language, as a means of communication, depends on many factors, the main of which is the communicative-oriented organization of teaching and learning activities. In modern methodology, it is believed that the learning process should be aimed at developing students' speaking skills, in the context of communicative situations, which simulate and imitate real speech communication. It follows that the main goal of teaching speaking is to develop the students' ability to communicate in various socially determined situations. The relevance of study is explained by these tasks. The article presents the materials, reflecting the long-term methodological experience of teachers of the Kazan Federal University in teaching of the Tatar language to foreign students, and also the system of organization of learning process in the aspect of teaching speaking. The textbooks on the Tatar language, developed by the authors of the article, were introduced into the training process, and allowed to achieve the following results: the creation of problem situations for students in order to realize their verbal intentions; practical mastering of structural and systemic forms at different levels of language and the ability to use them in appropriate communication situations; the development of students' ability to interact successfully with the representatives of other culture, etc. All of the above are used to increase the motivation in the study of the Tatar language, awareness of students' personal responsibility for the results of the learning process. The purpose of the study is to identify the factors, which determine the success of systemic mastering of fundamentals of dialogical and monological communication in the Tatar language; introduction of a communicative-oriented approach into the learning process. During the research, modern works on linguodidactics were studied; the process of learning the Tatar language was analysed; the most effective pedagogical technologies and interactive teaching methods were chosen; the own experience in teaching of the Tatar language to Russian-speaking students was offered.

Keywords: linguistic education, communicative-oriented training, speaking, communicative exercises, speech skills.

## 1 Introduction

In the modern world, linguistic education necessitates the formation of a new worldview of students, a willingness and ability to live and work in a changing world with its problems, successfully implement various forms of communication with the representatives of other linguistic ethno-cultures, to process the information, received in the course of this communication, and to make the necessary decisions (Galskova & Gez, 2008). Educational process is designed to help each student to understand his individual way of mastering the Tatar language, to stimulate him for his own activity, and to motivate the teacher for creative implementation of his professional activity with the goal of achieving the planned results in a qualitative way. Therefore, the main goal of teaching the Tatar language in modern conditions is to develop students' ability to use speech communication for achieving mutual understanding and cooperation. Studying the Tatar language as a non-native is aimed at ensuring students' ability to communicate in everyday life, to interact and to understand other people in a multi-lingual society (Fazliakhmetov et al, 2017; Shakirova et al, 2017; Yarmakeev et al, 2016; Husnutdinov et al, 2016; Zaidullina & Demyanova, 2017). The learning process is organized taking into account both common didactic principles and the basic principles of communicative approach: the principle of communication training through communication (maximum approximation of the learning process to the conditions of the principle of personal communication); individualization (the organization of training process, taking into account personal needs, wishes and individual psychological characteristics of trainees); the principle of learning the language on the basis of active thinking activity (ensuring the practical use of the studied lexical and grammatical units in communication situations, taking into account the communicative task); the principle of functionality (the definition of lexical and grammatical material, taking into account the communicative purpose and frequency of use in speech); the principle of consideration of native language peculiarities; the principle of interrelated leaning of speech activity types. Communicativeoriented training provides for the organization of active learning and cognitive activity of students at the lessons of the Tatar language, with the use of innovative pedagogical techniques (Sztaho et al, 2018; Kessler, 2018; Valetopoulos, 2017; Villalobos Antúnez, 2001).

The purpose of this study is to develop and implement in the learning process a system of communicative exercises for teaching speaking the Tatar language. The problem of mastering the Tatar language, as a means of transmitting and receiving information, on the basis of a communicatively-oriented methodology, has not been the object of a special scientific study until now

### 2 Methodology

To achieve the desired goal, we studied modern works on linguodidactics; analysed the educational process; choose the most effective pedagogical technologies and interactive forms of training; offered own experience in teaching the Tatar language to Russian-speaking students. When developing a system of communicative exercises for teaching speaking, we relied on the practical experience of teaching the Tatar language in KFU.

To carry out this study we used the following methods: the method of theoretical analysis, comparative method, the method of observation, statistical method, the method of generalization of pedagogical experience.

## 3 Results and Discussion

The system of teaching speaking should prepare the students for both extemporaneous communication in the Tatar language and a well-thought-out statement. The task of mastering the Tatar language as a means of communication predetermines the need for parallel development of the skills of dialogical and monological speech of the students, since in real life we often see the speech, where these two forms combine. When teaching the Tatar dialogical speech, the students should master communicative skills for conducting a conversation in typical situations. They should respond to external stimuli and be active in conversation; turn to interlocutor for help. Monological speech training provides for the formation of students' ability to make various statements, based on a given situation with pretraining or without it; to combine different speech patterns in accordance with the communicative task; to transfer the content of the monological text; to review the previously read text, expressing own attitude to its content. In the learning process, we proceed from the fact that the generation of speech act consists of certain stages: acquaintance with the situation, which stimulates the speaker to speech action with communication purpose; the speech situation generates the motives, without which the utterance is impossible; motives turn into the need to speak out, that leads to the definition of the speech goal and the formation of a future utterance. Among all of these stages, the process of utterance structuring is of the greatest interest. At this stage the students use linguistic units in communicative plan, taking into account the conditions of communication, to express their thoughts about the surrounding reality. At the same time, the work is organized in such a way that students can make a stable connection between the communicative task and the means of its implementation; consciously correlate the speech structures with their communicative functions in everyday communication situations.

The textbooks, developed by us, contain various types of communicative exercises for teaching speaking. In order to learn the dialogue communication from the first lessons, we offer the students microdialogue samples. Using them, the students learn how to greet each other, say goodbye, ask for forgiveness, express gratitude and request, get acquainted with the interlocutor, briefly talk about themselves, etc. As the examples we can give the following communication tasks: 1. Greet the

interlocutor in Tatar. 2. Inform the interlocutor about yourself and try to get information about him. 3. Express you gratitude to the interlocutor for the conversation. 4. Ask your interlocutor about his place of living and his occupation. 5. Tell how many languages you know. 6. Ask the interlocutor about his hobbies. 7. Congratulate your classmates on the upcoming holiday. 8. Prepare 10 questions in order to interview the winner of the student competition. 9. Complete the dialogue on winter holidays. 10. Tell about languages learning, etc. In the learning process, we use different types of exercises for teaching speaking, choosing them depending on the stage of training, the level of preparedness of students and the nature of the studied material. All the proposed tasks are characterized by diversity, consistency, systemic nature and can be changed, taking into account the real conditions of training. The most important thing is that their use is aimed at developing students' sense of communicative expediency. At every lesson, the teacher pays special attention to stepping up the communicative activity of students, using exercises, which reproduce real communication situations, and require of students communicative behaviour. Experience shows that the transition to free conversation, characterized by the spontaneity of structural models, is the main difficulty in teaching the Tatar language as non-native. It is one of the most important tasks of the teacher to remove this difficulty and to prevent it to the greatest possible extent. To do this, the students should develop the stable skills of combining the studied speech patterns, for expressing their own thoughts in relation to changing speech situations.

To develop the skills of verbal communication, we offer the students the following situational exercises: 1. You take part in an interview about the problems of ecology. You need to answer the proposed questions. Give full answers to them. 2. Imagine that you are a tourist, who came to Kazan, and your interlocutor is a guide. During the conversation, you should ask him about historical places, which worth seeing in the city; about international events in Kazan. 3. Tell about the holiday, which was best remembered for you. Do not forget to tell when it was; what it was dedicated to; who took part in it; what you liked most, etc. The practice of teaching the Tatar language in a foreign language audience shows that the types of exercises and the nature of operations, associated with their implementation, vary depending on the stage of training and the linguistic complexity of generated text.

The group, consisting of foreign and Russian-speaking students from the regions of the Russian Federation, who studied at the Institute of International Relations, History and Oriental Studies of KFU in the specialty "International Relations", was selected for conducting the experimental training. Average age of the students: 18-19. They studied the Tatar language for 3 semesters. In the learning process we used the textbook "Let's speak Tatar", developed by us (Derderian, 2017). The main goal of training was to develop their speech, language and socio-cultural competences. At the practical lessons, the main attention was paid to dialogical and monological forms, to activation of communicative skills in the main types of speech activity, as well as to familiarization of students with the Tatar world. During the period of training, the students studied the following topics: Acquaintance. Time. Weather. In transport. Family. Friends. Learning of languages. At the lesson of the Tatar language. Studying at the University. Professions. House and apartment. Daily regime. Sports and leisure. In the shop. On a visit. Holidays. Kazan is the capital of the Republic of Tatarstan. The Republic of Tatarstan. At the final control, the students should be able to demonstrate the skills of oral speech, as well as to understand the content of read and listened texts, within the studied topics. In listening exercises, the ability of students to understand both dialogical and monological speech in situations of everyday communication was assessed. At the same time, special attention was paid to the use of internal forms of the Tatar language in speech, stable etiquette expressions. Dialogical speech of students was evaluated according to the following parameters: correspondence of the situation of communication; communicative continuity between replicas; language correctness; knowledge of speech etiquette formulas. To assess

monological speech, the following parameters were used: correspondence to the topic; semantic completeness; sequence; lexico-grammatical correctness; variety of syntactic models used. The students' answers were analysed, taking into account the above criteria. Comparative analysis of the final data showed that students acquired practical skills of speaking in dialogical and monological forms; they constructed their own statements, using lexico-grammatical material, in accordance with the communicative task. The answers of students were characterized by content, coherence, consistency and emotionality (Sakaev, 2016).

### 4 Discussion issues

Communicative-oriented training of the Tatar language provides for extensive use of the project method in the learning process. Project activity as one of the pedagogical technologies makes the learning process personally significant, in which students can fully reveal their creative potential, demonstrate their research abilities, independence, activity, imagination and creativity. The novelty of this approach is that students are given the opportunity to construct the content of communication. The success of defend of each project depends on the teacher's ability to create conditions, which stimulate the development of students' organizational skills and the maximum development of communicative abilities. This is one of the effective forms of improving the oral Tatar speech, which allows to stimulate the development of reflection, to integrate knowledge from different subject areas, thereby developing the ability to comprehend a holistic picture of the world. Due to the successful organization of project activity, the students acquire important communication skills, such as: the ability to identify the problem, to formulate a research task and to outline the ways of its solving; the ability to work in a team, clearly and reasonably state own thoughts, work on mistakes, etc. It is gratifying to note that the project works of students in the Tatar language is distinguished by their content, volume, and the presence of own opinion on the topic under consideration. In the process of the work they experience different life situations; they learn how to apply the received communicative skills, to solve practical and cognitive tasks. In the process of independent work, the students receive information from popular Tatar electronic resources (http://giylem.tatar; http://elbette.ru). Due to the wide possibilities of information technologies, students get acquainted with video materials and media presentations about the Tatar world (national holidays and traditions, outstanding representatives of the Tatar people, history of the Tatar people, cultural, scientific and sport achievements of the Republic of Tatarstan, etc.). To improve their oral speaking skills, students register in the online school "ANA TELE", and participate in group conversational lessons in real time. This educational resource is of great interest to all people, who want to learn the Tatar language for verbal communication.

# 5 Summary

The research and communicative-oriented experimental training of the Tatar language in a foreign-language audience allow to formulate the following conclusions:

- 1. Each language, being a complex system, can be practically embodied only in a speech. The language performs its communicative purpose through the speech.
- Communicative-oriented training of the Tatar language as non-native provides for the development of students' skills of dialogical and monological communication in everyday, sociocultural and business spheres.
- 3. When teaching the Tatar language as a non-native, we pay careful attention to the dialogical forms, which are the most similar to colloquial speech, as well as to the forms of monological speech, with the help of which students tell about real-life events, joining to the act of communication.
- 4. The system of exercises, developed by us and tested in practice, is used for teaching speaking in the learning process. It includes preparatory, speech tasks; communicative, role-playing and business games; project

works. The control of students' communication skills, organized correctly, gives the teacher the opportunity to check the effectiveness of the proposed system; to see practical achievements of students in the field of speaking.

### 6 Conclusions

In conclusion, we would like to emphasize that the experience of our teachers, their considerable innovative potential, the desire to improve their qualifications, to keep abreast of the latest technologies in the field of linguistic education, contribute to the further improvement of teaching speaking methodology, as the main type of speech activity.

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### COMPARATIVE STUDY OF SMALL GENRES IN RUSSIAN AND TATAR LITERATURES

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Abstract: This research deals with a comparative study of small forms in Russian and Tatar literature: poem in prose and neser. The article aims at elucidating the features of correlation of these forms in different national literatures, understanding their uniqueness, which is an objective basis from interaction. Neser and poem in prose have a common ground: rhythm occupies a special place, it is created in different ways, including by means of repetitions, pauses, inversion and other means of poetics. The actual material of the work was the works by I. S. Turgenev «The roses beautiful and fresh » «What will I think?», neser by F. Amirkhan « Bring me the flowers!» and by G. Rakhim («Letnij neser »). When comparing the works it was found that the poems in prose, created with the help of a short verse stanza, are close to the rhythm of rhyme. In neser, the rhythm is more correlated with the rhythm of the lyrical folk song and some aspects of its poetics. The melodic basis of such works in its own way resembles the Tatar songs: they contain frequent repetitions, anaphora, inversion. In their poetics a special place is occupied by long lines that gravitate towards the creation of distiches, which are thus completed in semantic content and can form a maxim or abnoristic uterance.

Keywords: small genres, juxtaposition of literatures, rhythm, verse, neser, poem in

## 1 Introduction

Currently, one of the insufficiently studied field of philological research is the consideration of literary genres in a comparative aspect. Among the genres of the small form of Russian and Tatar literature, a special place is occupied by a poem in prose and neser.

The turn to the comparison of genres is not accidental. This is largely determined by the very specific nature of the genre as a literary form, the content of which is conditioned by a circle of literary and linguistic traditions, the cultural foundations of literature, as well as the national identity of the people (Gachev, 1999; Nigmatullina, 1997; Bekmetov, 2015; Amineva, 2016; Amineva et al, 2015). As G. Gachev writes: "when getting familiarized with variegated national cultures, it is precisely found that the main difficulty is to understand how the other people think, and only by mastering the genre and the structure of thought one can understand its subject" (Gachev, 1968; Dashkin; 2017).

The proposed study aims to reveal the features of uniqueness of small forms of Russian and Tatar literature – poems in prose and neser; to understand the nature of their homologous correlation in a comparative study of different types of cultures, language traditions and features of national and literary thinking of two peoples.

Both genres are traditionally considered as the types of prose, the sphere of their interaction is based on differences, i.e. what makes them different in different cultures and at the same time harmonized, "consonant" with each other. The unique properties of these genres, complementing each other in the dialogue between Russian and Tatar literatures, are most fully revealed in their poetics.

# 2 Methodology

The conception of the work was greatly influenced by the works of scholars concerning the problems of genre identity, as well as studies in which genres are compared in the context of achievements of comparative method in contemporary comparative linguistics. Comparison as a scientific method presupposes the preservation of the uniqueness (originality) of each of the literatures included in the scope of the study (Fowler, 1982). The search for a common ground in this approach, unlike comparison, is not the goal, not the unity in the generally

accepted sense of the word, but an ongoing dialogue. According to Y. G. Safiullin: "Comparison does not absolutize the identity of a particular literature. On the contrary, it considers the collision of identities as an opportunity to reach agreement between different literatures through mutual understanding" (Safiullin, 2010).

The most important method of studying genres in a comparative aspect is the method of description, which makes it possible to overcome the alignment of literatures and the leveling of national identity in them. It should be noted that at present this method is used in the study of small and medium genres of Russian and Tatar literatures (Amineva & Yuzmukhametova, 2017; Bawarshi et al, 2010).

The relevance of the research is also connected with the fact that it develops the theory of interliterary dialogues, which is based on the recognition of the uniqueness of life of each literature that is in dialogical relations with "the other ones" (M. Bakhtin, V. Bibler, V. Yauss). According to M. Bakhtin, who made a significant contribution to the theory of the dialogue of literatures, "two cultures do not merge, do not mix, they retain their unity and open integrity, they are mutually enriched". Consideration of the dialogue of literatures as an exchange of values, images, ideas, genres enables to see the unique, on the basis of which "ours", facing "the other's", unfolds in the depth and complexity of its potential meanings and "new" interpretations (Latypova et al, 2017; Ferrer et al, 2015).

At present, the theory of interliterary dialogue is increasingly being considered as a sphere of interaction between different national identities that manifest themselves, including in comparative poetics of Russian and Tatar literatures (Edikhanov & 2016).

The concept of the proposed study was also provided influence by the works on receptive aesthetics (Iser, 1978; Jauss, 1995). In particular, in the well-known studies by H. Yauss and V. Izer, it is asserted that the violation of the usual "expectation horizon" of the classical text and adding to it "other" meanings that give it "second wind" is possible if the literary work is perceived in foreign-language reading medium.

## 3 Results and Discussion

1. Let us turn to the prevailing viewpoints on the origin and features of the genres of neser and poem in prose, their linguistic originality in Russian literature of the second half of the 19th century and in the Tatar prose of the beginning of the 20th century.

According to the views of the scholars, neser is an Arabic word denoting "prose work", "prose". Often this term was used to distinguish rhythmic works from verses. The researchers (D. F. Zagidullina, A. M. Khasanova, etc.) emphasize that there is no consistent and detailed plot development in neser, it tells about one significant event and the character; a fictious effect is achieved through associative and figurative parallelism, landscape sketches and lyrical philosophical contemplation play an essential role in neser.

According to D.F. Zagidullina, neser is one of the main genres in the Tatar modernist literature of the early 20th century. In the works by F. Amirkhan, M. Khanafi, M. Gafuri, G. Rahim, A. Tangatarov, the philosophical principle, connected with the rethinking of the place of man in being, in the world as a whole, prevails. In its own way, such dynamics was preserved even after 1917. D. Zagidullina writes: "Hope for musicality, which manifested itself in a special selection of consonant words, numerous repetitions, in the active use of such expressive means as alliteration, anaphora and epiphany, assonance, radif, etc., contributed to the preservation of the genre of neser, and also led to the change in the entire structure of the work of literature in general, in which the impressionist methods were clearly developed" (Zagidullina, 2013).

Neser is a genre that correlates in Russian literature with the genre of poem in prose. They have a common ground: a special place here is occupied by rhythm that is created in different ways, including by means of repetitions, pauses, inversion and other means of poetics.

Let us briefly consider some aspects of the poetics of poem in prose.

A special place in the poetics of this form is taken by verse – a small stanza. Thus, the feature of most of the works by I. S. Turgenev, defined by the author himself as a poem in prose, is the dominance of verse stanzas in the narrative. According to Y. Orlitsky's definition, the verse is a regulated, "statically structured (as a stanzaic translation of the Bible) verse prose characterized by a small volume of all or most of the stanzas, an approximate equality of the size of these stanzas and the tendency of most of them to coincide with one sentence".

The verse stanza is short, which brings it closer to the verse line. The presence of pauses, repetitions, refrains further emphasizes the connection of such works with verse, its especial distinct from prose work, rhythm. An abnormal brevity of stanzas from the point of view of traditional prose and the frequent repetitions in them are clearly recognized as something verse-like.

2. Let us turn to a comparative analysis of the work by I. S. Turgenev "The roses beautiful, and fresh ..." (1879) and the neser by F. Amirkhan « Bring me flowers!» (1921).

Our analysis confirms that the work by I. S. Turgenev quite clearly illustrates the features of non-prose narrative.

It is devoted to the character's reflections on the irreversible motion of time; presents, as a memory of the beautiful past, the fragments of memory of those who he still cannot forget.

Gde-to, kogda-to, davno-davno tomu nazad, ya prochel odno stikhotvorenie. Ono skoro pozabylos' mnoyu... no pervyj stikh ostalsya u menya v pamyati:

Kak khoroshi, kak svezhi byli rozy...

Teper' zima; moroz zapushil stekla okon; v temnoj komnate gorit odna svecha. YA sizhu, zabivshis' v ugol; a v golove vsyo zvenit da zvenit:

Kak khoroshi, kak svezhi byli rozy...

I vizhu ya sebya pered nizkim oknom zagorodnogo russkogo doma. Letnij vecher tiho taet i perekhodit v noch', v teplom vozduhe pahnet rezedoj i lipoj; a na okne, opershis' na vypryamlennuyu ruku i skloniv golovu k plechu, sidit devushka — i bezmolvno i pristal'no smotrit na nebo, kak by vyzhidaya poyavleniya pervyh zvezd. Kak prostodushno-vdohnovenny zadumchivye glaza, kak trogatel'no-nevinny raskrytye, voproshayushchie guby, kak rovno dyshit eshche ne vpolne rascvetshaya, eshche nichem ne vzvolnovannaya grud', kak chist i nezhen oblik yunogo lica! YA ne derzayu zagovorit' s neyu – no kak ona mne doroga, kak b'etsya moe serdce!

Kak khoroshi, kak svezhi byli rozy...

Of interest is the structure of this work: in it, a line from the poem by Myatlev « How good, how fresh the roses were ...» / "The roses beautiful and fresh ..."is repeated as a refrain (6 times!), it is included in the title – a strong position of the text. Refrain compositionally stands out in the text: it is placed in the middle of the text space, italicized graphically, which also intensifies the emotional turning, characteristic of the perception of the lyrics, in the reader's perception.

A poem in Turgenev's prose « What will I think?» is similarly structured (1879). Each stanza in it, as a line in the poem, contributes to the creation of a vertical rhythm, making the reader constantly return to the stanzas previously read. At the

same time, they are distinguished by relative proportionality and conciseness of the form.

The analysis of the neser by F. Amirkhan « Bring me the flowers! » confirms that the rhythm in it is quite different than in the work by I. Turgenev.

The neser by F. Amirkhan completely leaves a lasting impression of a prose work in which there are no quotes and verse; the sphere of the subjective here does not dominate over what is connected with the objective principle, which is connected with the ideas of the flow of time, youth, love to have left. The neser by F. Amirkhan also has the features of a ring composition: the last sentence in neser, highlighted by a separate stanza – A, ishetsəgez lə, kiteregez, kiteregez ,compositionally "frames" the beginning and end of the neser: its title and the first sentence. The features of "framing" ("ring") composition exposed in the work, of course, bring it closer to the rhythm and structure of the lyrical work.

Rhythm in neser is also achieved through repetitions and frequent exclamations, simultaneously giving the work of the Tatar writer a sublime intonation.

Unlike the romantic neser by F. Amirkhan, the neser by G. Rahim "Letnij neser" is a work of a nonclassical type in the Tatar literature of the early 20th century. The character in it appears as a man who acutely experiences the disharmony of the world, in which there is no place for supreme beauty, "a great dream" and a free manifestation of the spirit.

The neser is based on the antithesis: what is in the terrestrial world surrounding the character stands against the fictitious, imaginary picture of nature, in which there is the extraordinary beauty of the garden and flowers growing in it, the palace, like the palace of the padishah. This fictitious beautiful palace connects to the garden with the help of a staircase that is "ready to just rocket into the sky"!

If one turns to the question of rhythm in the neser by G. Rakhim, one should first distinguish repetitions, which, like the notes, are "scattered" throughout the text, creating a sense of its melodic sound.

Also the neser by G. Rakhim contains those units of the text that are close to the anaphora in the lyric work:

Von ona [sushhnost'] stoit v rozovykh luchakh vechernego, zakhodyashhego solntsa, sredi porozovevshikh mramornykh kolonn, bolee statnaya, chem ehti kolonny. Akh, pochemu zhe ya vizhu eyo prostupayushhee v rozovykh shyolkovykh odezhdakh telo kak telo nekoj bogini i ne smeyu prikosnut'sya k nej svoej rukoj? Akh, esli by pali na zemlyu odezhdy, skryvayushhie eyo telo ot moikh glaz, i ona, prevrativshis' v vechnyj pamyatnik iz kamnya, ostalas' by naveki na ehtom meste

Akh, pochemu zhe ehto tol'ko mechta, vsyo ehto tol'ko naprasnaya mechta! ZHizn', pochemu zhe ty takaya podlaya, pochemu v tebe net toj krasoty, kotoruyu ya zhelayu videt'?.. ZHizn', pochemu zhe ty naprasnaya? <sup>1</sup>.

However, reflecting on the rhythm-forming elements of this neser, it is essential to note another feature: short sentences within a whole paragraph or stanza (if we accept modern terminology) are not generally typical of prose and poetic works of Tatar literature of the early 20th century. This is due, first of all, to the history of the Tatar verse.

1

<sup>&</sup>lt;sup>1</sup>Let make one observation explicit. The structure of this fragment in the work by G. Rakhim resembles certain Tatar songs, which he illustrates in his scientific work «Insight into Our Popular Literature».

<sup>«</sup>Insight into Our Popular Literature». I ran downstairs and drank some water. Why did he escape, why did he drink? Why should I see these troubles, why I was born, why grew up?

In the sky, interrupted, stretched a white cloud.
Will my sorrows and sorrows stretch for the rest of my life?

### 4 Summary

As confirmed by many studies (H. Usmanov, K. Kurbatov, M. Bakirov, N. Khisamov), in the Turkic verse, not short lines, but, on the contrary, long lines, which were most often an illustrative utterance, aphorism, a complete sentence are distinguished in terms of composition. Such extensionality of verse was achieved mainly due to aruz – the main form of quantitative versification, which became widespread in Tatar poetry of the beginning of 20th century.

Long lines in the poetic work were distiches. Their form resembles the language to be unbroken or "linear", that is, to be characteristic of prose. And, on the contrary, a continuous speech in the prose text is easier than in Russian prose, it is closer to intonation features of oriental verse.

#### 5 Conclusions

Comparison of small genres of Russian and Tatar literatures versification in prose and neser - confirms the features of their originality. These forms are not identical and are not interchangeable, although between them, as between different magnetic poles, there a great force of attraction, capable of creating a dialogue of literatures, is formed. Its basis is the presence of rhythmized material, which arises in them differently. In case of the works by I. S. Turgenev, it resembles a verse and is close to the verse rhythm. The rhythm of neser is more correlated with the rhythm of the lyrical folk song and conveys some aspects of its poetics. The melodic basis of such works is reminiscent of Tatar songs in their own way: they comprehend frequent repetitions, anaphora, inversion, and in their poetics a special place is occupied by long lines that gravitate towards the creation of couplets which in this case are completed in semantic content and can form a maxim or an aphoristic utterance.

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# CONCEPT 'ROSSIYANE' IN THE CONTEXT OF IDENTITY OF DIFFERENT AGE GROUPS (BY MATERIALS OF THE SOCIOLOGICAL RESEARCH)

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Abstract: The paper is devoted to the problem of identity of the population in the Russian province. The subject of the study is the concept "Rossiyane" (citizens of the Russian Federation), its perception and connection with civil, ethnic, and regional identity. The concept "Rossiyane" was widely introduced into the political consciousness under the President B.N. Yeltsin, because it was considered as a basis for the formation of Russian civil identity, but then, gradually, withdrew from the political discourse of the country. The paper was prepared on the basis of the materials of a sociological survey conducted in 2014 in the city of Naberezhnye Chelny. Naberezhnye Chelny is a unique case, since its population was formed in the 1970s-1980s as a result of mass migrations and has a high degree of ethnic differentiation. During the study, three generations of citizens were distinguished based on the period of their political socialization: the Brezhnev generation, the Gorbachev generation, and the Yeltsin generation. Specificity of perception and use of the concept "Rossiyane" for different generations of townspeople has been determined, interrelations of the concept "Rossiyane" with different levels of identity have been established, the attitude of the Russian and non-Russian population of the city to it and its use in everyday practices, the role of this concept in the formation of regional identity and relationship with the level of patriotism has been determined. The results of the work will be useful for further study of the problems on formation of civil identity in Russia and expand the basis for further theoretical generalizations. The next stage of the work may be a comparative study of the specifics on formation of civil identity in different regions of Russia, as well as a study of the political consciousness characteristics for different generations of the Russian population.

Key words: civil identity, levels of identity, concepts, Russia, population, generations.

### 1 Introduction

By the term "Rossiyane" we mean citizens of Russia regardless of their ethnicity. Although the term "Rossiyane" is found in a number of official political acts, nevertheless, the attitude to it is ambiguous in Russian society (Vasiliev, 2008). The term "Rossiyane" has been known since the 16th century, but it began to be actively introduced as a political concept only under the President B.N. Yeltsin. Then it was considered as a basis for the formation of the Russian Federation civil identity and uniting a supra-ethnic construct. In the following years, under the Presidents of V.V. Putin and D.A. Medvedev, this term has disappeared from the country's public political discourse. However, according to the author, the positive potential of this concept is far from exhausted (Taylor, 1994).

Since identity is an important tool for analyzing the social and political situation of groups and communities in the modern world (Giddens, 1991; Taylor, 1994). and defines the activities of various political actors (Abdelal et al, 2006; Tuan, 2017), it seems important to consider the connection of the term "Rossiyane" with a civil, ethnic and regional identity. It seems necessary to explore how this concept is rooted in the minds of the population of the Russian Federation province, especially in the national republic. What are the patterns of its functioning and is it possible to update it?

The object of the study was the population of the city of Naberezhnye Chelny at the age of 18-47. The subject of the study was the specificity of the formation of civic identity among different age groups of the city's population in the context of the relationship with the concept of "Rossiyane" (Burke & Stryker, 2000; Villalobos Antúnez, 2016).

According to the hypothesis, the age group of 1966-1975 birth (38-47 years at the time of the survey) has passed a process of political socialization in the heyday of the USSR and is the bearer of the Soviet people identity. The age group of 1976-1985 birth (28-37 years) was socialized already in the conditions of the crisis and the collapse of the USSR, as well as the formation of a new Russian Federation identity, which is reflected in the eclectic nature of their life values. The world outlook of the age group of 1986-1995 birth (18-27 years) was completely formed already in the conditions of the new Russian Federation

statehood. Therefore, each of the generations has its own identity and specific perception of the concept of "Rossiyane".

The author has already conducted research on various aspects of the formation of the population's identity in the city of Naberezhnye Chelny. In particular, in 2014, a study was conducted on the nature of the self-identification of the city's students (Sakaev, 2016) and the specifics of young people's perception of multinationality as a characteristics of the Russian Federation society in the context of the civil identity formation [9]; in 2016, a comparative study of the levels of identity, including civil identity, of different age groups of the city's population was carried out. This paper is a logical continuation of the studies listed above; it complements and expands the results presented in them (Burke & Stets, 2000; Villalobos Antúnez, 2016).

### 2 Methodology

The paper is based on the materials of a representative sociological survey conducted in 2014 in the city of Naberezhnye Chelny. Naberezhnye Chelny is a unique case for the Russian reality, as the population of the city was formed by 90% only in the 1970s-1980s as a result of mass migrations. In the national composition of the city's population, 45% were Russians and 47% Tatars; however, more than 100 ethnic groups are also part of it. This makes it possible to consider the population of the city as a certain impression from contemporary Russian Federation society, reflecting various ethnic, regional and social groups. In the course of the study, three conditional generations of townspeople were identified based on the period of their political socialization. Although common in demography is to consider the duration of a generation in 20 years, but the author considers the right to use an approach that combines demographic criteria from the historical periodization, reflecting the dynamics of the political development of the society. Thus, as a part of the citizens, three conditional generations were distinguished for 10 years each: the "Brezhnev generation", the "Gorbachev generation" and the "Yeltsin generation".

The research was conducted in January-February 2014 by the method of questioning. The volume of the general population was 234,824 people of both sexes from the age of 18 to 47; the total sample size was 384 respondents. The selection of respondents was conducted centrally among representatives of various social groups, such as students of educational institutions, municipal employees, employees of municipal educational institutions, health and culture, workers and employees of industrial enterprises of the city, law enforcement officers, etc., and, in general, corresponded to the social structure of the city's population.

# 3 Results

In the course of the survey, the respondents were asked the question "Do you use the term "Rossiyane" in your everyday communication?" Among all respondents, 9.5% said that they use the term regularly, 10.3% - from time to time, 35% - rarely, 44.8% - do not use the term at all. So, the totality of respondents actually divided into two parts: 55% use this concept anyway, 45% - do not use. As to gender identity, this term is more often used by men (57%) than women (46%). By age groups, the distribution is as follows: in the group of 18-27 years, this term is used with a frequency of 51.5% of respondents, in the group of 28-37 years - 59.9%, in the group of 38-47 years - 52.8%. Thus, it seems that the term is most commonly used in the middle age group. At the same time, gender differences are also traced here: the proportion of men using this term one way or another is always higher than the proportion of women. So in the group of 28-37 years the term "Russians" is used by 61.9% of men and 42.3% of women, in the group of 28-37 years - 67.6% and 52.7%, in the group of 38-47 years - 71.4% and 40.9%, respectively.

That is, the term "Rossiyane" somehow used by about half of the city's population, most often by men, and most of all in the middle and older age group (the highest proportion of those who use this term regularly turned out to be middle-aged men group -14.7%, and the highest proportion of those who use this term periodically, was revealed in the older age group - 32.1%).

What are the reasons for these differences? Perhaps, this term is psychologically more similar to men, especially since the female version of this term - "Rossiyanka" is rare. As for the age features, they are obviously due to the fact that more than half of the respondents of the younger age group entered the period of political socialization after the resignation of the President B.N. Yeltsin who was the main supporter of this concept.

The following question about the prevailing self-identification of the respondents was received: 13.2% consider themselves primarily representatives of their people, 23.7% - residents of the city of Naberezhnye Chelny, 12.6% - residents of the region, 43.9% - citizens of Russia. At the same time, if we compare the results of the questions about the attitude to the concept "Rossiyane" and the self-identification of the respondents, we have obtained the following data. Among those who said that the term "Rossiyane" is regularly used by them, 48.6% identified themselves primarily as representatives of their people and only 14.3% as citizens of the Russian Federation. At the same time, among those who use this term periodically or occasionally, the majority of respondents identified themselves primarily as citizens of Russia - 61.8% and 48.8%, respectively. Among those who never use this term, the largest share (39.7%) is for those with a predominantly civilian identity, while those with an ethnic or regional identity dominate account for only 14.1% and 12.2% respectively. So, for most of the respondents, the dominant ethnic identity is not an obstacle to the use of the term "Rossiyane". At the same time, we see that in respondents with a dominant civic identity, a significant number also do not correlate civic identity with the notion of "Rossiyane" (in fact, every sixth respondent of a sample population). Perhaps, there are those among them who consider it right to use the term "citizen of the Russian Federation", as well as those who consider it more correct to use the term "Russians" (Ruskiye).

It is also interesting to relate the attitude to the concept "Rossiyane" to the language characteristics of the respondents, identified through the question of the language of communication with the family. Among those who use the term "Rossiyane" permanently, periodically or occasionally, the overwhelming majority indicated Russian language as such (60.0%, 61.8% and 42.4%, respectively). There is also a high proportion of respondents who use Russian and native (non-Russian) languages in equal measure, or mostly Russian, but also native (non-Russian) language, and at the same time, periodically or occasionally use the term "Rossiyane" (34.3%, 32.3% and 55.2% respectively). Among those who answered that they never use the term "Rossiyane", 42.9% speak with the family only in Russian, 6.4 % speak only in their native (non-Russian) language, 27.6% in Russian and native (non-Russian) languages in equal, 16.7% - mainly in Russian, but also in native (non-Russian) language, 6.4% - mostly in native (non-Russian) language, but also in Russian.

This means that, ethnic Russians and assimilated representatives of other nations prevail among those using the term "Rossiyane". At the same time, it is noticeable that among ethnic Russians there are many who reject this term. And likewise, among the representatives of other peoples with a strong ethnicity (speaking in the family circle in their native language or predominantly in their native language) there is also a group of those who do not accept this term and do not apply it.

Interestingly to compare the ratio of answers to the question about the use of the term "Rossiyane" with the level of patriotism. In particular, the respondents were asked whether you feel proud for Russia (Rossiya)? Among those using the term "Rossiyane" on a regular basis, 94.3% experienced a feeling of pride for the country always or often, another 5.7%

experienced this feeling sometimes. The distribution of answers among those who periodically use the term "Rossiyane" - 55.8% and 44.1%, and in the group of respondents who use this term rarely - 48.0% and 46.4 %. That is, a regularity is revealed that the more often the respondent uses the term "Rossiyane", the more likely and the more often he/she felt a sense of pride for the country. Moreover, we emphasize that this survey was conducted prior to the beginning of the "Russian Spring" in 2014 and the growth of patriotism in Russian society associated with this. Although, it was also revealed a lot of those who feel pride for the country always or often or sometimes, but do not use the term "Rossiyane" (31.4% and 50.6%, respectively). It is probable that they are Russians and representatives of other peoples with a strong ethnicity who reject this concept as not conforming to their ethnic identity, but at the same time remain patriots of the country. However, in the same group (not using the term "Rossiyane"), there are significantly more people who do not feel pride for the country - 17.9% (in other groups - 0% and 5.6% respectively). In this case, the rejection of the concept "Rossiyane" can be interpreted as a consequence of a low level of patriotism.

It is also interesting how the use of the concept "Rossiyane" is combined with regional identity. A question was asked about whether respondents consider themselves "Tatarstanians" (that is, do they feel a strong political connection with the region of Tatarstan). 97.2% of respondents who answered that they use the term " Rossiyane" permanently, simultaneously consider themselves "Tatarstanians"; it turned out to be 79.5% among those who use this term periodically; among those who use rarely - 84.8%. It would seem that there is nothing special in these results, since the contradiction between civil and regional identity is not necessary, they could be positively combined. However, among those who said that they never use the term Rossiyane ", 78.8% of respondents also consider themselves "Tatarstanians" and, in this case, we can state a challenge that regional identity throws (most likely, reinforced by a strongly pronounced non-Russian ethnic identity) the all-Russian civil identity.

## 4 Discussion

It seems important to correlate the obtained data with the results of other studies concerning the city of Naberezhnye Chelny.

So, within the framework of the study on the opinion of the city's students held in 2014, it was found that respondents often make different meanings in the term "Rossiyane". If half of the respondents adhered to a civic approach to this concept, the other half used it as an ethnic feature. At that, among the first there were more men and non-Russian respondents, and women and Russian respondents among the latter (Sakaev, 2016).

The study of 2016 showed similar results. More nationalistic positions were then demonstrated by the younger generation (20-29 years), whereas middle-aged people (30-39 years old) adhered basically to the civil approach concerning the notion of "Rossiyane".

In 2016, the concept "Rossiyane" was already irrelevant for almost 50% of respondents, and only 20.8% of respondents tried to actively use it in everyday communication. And the most active people which used it was the generation of those who was 40-49 years (Sakaev, 2016).

In 2016, the concept of "Rossiyane" was more often used by Russians than Tatar respondents. At the same time, for some of the Russian respondents, it seemed an attempt to substitute the Russian ethnic identity. At the same time, in the generation of 20-29 years, the share of those who actively used the concept "Rossiyane" among Russians and Tatars was approximately the same, and in generations of 30-39 years and 40-49 years this share among Russians was significantly higher than among the Tatars.

Thus, the comparison of data from different years indicates a gradual reduction in the use of the term "Rossiyane " in

everyday practice. As before, this concept is mainly used by people of senior and middle age and, mainly, Russians; and it is less relevant for youth. Gender differences in the use of the term identified in 2014, in 2016 was not already so clearly manifested. For the majority of Russian and non-Russian respondents, the notion of "Rossiyane" does not conflict with their ethnic identity and they can be combined, what was confirmed by the data of 2014 and 2016. We managed to identify a certain correlation between the use of the term " Rossiyane" in everyday communication and the level of patriotism, but this issue needs further study, since the events of 2014 seriously changed the nature and level of patriotic attitudes in society. As for the correlation between the concept "Rossiyane" and regional identity, it should be noted that most respondents do not have antagonism between them, but for persons with a pronounced ethnic identity it seems that a regional identity can provoke such a contradiction.

# 5 Summary

To summarize, we note that the concept of "Rossiyane" is undoubtedly gradually being supplanted (especially after the events of the "Russian Spring") from public discourse and replaced by the concept "Russians". The processes in the political sphere, including the adoption in 2018 of the law on the selective procedure for the study of the state languages for the peoples of Russia, emphasize the policy taken by the federal elite to strengthen the Russification of the country and the strengthening of "Russianness" at the heart of Russia's statehood as opposed to the former, more tolerant approach. The latter was precisely associated with the concept of "Rossiyane" which emphasized the multinationality of Russian statehood. It is logical that the consequence of this was the weakening of the position of the "Rossiyane" concept in the political consciousness of the population, what was partly recorded by the comparison of the data of 2014 and 2016.

## 6 Conclusions

In conclusion, the author would like to emphasize that, nevertheless, the potential of this concept for Russian political reality has not been fully exhausted, given that those generations are still participating in the active political life of the country so far, which took it deep enough (the "Gorbachev generation" and the "Brezhnev generation"). Changing the domestic political situation in the country can easily make this concept again in demand, especially if its return will be associated with a more successful and popular politician than President B.N. Yeltsin in the 1990s.

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# CONSONANT SOUNDS OF MODERN TATAR COLLOQUIAL SPEECH: NORM AND VARIABILITY

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Abstract:The article presents the results of consonant sound phonetic feature study in modern Tatar colloquial speech and their correlation with the literary norm. In particular, the normative variants of pronunciation were systematized and the most common deviations from the literary norm were indicated. In Tatar linguistics the normative aspect of linguistic units has been the object of research up to the present time. Various options, which are manifested in colloquial speech, were studied poorly. The article focuses on this problem for the first time. We have analyzed the original Tatar and consonant sounds borrowed from Russian language. Due to the fact that the influence of Russian language on spoken Tatar speech has increased now, the attention was focused on sound composition comparison between two languages. 96 phonograms of oral speech by Tatar language speakers from various age groups were involved for analysis. In the course of the study they found out that the revealed deviations from the norm in the field of consonant sounds are of a regular nature and can be considered the identification features of modern Tatar colloquial speech. The main reasons for the deviation from phonetic norms are an active penetration of dialectal features into modern Tatar speech and the phenomenon of interference that arose as the result of active bilingualism.

Key words: Tatar colloquial speech, language norm, variability, phonetics, consonant sounds

## 1 Introduction

Spoken language plays a crucial role in human society. Its main function is to ensure everyday communication between people. In comparison to the codified literary language, the spoken language is considered primary in origin and application. Thus, every change and novelty that the language undergoes can first be seen in its spoken version. In time, if they stand the test of time, these new features make their way into the codified literary language (Galiullina, 2018).

Many changes occurring in the language arise under the influence of changes in spoken language. According to L.V. Scherba, "all changes in the language, which later appear in monologue speech, are forged and accumulated in the smithy of colloquial speech" (Shcherba, 1957; Nurhayati, 2018). Constantly observed language trends towards a more conservative and sustainable deserve a close attention of linguists. The sphere of oral conversation "free of conservatism" is the medium where the rethinking and the development of linguistic forms take place.

Each national language is one in all the diversity of its manifestations - dialects, jargons and literally processed forms.

The literary form, which has emerged from the national language in the process of its historical development, does not lose its connection with other forms of national language, namely with dialects, colloquial language, etc. The interaction of these subsystems at each stage of linguistic evolution reflects the social processes taking place in society through complex mediations. The regulator of literary language interaction with other subsystems is the norm, which is designed to filter the means coming into literary use from dialects, colloquial language and slang spheres. The norm itself is also subject to change; the social assessments of normative attitudes also vary depending on time, and on the nature of the processes taking place in society.

In the literary language, all aspects of the national language are processed and normalized - phonetics, vocabulary, grammar, word formation, stylistics. The term "language norm" means a set of rules for the choice and the use of language elements acting at different language levels (Kozhemyakina et al, 2006). In accordance with this they distinguish phonetic, lexical, grammatical and stylistic norms.

Taking into account the fact that the Tatar conversational speech is spreading in various spheres of mass communication, the systematic and the complex research of Tatar colloquial speech has become necessary and urgent to reveal its specifics.

Until now the normative aspect of linguistic units has been the object of study in Tatar linguistics. The various variants manifested in colloquial speech remained hardly noticed. So, for example, this problem was raised in the works by I.A. Baudouin de Courtenay - the founder of the Kazan Linguistic School (Baudouin, 1963). Then this trend was developed by V.A. Bogoroditsky within the framework of this school. He reflected the specificity of the Tatar speech in his works (Bogoroditsky, 1953; Galiullina, 2014; Ismagilova et al, 2016; Ibrahimov & Saikhunov, 2008; Martyanov et al, 2018 Villalobos Antunez, 2016).

The purpose of this work is to analyze the phonetic characteristics of consonant sounds that are most characteristic for conversational speech and their correlation with the literary norm of the Tatar language. The objectives of the work: to determine the composition and their most common variants of consonant phonemes in Tatar colloquial speech; to reveal phonetic peculiarities in the field of consonantism, which are observed in the oral speech of Tatar native speakers.

The analysis was carried out on the basis of 96 phonograms of dialogical and monologic oral speech by the Tatar language speakers of different ages, the representatives of the middle and western (Mishar) dialects of the Tatar language (Sattarova et al, 2014).

## 2 Methodology

In the process of research, they used the set of methods and techniques that allowed to come to the main results. In order to collect and accumulate the actual speech material, they used the method of observation, language experiment and continuous sampling. Using the descriptive method, scientific-theoretical and practical material was studied, language and speech phenomena were described. The comparative method was used in order to compare intra- and interlanguage phenomena during the interpretation of obtained results, as well as to characterize the phonetic features of modern Tatar colloquial speech consonant sounds and their correlation with the literary norm.

# 3 Results and discussion

Language is realized only in speech, and the communicative function of language is determined by this fact precisely. The study of language and speech relationship in phonetic, lexical, morphological and syntactic terms promises many interesting things. Language can be considered as fully described and studied when these parts of the language are studied in paradigmatics and syntagmatics. Learning the language in all its richness implies the display of linguistic phenomenon implementation in speech (Shakirova, 2017).

The phonetic system of any language develops and constantly changes, like the language itself. In the process of historical development, the people, and consequently, the culture come into contact with other cultures, which primarily influence everyday life and language at all levels. It is rather difficult to say what the phonetic system of the Tatar language was a thousand years ago. First, there were no methods of recording the features of phonetics then. Secondly, the literary language was formed rather late, and there was a gap between written and oral colloquial language. One can assert with certainty that this process will last as long as the language develops and changes.

The existing set of rules for the pronunciation of phonemes and the patterns of their use in speech are accepted as the phonetic norms of the Tatar language, which are considered compulsory for all members of the language collective. When they study the modern oral form of the language, they found that modern spoken language undergoes changes and deviations from phonetic norms. The main reasons of this process are the active penetration of dialectal features into modern Tatar speech and the interference phenomenon that arose as the result of active bilingualism.

The system of Tatar literary language consonants includes 28 sounds:  $[\pi]$ ,  $[\mathfrak{G}]$ ,  $[\tau]$ ,  $[\mathfrak{A}]$ ,  $[\Gamma]$ ,  $[\kappa]$ ,  $[\mathfrak{G}]$ ,  $[\mathfrak{G}]$ ,  $[\mathfrak{G}]$ ,  $[\mathfrak{M}]$ , are used in Russian borrowed words, and  $[\mathfrak{K}]$ ,  $[\mathfrak{F}]$ ,  $[\mathfrak{M}]$ ,  $[\mathfrak{M}]$ ,  $[\mathfrak{M}]$ ,  $[\mathfrak{M}]$ ,  $[\mathfrak{M}]$ ,  $[\mathfrak{M}]$ , are specific Tatar sounds.

In order to identify the conformity and the inconsistency of consonant sounds with the ortoepic norms of the Tatar language at the level of words and phrases, let us dwell on their linguistic features. The sign groups of consonant sounds correspond to their classification by development place and mode. Let us consider the cases that most often lead to the deviation from the norm in detail.

The pronunciation of consonants in Tatar speech is significantly influenced by vowels, for example: the labialization of consonants after labialized vowels туп [ $\tau^{y}$ уп] — тирән [тирән], котып [ $\kappa^{o}$ отоп] — кыргый [кы ргый]), the palatalization of consonants next to the vowels of the front row and the velarization with the rear-row vowels (кал-кил) correspond to the orthoepic norms of the Tatar language.

As for the labial consonant sounds  $[\delta]$ ,  $[\Pi]$ , [M], [M], [B],  $[\varphi]$  – the following positions are considered as normative pronunciation:

- 1) in the intervocal position both inside a word and at the junction of the words the explosive element of the sound [6] weakens: caδaκ [ca $^{\circ}$ 6aκ], καραπ απα [κα $^{\circ}$ ραδ α $^{\circ}$ πα];
- 2) the voiceless sound  $[\pi]$  in the intervocal position, both within the same word, and at the junction of words, alternates with the voiced pair  $[\delta]$ : туп тубы, салып ала  $[ca^a \pi \delta^a \pi a]$ . This sound is also voiced at the junction of the words in front of the voiced  $[\delta]$ : карап бирэ  $[\kappa a^a p a \delta \delta u p a]$ ;
- 3) The sound [w], transmitted at the beginning of the syllable with the letter B, and at the end of the syllable with the letters y, y, is pronounced with the participation of elongated rounded lips that are not touching each other: Batah [wa $^{\circ}$ tah], дәу [дәw];
- 4) under the influence of the labial nasal sound [M], some sounds alternate with the nasal ones:  $\kappa o M + \pi a p$  [ $\kappa o M + \pi a p$ ];
- 5) the alternation of non-linear consonants next to the labial ones: унбиш [умбиш].

Deviations from the norm:

- 1) the pronounciation of labial-dental [в] instead of [w] is typical for the speech of Russian-speaking Tatars, who grew up in Russian-speaking environment: ватан [ватан], дәү [дәв];
- 2) the absence of alternation when the affix of the plural is added under the influence of the nasal [м]: белем+ләр [бэлэмләр] instead of [бэлэмнәр];
- 3) the absence of non-labial alternation next with the labial ones: унбиш [унбиш];
- 4) insufficiently soft labial consonants before the vowels of the front row: Мәрьям [мә $^a$ рьйәм];
- 5) the absence of the vowel  $[a^o]$  labialization after the labial consonants: 6apa [6apa];
- 6) the pronounciation of voiceless pair [π] instead of [ф]: фиргавен [пиргәwэн];

7) the pronounciation of the sound [w] instead of [б]: кабып [каwып], табып [таwып].

The front-line consonants: [T], [Д], [Ц], [Ч], [Щ], [С], [З], [Ш], [Ж], [Ж], [Н], [Л], [р].

The basic normative principles of the front-language consonant pronounciation:

- 1) the feature of antero-consonant consonant pronounciation when they are formed, the front part of the tongue articulates towards the upper teeth or to the dental part of the hard palate, and, thus, they are pronounced somewhat softly;
- 2) under the influence of the front [4], [ $\kappa$ ] the back vowels [a], [y], [o], [ы] are pronounced somewhat softly;
- 3) [н] in front of labial [б], [м] loses the sign of frontology and passes into the sound [м]: унбер [умбэр];
- 4) [ $\mu$ ] before uvular [ $\kappa$ ], [ $\kappa$ ] [ $\Gamma$ ], [ $\Gamma$ ] passes into the uvular [ $\mu$ ]: энкэй [эңкэй];
- 5) [ч], [ц], [щ] are pronounced only in the borrowings from Russian and European languages: чек, цирк, щетка, щи;
- 6) the sound [3] in front of a voiceless consonant of a monosyllabic word or an affix is somewhat unvoiced at the end of a word and between two words, where the second word begins with a voiceless consonant: тозсыз [тоз<sup>c</sup> соз<sup>c</sup>], йөз кат [йөз<sup>c</sup> ка<sup>o</sup>т];
- 7) the sound  $[\pi]$  following the nasal consonants [H], [M], alternates with the nasal [H]: Төнлә [Tөннә], андамады  $[a^o$ ннамады]. Although such assimilation is not considered as the norm in the literary pronunciation, but it is common in colloquial speech.
- 8) The most common deviations in colloquial speech:
- 1) the substitution of slit sound [ч] with an affricate [ц] or  $[^{\mathrm{T}}$ ч] in the dialects and in the speech of Russian-speaking Tatars: чэчэк [цэцэк] /  $[^{\mathrm{T}}$ чэ $^{\mathrm{T}}$ чэк]; пычак [пы $^{\mathrm{T}}$ чак] / [пыцак];
- 2) the pronounciation of palatalized variants [т'] and [д'] instead of [т] and [д], according to articulatory and acoustic signs similar to Russian sounds [т'] and [д']: тиен [т'иэн]; димөк [д'имөк];
- 3) the use of the combination of sounds [дж] instead of the Tatar specific anterolanguage sound [ж]: жилэк [джилэк], елак [джылак], жыр [джыр];
- 4) the replacement of affricate [ц] with the sounds [c] or [ч] is common in common speech: молодец [маладис], цирк [сирык], купец [купис], офицер [эфисэр], больница [бүльнис].

Back consonants [r],  $[\kappa]$ . During their articulation, the back of the tongue articulates towards the upper palate. The back consonants are characterized by the following pronounciation features, which are considered as the norm:

- 1) the alternation of the sound  $[\kappa]$  with the voiced pair  $[\Gamma]$  in the intervocal position and next to the sonorous [p] both within the same word and at the junction of the words::  $\tau \gamma \kappa \tau \gamma \tau \rho$ , бөк бөгө, ак аграк, йөк алу  $[й \ o\ ra^{\circ} \ ny^{w}]$ , биек рэшэткэ  $[бий \ o\ ra^{\circ} \ ny^{\circ}]$ ;
- 2) when the joint of words has uvular  $[\kappa]$ , when the first word ends by the back  $[\kappa]$ , it is likened to the last  $\kappa\kappa \to \kappa\kappa$ : бик куркак [биккуркак];

There are few typical deviations from the norm, associated with the back  $[\Gamma]$ ,  $[\kappa]$ .

Uvular consonants  $[\kappa]$ ,  $[\tau]$ , [x],  $[\mu]$ . When these sounds are articulated, the uvula descends toward the back of the tongue.

Among the uvular sounds, all three are considered as specific Tatar sounds except for [x].

The normative pronunciation:

- 1) the alternation of the sound  $[\kappa]$  with the voiced pair [F] in the intervocal position and next to the sonar [p] both within the same word and at the junction of words:  $a\kappa a\varepsilon a$ , ak  $\varepsilon \tau = [a^{\alpha}\varepsilon \partial m \partial u]$ ;
- 2) if there are  $[\kappa]$  with the voiced pair [F] or the front [m], then the voiceless sound  $[\kappa]$  acquires the color of the consonant [x] at the junction of words:  $a\kappa$  халат  $[a^{\sigma}\kappa^{x}a\pi am]$ .

## Deviations from the norm:

- 1) the pronounciation of back  $[\kappa]$ ,  $[\Gamma]$  instead of uvular  $[\kappa]$  and [F]:  $\kappa ap$  instead of literary  $[\kappa a^o p] [\kappa a^o p]$ ;  $a \epsilon b \iota m$  instead of literary  $[a^o \Gamma b \iota m] [a^o \Gamma b \iota m]$ ;
- 2) the replacement of the uvular [x] by posterior-lingual Russian [x];
- 3) the replacement of the uvular [H] with the front nasal [H]: COH[CYH];
- 4) the replacement of the uvular [н] with the combination of sounds [нғ]: миңа [минға];
- 5) the replacement of the uvular [ $\kappa$ ] with the uvular [ $\kappa$ ]: вакыт [ $\kappa$ а°хыт]; хатын [ $\kappa$ а°тын];
- 6) the replacement of the uvular [к] with the uvular [ғ]: вакыт [wa°ғыт]:
- 7) in common language and dialects (predominantly in the Mishar dialect), the uvular [F] falls out in Arab-Persian borrowings: гадэт [эдэт], гаеп [айып], гомер [умэр].
- 8) The pharyngeal consonant [h] and the laryngal consonant gamza [ξ]. These consonants are used only in the words borrowed from Arabic and Persian languages. In colloquial speech, these sounds have a number of features that can be considered as deviations from the normative pronunciation. The deviations are related to the following fact: 1) these sounds are somewhat passive in colloquial speech; 2) their articulation causes difficulties in pronunciation for native Tatar language speakers.

# Deviations from the norm:

- 1) in common language and in dialects (predominantly in the Mishar dialect), the pharyngeal [h] falls out: həbəc [əwəc], hyuu [yuɪ];
- 2) in common speech and in the speech of Russian-speaking Tatars, the replacement of [h] with uvular [x] is quite common: шэhəр [шэхэр];
- 3) the pronounciation of the sound similar in articulation and acoustic characteristics to [й] sound instead of a laryngeal consonant [ɛ]: тоэмин instead of [тое мин] [тоймин].

# 4 Conclusions

In oral conversational speech, the phonetic norms undergo the changes that are mainly conditioned by the influence of a place of residence or a place of a speaker's permanent long-term presence in a certain linguistic continuum, as well as by the phenomenon of interference.

The phonetic norms of the Tatar language are represented by the existing set of rules for the pronunciation of phonemes and the patterns of their use in speech, which are considered as compulsory for all members of the language collective. There is the opinion among the researchers that the phonetic system of the Tatar language is more stable and less subject to various kinds of influences. However, when they study the modern oral

form of the language, they found that modern spoken language undergoes changes, there are deviations from phonetic norms.

### 5 Summary

Thus, in Tatar colloquial speech the variability is manifested by  $[\kappa]$ ,  $[\![\!\,r]\!]$ , which are replaced by the back  $[\![\!\,\kappa]\!]$ ,  $[\![\!\,r]\!]$ . One should note the substitution of the slit, deep back  $[\![\!\,h]\!]$  by Russian slit posterior  $[\![\!\,x]\!]$ . In the Tatar language, the palatized variants  $[\![\!\,\tau]\!]$  and  $[\![\!\,\pi]\!]$  are varied rather actively, according to articulatory and acoustic signs similar to the Russian sounds  $[\![\!\,\tau]\!]$  and  $[\![\!\,\pi]\!]$ . The main reasons for this are the interference that arose as a result of active bilingualism.

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# CONTEMPORARY CONTRADICTIONS IN THE IMPLEMENTATION OF THE ISLAMIC FINANCIAL MODEL

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Abstract: Islamic financial institutions have proved to be an effective instrument of financial and economic integration at the regional and global levels. The Islamic financial services industry is growing rapidly over the past decades. The basis for the Islamic financial model is the principles of Sharia. Approaches dictated by the Islamic financial model which deny the use of unsafe financial instruments, are a fundamental reason why Islamic financial institutions remain robust against the background of the financial crisis, and even develop their financial structure. At the same time, it is necessary to recognize a certain conversion of Islamic financial products and institutions towards traditional functioning principles. Currently, the Islamic financial model is slowly making more concessions to the modernized traditional model, thus bringing this industry closer to its traditional analogy. We need a well-developed theoretical and regulatory framework for the Islamic financial sector. The absence of a developed conceptual framework for the promotion of Islamic financial instruments is one of a number of problems caused by the lack of interaction between the Islamic and traditional financial systems. Features and contradictions of Islamic financial model realization in modern economy are considered in the paper. The conclusion is made on the need for internationalization of Shariah principles in Islamic financial operations, in its form and design, which will require the development of theoretical studies and the improvement of the regulatory control over Islamic financial instruments and institutions.

Keywords: Islamic finance, Islamic financial system, Islamic model, Islamic financial instruments, Islamic financial institutions.

# 1 Introduction

The formation of the Islamic economy was a reaction to Western penetration into the Islamic world. Since the mid-nineteenth century, several Western countries have established their own banks to support their commercial activities. For example, England created the Imperial Ottoman Bank (1856) on the territory controlled by the Ottoman dynasty and the Imperial Bank of Persia (1889) on the territory of the Qajar dynasty.

Over the last thirty years, Islamic finance has not only survived among the rivals of traditional finance, but also shows a trend toward stable and rapid development.

In modern times, the Islamic financial model is represented in practice by several hundred financial institutions with international coverage and aggregate assets that reached 2 trillion US dollars in 2017, or 1% of world assets (without taking into account derivative securities). By 2021, the total world Islamic finance assets are expected to increase to \$ 3.5 trillion.

The problems of the Islamic financial model can be attributed to various categories: ideological, theoretical and practical. These problems are related to the circumstances created by the promotion of Islamic financial institutions and instruments in the regions where they operate: traditional economic, legal, administrative, sociocultural conditions (Haseeb, 2018). At the macro level, one of the important problems of Islamic finance is the search for an ideological balance.

During the last period, attempts were made in the world economy to form the Islamic finance industry, but the list of disputed and unexplored phenomena remains extensive.

# 2 Methodology

The purpose of this study is to identify the peculiarities and contradictions in the implementation of the Islamic financial model in the modern economy.

The methodology of the research is based on the application of classical scientific methods and techniques, namely: systematic consideration of the object and subject of research, dialectical logic, analysis and synthesis, grouping, comparison, and generalization methods which allows speaking about the

complexity, integrity and reliability of the research results (Abozaid, 2010; Villalobos Antúnez, 2015).

# 3 Principles and limitations of the Shariah in relation to financial activities

Islamic financial institutions operate in several dozen countries, and in some of them they are formally the only acceptable form of financial business.

Islamic financial model is relatively young; it has no more than half a century and the active growth of the industry began only in the last two decades. Therefore, it is not surprising that there are differences in interpretation on a number of theoretical and methodological issues, and a number of questions remain poorly understood. As a result, in different countries the model is implemented in different ways.

There are two key directions of implementation: strict adherence to the Shariah requirements (minimization of trade-offs) and non-strict compliance with them (wide application of trade-offs) (Abozaid, 2010). The principles of Islamic finance protect justice in remuneration and remuneration structures and are designed to embrace social and economic justice among all (Hegazy, 2007).

Let's outline the list of basic principles and limitations of Shariah in relation to financial activities:

- The prohibition of charging borrowers for the use of a loan, if it has the form of a percentage from the funds to be credited.
- Prohibition of the use in financial practice of contracts, the terms of which involve the obligation of participants or one of the parties-participants depending on the probabilistic combination of circumstances.
- 3. Prohibition of multiple resale of a financial instrument without causes confirmed by information sources.
- 4. Prohibition of the transfer of risk related to a financial instrument to the end user.
- Prohibition of receiving remuneration for the provided financing without assuming by the credit institution of a share of the risk.
- Prohibition of levying penalties and fines from a customer in the event of late repayment of the loan amount.
- Prohibition of sales of products, sales of financial instruments and other assets not owned by the seller at the time of sale.
- 8. Prohibition of the sale of debt at a value different from the nominal.
- 9. Prohibition of sales of debts into debt.
- Debt financing can only be used to create new non-financial assets.
- Islamic financial products and services should be based only on physical assets.
- Prohibition of financing non-halal businesses and non-halal projects: for example, investments in the sectors related to alcohol, tobacco, pork, gambling and so on are not allowed.

During the last period, attempts were made in the world economy to form the Islamic finance industry, but the list of disputed and unexplored phenomena remains extensive. The result was the following contradiction: entrepreneurs and the state are trying to introduce the Islamic financial model into practice, while the existing concept of this model is not complete and full-fledged yet. Academic science does not keep pace with the requirements of practice in this matter. (Jose et al, 2012; Ferrer et al, 2015).

From a terminological point of view, the Islamic financial model should be interpreted as a certain system of financial institutions that have similarities with traditional financial institutions, but act in accordance with Sharia law (Sedov & Sigarev, 2017).

### 4 Results and discussion

Let us note that not all spheres of the economy of Islamic states embody the principles of Islamic finance stemming from the Sharia

1. Firstly, as practice shows, these principles are by no means always respected by the public finance institutions. For example, the condition of the debtor's forgiveness for tax payments and the determination of the amounts of arrears are not realized in this segment. The principles of Sharia prohibit the lender from punishing the borrower.

The Islamic analogue of co-financing of interest rates by economic entities is not developed. In the context of the Islamic financial system, the payments generated by the underlying asset will be analogous to payments at the interest rate. When co-financing obligations, states are dependent on volatile factors, while, as already indicated, Sharia principles impose a ban on contracts with vague commitments.

There is no unambiguous interpretation as to whether it is correct from the point of view of the Sharia to levy tax levies received from military enterprises and the state budget on programs of a social nature.

2. With regard to the finances of enterprises and businesses, there is no strict connection between the halal sector (manufacturing of products, mainly food products, with the observance of the Shariah requirements) and Islamic financial institutions and instruments. So, in no country with the Islamic model of economy and finance such an assumption of obtaining a halal certificate is applied, as, for example, the presence of bank accounts in Islamic rather than traditional credit institutions.

Not all countries oriented to the Islamic financial model are unambiguous in answering the question of deductions from profits before taxation of amounts of debt servicing costs. If the traditional economy deducts interests on debt servicing from the profit before tax, then in the Islamic finance segment, the term "interest payment for debt" is not applicable, but it is "the income generated by the underlying asset, the share of which goes to the creditor". This approach means making payments on the loan in the section "Profit after tax". This implies that companies operating in accordance with the principles of Sharia are in a less advantageous economic environment.

Another important business problem is the definition of the landlord's value when leasing property. In the traditional model, the rental price is calculated based on the current value of money (interest rate). But this approach is not applicable for the Islamic financial model (Mokina, 2017).

- 3. The issue of monetary circulation formation according to the model corresponding to the Sharia is also open. So, according to the Shari'ah, money cannot fulfill the role of a commodity, since they are a universally recognized means of exchange. Taking into account the feature of money to depreciate (and in relation to money, it can be treated as the identity of depreciation), money is not only a simple means of exchange, but in parallel must recognize the nature of the goods.
- 4. In financial markets of the Islamic type, there is no own developed and relevant parameter for the Islamic finance industry an analogue of the LIBOR rate, an indicator reflecting the cost of risk (such a rate as LIBOR and similar ones show with the cost of selling money). The absence of this indicator forces Islamic financiers to constantly monitor the parameters of the traditional interest rate and carry out transactions taking into account its dynamics. It cannot be considered logical to deny the traditional interest rate while simultaneously targeting it in developing financial decisions.

It should be pointed out that in the Islamic financial model there is no developed analogue of the cash flow discounting model. At present, Islamic financial institutions apply the traditional model of discounting cash flows, and such a situation provokes a conflict of interest. Namely: the calculation is performed on the basis of value of money in time, while Islamic financial relations are based on the non-acceptance of this principle.

5. In the Islamic banking sector, there is no understanding of the specifics of Islamic financial institutions' liquidity management. There are no financial mechanisms that are consistent with the principles of Sharia and allow the introduction and removal of financial markets liquidity by a state regulator. The reason for this situation is the unwillingness of the Islamic banking community to recognize the central bank as a special risk-free institution that differs from other banks. Therefore, in accordance with the requirements of the Sharia, it is basically impossible to extract remuneration from an Islamic bank when lending to the central bank, whichever contract is used upon that.

An important component of the Islamic financial model is the functions of Islamic banks.

Obviously, Islamic banking includes such operations as payments, cash handling, and raising funds in the capacity of a deposit, and investment. But the operations of purchase and sale of goods by banks (a "murabakha" contract similar to consumer lending being one of the most common operations of Islamic banking today) is contradictory.

The situation when a client comes to the bank and tells the bank what exactly they would like to buy on credit, and only then the bank buys this product for the client from third parties, is a camouflaged interest transaction. From the formal point of view, only the real owner of the goods has the right to carry out the operation of murabakha, but then it must be either the producer of the goods or the wholesale intermediary, even before the arrival of the customer, he bought the goods from the producer (Shaikhutdinova & Dibaeva, 2016).

6. Very often Islamic financial institutions completely copy traditional banking and traditional companies when creating and promoting financial products. In Islamic banking, as in its traditional model, there is a practice of stimulating investment processes. To this end, Islamic financial institutions introduce differentiated rates of profit distribution between the bank and the co-investor: the larger the amount of investment, the higher the percentage of profit the bank offers.

The investment model in the Islamic financial environment assumes that an investor receives profit from the cash flow generated by the investment project (Masih, 2017). But, as a rule, it may take several years to get the first award from the time the project begins. This forces Islamic banking to design a financial product in which the period from the beginning of the project to the receipt of the first income is filled with artificial "payments from the project's expected revenues". The result is a special financial product which payment structure is reminiscent of a traditional product, but going beyond the logic of the Shariah on the distribution of profits (Yandiyev, 2017).

7. Rivalry of financial models. This problem is caused by an ambiguity on whether the traditional percentage economy can be considered a more direct route to economic development than the Islamic one. The question arises of allowing an interest economy to work in Muslim states in order to achieve rapid economic growth, and then rebuild the system under the principles of Sharia in economics and finance. Such disputes, for example, occur in Iran, where at the state level there is a deviation from in many ways from strict compliance with the principles of the Sharia in the financial sector (Nikonova, et al 2016)

Another factor that influences the Islamic financial model is the rapid penetration of the digital economy. The growth rate of this industry is 40-50% per year in some sub-sectors (Yusupova, et al, 2017).

The development of financial Internet service products can lead to the transformation of the Islamic financial model into a small niche of market choice for the most religious part of the population in Muslim countries.

We should also highlight the terminology factor. In a number of non-Muslim states the term "Islamic finance" is not used for various reasons, and names that are not related to the religious factor are used. For example, such terms as "partner finance" and "participation finance" are used (Kodolova et al, 2017).

#### 5 Summary

So, we can conclude that the Islamic financial model has not yet been formed in its final form; at present it is aimed at finding the optimal structure of Islamic financial institutions that could function effectively as legitimate or permissible platforms for the lawful provision of conventional banking and financial services

Currently, the Islamic financial model is slowly making more concessions to the modern traditional model, thus bringing this industry closer to its traditional analogy.

It should be feared that such changes may ultimately lead to a loss of confidence in the Islamic financial model, although this confidence is its biggest asset which gives it a competitive advantage against the traditional model.

Islamic financiers should be far-sighted enough in order not to allow controversial methods to lead to the loss of this industry. There will be a question about the legitimacy of each product offered by Islamic financial institutions.

Islamic banks and financial institutions will be forced to face some ideological and conceptual problems; this must be recognized as inevitable characteristic when they move into the modern world financial space (Yusupova et al, 2017).

## 6 Conclusion

The Islamic financial industry and its concepts as of 2018 differ significantly in width and depth from those that existed in the early 1970s or early 1990s.

The economy continues to develop, and there is no reason why the area of Islamic finance will not be improved in the years to come

From the perspective of global financial turmoil, the ideas underlying Islamic finance may be of interest to those who seek a relatively restrained financial system and are concerned about the global impact of the financial industry on society.

The Islamic financial system can become one of the promising sectors for the implementation of the global financial model, but this requires the internationalization of Shariah principles in Islamic financial transactions, in its form and design; this requires the development of theoretical research and the improvement of regulatory control over Islamic financial instruments and institutions.

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## CRYPTOCURRENCY IN RUSSIA: PROBLEMS OF LEGAL REGULATION

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Abstract: The paper is devoted to the main problems of legal regulation of the crypto currency in Russia. The paper gives examples of court proceedings where an example of a dispute was a crypto wallet. The author draws attention to the need for an analysis of foreign experience in the legal regulation of this problem. As a result of a comparative legal study of foreign legislation in several countries, the author comes to the conclusion that there are two ways of legal regulation (normative, informational). The normative way of legal regulation is that a state adopts special legal acts aimed at regulating the legal relationship on the turnover of the crypto currency. The informational paproach to legal regulation is that a state does not prohibit the use of crypto currency, but informs consumers of financial services about possible economic and legal risks in the process of its application. The author also conducts an examination of all bills on the legal regulation of the crypto currency in Russia. The analysis of bills "On digital financial assets", "On alternative ways of attracting investment (crowdfunding)" and "On introducing amendments to parts one, two and four of the Civil Code of the Russian Federation" was conducted. All these bills have their own advantages and disadvantages. In this regard, the author of the paper developed recommendations aimed at improving the effectiveness of legal regulation of crypto-currency turnover in Russia.

Key words: digital wallet, digital money, crypto currency, foreign practice, bills on the regulation of crypto-currency.

### 1 Introduction

Modern economic development and the emergence of new types of economic relations directly affect the modernization of existing mechanisms of civil law regulation. In this regard, L.S. Yavich wrote that the economy is primary, the right is secondary (Yavich, 1985). The right cannot outpace the development of the economy. The right must correspond to the economic life of society (Nefyodov, 2015). The modern system of legal regulation, especially in the entrepreneurial sphere, does not yet constitute a sound and complete system of norms, but rather can be characterized as a set of basic provisions that does not encompass all the diversity and manysidedness of business issues (Demieva, 2014).

# 2 Methodology

The general scientific dialectic methods of cognition, universal scientific methods (system-structural, formal-logical, methods of analysis and synthesis, induction and deduction, and abstraction), as well as special legal methods were used: legal-dogmatic, comparative-legal.

# 3 Results and discussion

In the last few years, one of the most discussed topics in the legal community is the study of the legal nature of virtual money (crypto currency). According to some experts, there are more than 500 varieties of crypto-currencies in the world; the most popular among them is bitcoin. There is no common opinion among domestic jurists about what the legal nature of a crypto currency is? What legal regulation mechanisms should be used in the course of its turnover? Therefore, the main task before the legal community is to determine the strengths and weaknesses of the crypto currency, and to develop effective mechanisms for its legal regulation.

In Russia there has been formed the practice that before the introduction of reforms (amendments and additions) into the current legislation, legal scholars analyze foreign experience of legal regulation in terms of similar legal relations. However, this practice is not perceived positively by all scientists. So, for example, Yu. K. Tolstoy expresses his criticisms noting that the basis of foreign law (primarily English and American) is the system of Anglo-Saxon law, while the core of Russian law is the Romano-Germanic system (Tolstoy, 2015). Other jurists, for example, V.A. Rybakov, does not exclude the possibility of using foreign experience (foreign law) in the process of reforming Russian legislation, while noting that it is necessary to

take into account only the specifics of the formation of Russian law, calling it a "genetic code" (Rybakov, 2007).

Despite the fact that Russian law does not familiar with the legal nature of the crypto currency, at the same time, it has repeatedly become the subject of judicial research, mainly in cases involving bankruptcy of citizens. For example, during the consideration of creditors' claims on the inclusion in a bankruptcy estate of the contents of a crypto-wallet located in the Internet, the court refused to meet the claims of creditors. The court noted that: "Based on a direct interpretation of the law", crypto-currency "does not apply to the objects of the civil right, is outside the legal field in the territory of the Russian Federation, the execution of transactions with the crypto currency, its transactions are not secured by the force of the state. In addition, the lack of a control center in the system of crypto currency and the anonymity of users of crypto currencies does not allow with certainty to determine whether the crypto currency in the crypto wallet belongs to the debtor" (Sulkarnaeva et al, 2018).

Currently, there are no uniform and common international rules, requirements or recommendations that would regulate the turnover of the crypto currency. As a result, each state independently determines the mechanisms for regulating the crypto currency, based on its own national interest.

For example, the Argentine Constitution provides that the only body that has the authority to issue "legally significant" funds is the Central Bank (Pihlainen, 2002; Hutcheon, 1989). Crypto currency (bitcoin) is not a monetary instrument, since it was not issued by the state. In the country there is no special legal act regulating the turnover of the crypto currency, but, despite this, the crypto currency is used. The legal relations related to the circulation of the crypto currency are regulated by the Civil Code (Villalobos Antúnez, 2016).

In Brazil, a special legislative act has been adopted; it provides for the possibility of creating electronic currencies. The law defines an electronic currency as a resource that resides on a device or in an electronic system, and allows to an end user to perform a payment transaction. In this case, the regulation of the crypto currency is carried out by the Brazilian payment system (Sistema de Pagamentos Brasileiro) (Connor, 1996). The Central Bank and the National Monetary Council are responsible for regulating the turnover of the crypto currency.

In Chile, the turnover of the crypto currency is not settled. However, in 2013 a group of American specialists has organized an ancillary organic farm under the name "Galt's Gulch Chile", where financial and economic activities are based on bitcoins (Cooper, 1996).

In Denmark, the Financial Supervisory Authority has issued an official statement for warning the financial service consumers that crypto currency is not classified as a financial service (Shevchenko et al, 2017). It was proposed to consider the crypto currency in the form of an electronic service, and the income received from it should be taxed.

In France, the Central Bank published a report warning of the dangers of "virtual currencies". According to the bank, bitcoin is not a real currency or means of payment. It is noted that bitcoin can be considered as a payment service that should be performed by a specialized supplier and under the control of the Office - Autorité de contrôle prudentiel et de resolution (Breeva, 2014).

The analysis of international practice allows us to conclude that there are two ways of legal regulation of the crypto currency: the *first* is regulatory; it is that the state adopts special legal acts aimed at regulating the legal relationship on the turnover of the crypto currency; *the second* is informational; it consists in that the state does not prohibit the use of crypto currency, but informs consumers of financial services about possible economic and legal risks in the process of its application.

Russia chose the first way, which is legal regulation. In this regard, in March 2018, three draft laws aimed at regulating crypto-currencies were submitted to the State Duma (the parliament of the Russian Federation). Each of the bills has its advantages and disadvantages. Let us analyze them in more detail

On March 20, 2018, the bill "On Digital Financial Assets" has been introduced (Mrathuzina & Nasrutdinova, 2015). The bill has the status of lex specialis. Its undoubted advantages are that:

- This is the first bill in the history of Russia that aims to systematize legal relations that arise in the process of circulation of the crypto currency;
- The bill discloses such legal concepts as: "digital financial asset", "digital transaction", "digital record", "digital transactions register", "mining", "validator", "crypto", "token", "smart contract", "Operator of digital financial assets exchange", "digital wallet", and many others;
- A legal distinction has been made between the crypto currency and tokens, the procedure for performing transactions for their acquisition and disposal is provided;
- The basis for public attraction of funds through the offering of tokens has been developed.

The bill determines that a crypto currency is a type of digital financial asset that is an asset in electronic form. Ownership is confirmed by making a digital entry in the register of digital transactions. At the same time, digital financial assets are not a legal means of payment in the territory of Russia. The undoubted advantage of the bill is the ability of owners of digital financial assets to make transactions for the exchange of assets into rubles, foreign currency and / or other property that is carried out only through a specially authorized operator.

Despite the obvious advantages of the bill, it also has certain shortcomings, among which we can name, for example:

- The draft law provides for the possibility of making transactions only through a traditional exchange (Article 4 of the draft law). We are convinced that the bill should add the possibility of making transactions through special crypto-exchange exchanges, which must exist alternatively from the traditional exchange. It is necessary to provide that crypto currency exchanges can exist both centrally and decentrally;
- the bill provides that the release of the token is possible only by a legal entity or an individual entrepreneur (art.2. of the bill), while limiting the right of individuals. Therefore, it is necessary to foresee the possibility of issuing tokens also to individuals;

On March 20, 2018, a bill was introduced On alternative ways of attracting investment (crowdfunding). The law regulates the process of attracting investments by commercial organizations or individual entrepreneurs through investment platforms and determines the legal framework for arranging retail financing. The bill should be considered in a "tandem" with the draft law "On Digital Financial Assets". We will not dwell on the advantages of the bill, but pay attention to some shortcomings that need to be worked out, for example:

- The draft law does not provide for the possibility of investing money by non-profit organizations;
- It is necessary to carry out a harmonization between the same definitions used in these bills. We believe that the bill "On alternative ways of attracting investment (crowdfundinge)" should indicate that the token is a digital financial symbol (asset);
- The bill provides an exhaustive list of ways to attract investment through investment platforms. These methods are: 1) provision of loans; 2) purchase of securities; 3) acquisition of the participant's share in the authorized capital of a limited liability company, the share of the participant in the share capital of an economic partnership or an economic partnership; and 4) the acquisition of tokens (Part 1 of Article 5 of the draft law). We are convinced that it is also

necessary to give the right for investment platforms to independently develop investment products and offer them to investors. In this connection, it is necessary to make the wording "and in other ways" in the section on attracting investments of the bill, which will expand the methods of investment (for example: it will provide an opportunity for investment using real estate objects).

- It is necessary to provide for a mechanism for compulsory insurance of investments and investment activities of investment platform operators;
- To include in the bill a legal norm regulating protection of the information on investments, investors, and activity of investment platforms. This type of information must be equated to bank secrecy, establish administrative and civil liability for its disclosure;
- It is necessary to develop mechanisms for self-regulation of investment platform operators.

On March 26, 2018, a bill "On Amending Part One, Second and Fourth of the Civil Code of the Russian Federation" was introduced. The bill proposes to introduce the concept of "digital law" and "digital money" into civil law. We are convinced that the bill needs significant conceptual refinement. Let's note that Art. 1 of the bill provides that: "Digital money... in cases and on conditions established by law, can be used by individuals and legal entities as a means of payment (italics – A.D.)".

Thus, the draft law contains a norm that levels the status of a crypto currency with the status of a payment instrument. This situation is unacceptable, since it will come into conflict, first of all, with Part 1, Article 140 of the Civil Code of the Russian Federation, where it is enshrined that ruble is a single legal tender in the Russian Federation, and with the Constitution of the Russian Federation (Part 1, Article 75) stipulating that: introduction and issue of other money in the Russian Federation are not allowed. The analyzed bill needs in checking up and carrying out the harmonization of its conceptual apparatus and legal provisions with the other two bills mentioned above.

# 4 Summary

Russia follows the correct way of statutory regulation of the crypto currency. Crypto currency is an object of civil law and, therefore, should be regulated by civil legislation. It cannot be a means of payment or be used instead of money, substituting for itself money (a surrogate of money), because crypto currency is not guaranteed by its legal nature.

## 5 Conclusions

The adoption of contradictory laws containing conceptual mistakes will lead to the desystemization of legal regulation. In this regard, when drafting one bill, it is necessary to take into account the provisions that are fixed in other draft laws, directly or indirectly aimed at regulating crypto-currencies.

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# DAILY TIME CIRCLE "TÄÜLEK" IN THE TATAR LANGUAGE

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Abstract: This article deals with the study of the lexico-semantic group of the daily time circle in the Tatar language, represented by lexical units. The lexico-semantic category of division of twenty-four hours in the Tatar language has not been practically studied up to the present time as an integral subsystem. The urgency is determined by insufficient knowledge of this problem, finding out the most stable fund of values about the daily course of time, the need to study the patterns of its development. The complex of existing basic research methods is effectively used in the research problems: descriptive (methods of generalization and interpretation of the material under study), comparative-historical, methods of continuous sampling, systematization of units according to denotation classes, elements of component, contextual, etymological analyses. The scientific novelty of the article is that the lexico-semantic group associated with the daily cycle of time is investigated for the first time, the principles of the nomination of the daily cycle of time, the model of the organization of the daily time are revealed. It has been established that the basic archetypes kön 'day', tim 'night' determine the further development of the lexicosemantic category of time. It has been shown that the unity of the opposition day – night has a decisive influence on the realization of lexical units. The description of the meanings of semantic units that extend the notion of the organization of the day-night division in the Tatar language is the theoretical significance of the article. Practical value lies in the clarification of vocabulary definitions.

Keywords and phrases: the Tatar language, time, day division, day, night.

### 1 Introduction

One of the fundamental, universal phenomena of the surrounding reality - time "waqyt" is not given to a person in direct observation. To study time, to come nearer to its understanding, the principles of its being is possible to reach thanks to the reflection of their language system. Human life passes in space and time, including ethnic, confessional, diverse aspects of existence. As a result, the system of temporary representations, fixed in linguistic means, becomes an indicator of the features of the worldview of the people, ethnic culture.

In studies on the linguistic mapping of time in Turkic languages the verbal categories of time are mainly analyzed (Salykova et al, 2014). In Turkology, the works on explication of the designation of time by lexical means, in contrast to the grammatical means, is fragmentary to present day (Napolnova, 2010; Moldagali et al, 2017), such lexical units often in fictions become the symbolic image-symbols (Zagidullina & Yusupova, 2017). In recent years, in this area the works in which the Tatar language is studied within the framework of linguistic and cultural problems have appeared (Akhunzhanova et al, 2017), the influence of the national mentality on the vocabulary of the language has been studied (Galiullina, 2016), and linguistic means of expression of individual concepts have been analyzed (Husnutdinov et al, 2017; Villalobos Antúnez, 2018).

This article concerns the problems of systematization and analysis of lexical units, denoting the diurnal circle of time "täülek" in the Tatar language. The Tatar people's ideas of the daily cycle of time in passed a long path of development, the results of which have been reflected in the lexico-semantic variety of linguistic units.

In the analysis of lexical units that have the meaning of the diurnal cycle of time and the lexico-semantic category of day division in the Tatar language, various types of dictionaries were used to establish the origin and correct interpretation of lexemes in modern Tatar: "The Explanatory Dictionary of the Tatar Language", "Ancient Turkic Dictionary", "Etymological Dictionary of the Tatar Language" (Tatar Explanatory Dictionary, 2005; Ancient Turkic Dictionary, 2016).

A large number of ancient, Middle Türkic literary monuments and the works in the Old Tatar language, published in the Arabic

script, as well as the examples fixed in the above dictionaries were the sources of the study.

## 2 Methodology

With reference to research problems, a set of existing basic research methods is effectively used. The selection and analysis of the units of daily time was carried out on the basis of the use of a complex of research methods and techniques: continuous sampling, systematization of units according to denotative classes, the elements of component, contextual analyses were used. Generalization and interpretation of the results of observations were carried out on the basis of the method of scientific description. Comparative-historical method was used when analyzing semantic features of word usage of the exposed linguistic units in the diachronic aspect in correlation with the modern Tatar literary language.

In the course of the study, the elements of etymological analysis were also used to determine the origin of the word and to exclude the possibility of incorrect interpretation.

## 3 Results and Discussion

Most Turkologists refer the formation of a system of denominations of daily time to the oldest Altai roots. The studies of the vocabulary relating to the daily cycle of time "täülek" made it possible to establish that in the Turkic languages, in particular, in the Tatar language the most obvious of cyclical phenomena in the surrounding world is the change of day and night. These representations are found in the lexemes kön 'day' to denote the light part and tün 'night' to designate the dark part of the day. The very lexeme kön 'day', which is the basic designation of the light part of the day, can also be used to denote the meaning of the lexeme 'sun'. The etymology of words can shed light on the nomination of these concepts. The lexeme kön 'day' goes back to the great Turkic stem gun'al 'sun', and together with it is the correspondence to the great Altaic gan'u, reflected in the Mongolian gegeven 'daybreak, dawn'. Judging from the meanings in the Altai languages, originally this stem meant a daylight hours, and the transfer to "luminary" in the Turkic languages is clearly secondary Thus, the meaning of the term 'day' was defined by the fullness of the time interval, day is "mere sun" (Mudrak & Nauka, 1997; Sulkarnaeva et al, 2018).

In the language of the ancient Turkic monuments, the word kün had two meanings: a) the time interval from sunrise to sunset -'day': 'we were rushing day and night' and b 'sun': the sun rose and the light shone over everything'.

In the language of medieval monuments the word kün used to function in two meanings. For example: the sun has forgotten the road to the east; by overshadowing the night, the day has been brightened; day and night you will come with God; if even the sun does no rise, it will make the world brighter; that day you was created, etc.

In the Tatar language consciousness, the concept kön as dayshine 'day' and 'sun' are inextricably interrelated. However, it should be noted that in modern Tatar the root kön in the meanings of 'sun; day' remained only in dialectal use, and in literary use it was replaced by the lexeme qojaş ' the sun'. A striking illustration is provided by the examples from the dialects and subdialects of the Tatars: Kön 1. in the Mishar dialect, the Mordva-Karatai, Upland, Laishevsky, Mamadysh, Ichkin, Krasnoufim, Sharlik dialects, in the Siberian dialect "sun": qaryjm ajga, , ' I am contemplating the moon, the sun, the morning star' In the morning the sun rises in the evening it sets'- the Mordva-Karatai subdialect. The sun has not yet risen. They did not bake in the sun', 'We go to work at sunrise. Yesterday they came before the sunset'- the Krasnoufimsky subdialect, etc. It is gratifying that the obsolete meaning kün 'sun' in temporal semantics has been existing in the language and consciousness of the Tatar people. In the modern Tatar literary language, the lexeme day is represented in the meaning "day" – the time interval from sunrise to sunset".

The lexeme 'day' in modern language can enter into synonymic relations with the words "day, date": 'Sunday', 'the day before yesterday', the synonyms indicated are the evidence of the traditional use of the lexeme day for the calendar date 'what date is it today'.

Concerning the lexeme 'night', in both the ancient Turkic and modern Turkic languages, its basic semantics is represented by the correlation with the darkness hour and occurs only in the meaning of 'night', it is not in the Chuvash language, in the Oguz language group the primary meaning dün is 'yesterday'.

So, the representation of the day time in the ancient, Middle Türkic literary monuments as "24-hour day" was absent, it was depicted in opposition day - night: 'the night is the opposite of the day'. Day 'täülek' did not stand out, and the term entered the language use later . The legends preserved in modern folklore reveal ancient beliefs, according to which the luminaries are perceived as living beings that are born and die. Compare, in modern Turkic languages the verb tog 'to be born' is used when it is said about the rising of the sun. The sun was born in the morning, it died in the evening and was born the next day again. It is important to remember that the point at issue is the opposition of light and darkness. Out of sensory perceived features of the sun, our great-grandfathers, as well as some other peoples, fixed in the language the periodicity of appearance of the luminary in the sky, but not its round form, brightness, light and heat emanating from it, visible rotation around the Earth. The reference points for parts of the day in the Turkic languages in Tatar the objective factors such as sunrise and sunset were necessary, and in some European languages, for example, English, Spanish it was considered the achievement of the highest point of its trajectory - the noon (Bazen, 1984).

Gradually, in the Turkic languages, there was a transition from the system of day division with two points of correlation (sunrise and sunset), that is, from the division of the day into daylight time and periods of darkness to the system with three points of correlation

Further detailing of the concept of the daily circle of time by ancestors found expression in the use of new lexemes early in the morning, 'day time, noon', 'late at night', fixed in the monuments from the 11th century. Despite the above clarifications in the system of day division, the lexeme day still correlates with the dayshine and enters only the opposition 'unlit hours of day', and is not opposed to individual hours of day. According to many sources, the primary meaning day 'daylight hours' is assigned to the lexeme daytime, noon, indicating not the whole period of the day, but only its determined boundary. The stem time, which originally designated the concept of time, later there spread its meaning noon, middle of the day'. There is a variant noon: 1. it's already noon, 'noon'; 2. The south. The semantics of light and warmth is implicitely contained in these synonymic lexemes.

Further detailing of the system of day division resulted in singling out shorter time intervals, with the four-member opposition characteristic of many languages: morning -day - kič evening - night. Intermediate hours of the day are placed between the boundaries of day parts of the four listed above. For example, 'daybreak, morning dawn', 'twilight'. Although they have a minor communicative loading, but it is impossible to set hourly division of the day without taking them into account.

With the arrival of Islamic culture, the Tatar people have adopted a system for designating the daily cycle of time, based on the tradition of five times prayer. The duration of the intervals is closely interwoven with the duration of the day light. The Islamic system of time designation has astronomical motivation, it is built on three dimensions, such as sunrise, noon and sunset.

In the modern Tatar literary language, there function the following lexemes, based on Islamic culture and quintuple

prayer, which expand the idea of the organization of the day division in the Tatar language:

irtänge // irtä namaz 'the morning prayer' is a prayer in Islam, performed from dawn to sunrise. "The time of the morning prayer begins from the moment of the dawn and lasts until the sun rises; the time of the first prayer".

'noon' midday prayer,-midday prayer for Muslims;

ikende 'time before sunset', ikende namazy "the name of Namaz – a prayer performed an hour before sunset";

axṣam ' dusk; prayer immediately after sunset' rel. 1) evening, evening time, evening hour; twilight, twilight time  $\parallel$  evening; twilight;  $\parallel$ ; 2) axṣam namazy 'evening prayer service (Mohammedan prayer, prayer)'.

'prayer after sunset and the time of the fifth prayer', 'the fifth prayer after sunset' In the modern Tatar language, time in the same lexical meaning is fixed by the variants yasig 'evening prayer (one of the five Mohammedan prayers)' and yasig namazy 'evening prayer; the time of evening prayer, which takes place after evening twilight'.

### 4 Summary

- 1. It has been established that the basic archetypes 'day', 'night' define the further development of the lexico-semantic category of time. It has been shown that the unity of the opposition 'day'—'night' has a decisive influence on the realization of lexical units. It should be noted that in the language of ancient Turkic monuments two meanings of the word kin were fixed: a) the time interval from sunrise to sunset, 'day' and b) 'sun', and in modern Tatar the root kön in the meaning 'sun' has preserved in dialects only, and in the literary it was replaced by the lexeme qojaş 'sun'. The lexeme 'night', both in ancient Turkic and in modern Turkic, has its basic semantics to be represented by the correlation with the dark time of the day, and occurs only in the meaning 'night'.
- 2. The representation of the day time in ancient, Middle Turkic literary monuments as "24-hour day" was absent, it was represented by the opposition day night and in opposition to light and darkness. The name of the daily circle of time täülek 'day' entered the language use later.

As reference points in defining the parts of the day in the Turkic languages, in Tatar there the objective factors such as sunrise and sunset were necessary. The idea of the organization of the day in the Tatar language was based precisely on these factors. It has been proved that lexical units make it possible to trace historical changes in the categorization of hours of the day. At the heart of these changes there is the shift, which, at the level of the language, is expressed in the change of the three systems of correlation of the day division: the ancient Turkic two-point, the astronomical three-point and the Islamic five-point.

3. With the arrival of Islamic culture, the Tatar people adopted a system for designating the day cycle of time, based on the tradition of five-fold Mohammedan prayer .The Islamic system of time designation has astronomical motivation, it is built on three dimensions, such as sunrise, noon and sunset.

# 5 Conclusions

Thus, after analyzing, the lexemes denoting the day circle of time and lexico-semantic categories of the day division in the Tatar language, we have found that they all contain direct or indirect indications to the opposition light and the absence of light –darkness. These indications are comprehended in the ancient semantics of the studied lexemes. Archetypal opposition in the nomination of the day circle of time light – darkness is the elementary material for more complex models used in the conceptualization of time. The lexical units enable to trace historical changes in the categorization of parts of the day. At the heart of these changes there is the shift, which received the

language expression in the change of the three systems of correlation of the day division: the ancient two-point, the astronomical three-point and the Islamic five-point.

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# DEVELOPMENT OF A COMPETITIVE ENVIRONMENT AS A FACTOR OF THE QUALITATIVE GROWTH OF THE RUSSIAN INSURANCE MARKET

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Abstract: The current conditions for the functioning of the Russian insurance market at a macroeconomic level cause the emergence of a complex of problems, taking into account the economic sanctions of Western countries, and the microeconomic conditions. As a consequence, the number of insurance entities is decreasing, the number of unprofitable insurers is growing, the licenses are being massively withdrawn, the financial stability of participants in the insurance market as a whole is being reduced. Reduction of financial stability occurs on a number of parameters, including the volume of transferred reinsurance, there is an increase in the amount of self-deduction by insurers. It is necessary to revise the very ideology of insurance, the value of insurance for a client, and the revision of approaches to the concept of insurance supervision. Not only the solution of market problems, but also its planned development should be seen at the heart of the goal setting in insurance supervision. Last years the vector of state regulation of insurance business in Russia is aimed at toughening of supervision and control over insurance companies. Obviously, the main goal of supervision is to ensure effective control over the subjects of insurance business in order to protect the rights of consumers, that is, policyholders. However, the task of achieving this goal should be the development of the market itself. Moreover, the development of the insurance market should be determined primarily by qualitative indicators.

Keywords: insurance market, insurance premiums, state supervision, self-regulatory organizations, risk-oriented approach, risks of the insurer.

#### 1 Introduction

Currently, the insurance market is changing rapidly. The development of the insurance market is influenced by institutional transformations of the economic system, as well as structural factors (prerequisites). At the present stage, the Russian insurance market needs to rethink its development paradigm. It seems that one of the main threats to the Russian insurance market the concentration of internal risks of the Russian insurance system.

For three decades, the competitive environment of the insurance market was represented by a large number of participants. In the current situation, the number of subjects of insurance business is rapidly declining. Reducing the number of insurance companies leads to the oligopolistic insurance market, and to the deterioration of the competitive environment.

The vector of development of the insurance market largely coincides with the vector of development of banking services. Logic suggests that the success of the business model of technology banks developing business as IT companies should also be reflected in the building strategies of the leaders of the insurance market (Kaigorodova et al, 2018; Mobbalegh Naseri et al, 2018).

An important element of the stability of the insurance market is that the state supervisory authority should require insurers to realize the full range of risks that accompany their activities, while simultaneously assessing them adequately and finding effective ways to manage them.

# 2 Methodology

The purpose of the study was to identify the internal risks of the Russian insurance market and the directions for the development of state supervision over it.

We used for research the general scientific methods of analysis, as well as induction and deduction. In addition, a hypothetical approach has been used to draw conclusions on the insurance industry development vector based on the analysis of the insurance market risk system and directions of state supervision development.

Scientific sources have studied the influence of insurers on the formation of systemic risks. As a whole, the insurance sector makes a small contribution to system losses, but the level of contribution depends on how significant the insurance company is and on directions of its activities (Kaserer & Klein, 2018). In this case, insurers themselves face a variety of risks that require management. This requires a comprehensive solution within the insurance company, and an integrated risk management infrastructure that can be developed through the decision tree interface (Ai et al, 2017). The issues of risk management of an insurer are given great attention to (Mustafina et al, 2017). So, it is noted that property insurers and insurers from accidents face a variety of risks. It was investigated that the quality of the risk management program of such insurers largely determines their productivity and allows diversifying the product line (Mustafina, 2018). At the same time, the asymmetry in information is an important factor in the appearance of risks for the insurer (Dardanoni et al, 2018; Villalobos Antúnez, 2003).

Researchers note that state supervision, and requirements to capital of insurers limit these risks. Therefore, the introduction of risk-based supervision and Solvency II standards is necessary. Based on the set of risks, the risks of distribution of assets of insurers are identified and analyzed according to the classical portfolio theory and taking into account the requirements of Solvency II standards. But the development of the competitive environment in the insurance market should become the main strategy of the state (Fischer & Schlutter, 2015).

# 3 Results and discussion

Ift analyze the dynamics of changes in the number of subjects of insurance business and the total authorized capital, we can see the trends of a catastrophic decrease (more than 3 times) of the number of the insurance business subjects with a slight absolute increase in the authorized capital index. Growth of the total authorized capital for 2007 -2018 did not exceed 30%, which is significantly lower than the inflation rate for this period and indicates low market capitalization and low attractiveness of the market for investors.

When analyzing the dynamics in the number of the insurance business subjects and their aggregate authorized capital, there are even more pronounced the negative trends in the reduction of the number of participants with insignificant growth of the authorized capital, which does not cover inflation rates and market demand (Fig.1).

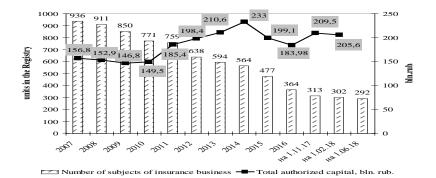


Fig 1. Dynamics of the number of insurance business subjects in the Russian Federation and their total authorized capital

The presented dynamics in the number of insurance companies shows that if since 2007 to 2014 the growth of the total authorized capital of insurers at least partially covered inflation,

then since 2014 the total insurers' authorized capital declines in absolute terms (Fig. 2).

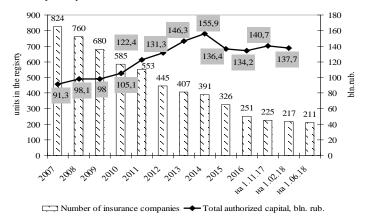


Fig 2. Dynamics in the number of insurance companies in the Russian Federation and in the total authorized capital

With significant territorial expanse and differentiation of regions in the Russian Federation, there are not enough insurance companies in the country. A comparative analysis of the saturation index by insurance companies in Russia, EU countries and the US at the end of 2016 indicates a weak saturation by insurance companies in the Russian market. If in Russia one insurance company accounts for 523 thousand people, in the EU countries - one company for 132 thousand people, and in the US - for 109 thousand people. This factor must be considered in conjunction with the level of penetration with insurance service, which continues to be extremely low (Braun, et al, 2017).

All these aspects have a very negative impact on the competitive environment of the insurance market and on the quality of insurance services provided to consumers.

The level of penetration with insurance service for the period from 2004 to the present is shown in Figure 3. Over the past 11 years, this indicator continues to be extremely low, despite the introduction of compulsory types of insurance.

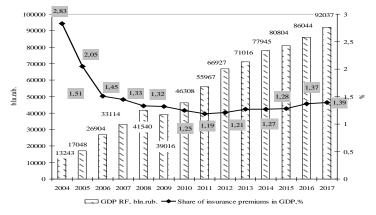


Fig 3. The share of insurance premiums in the GDP of Russia

Analyzing the quality of the competitive environment in the insurance market, we need to turn to the concentration indicator of the insurance market (Table. 1).

Table 1. Concentration of the insurance market of the Russian Federation

	Years											
Insurance companies	2015		2016		2017							
1	Receipts, bln. Rub.	Share, in%	Receipts, bln. Rub.	Share, in%	Receipts, bln. Rub.	Share, in%						
TOP 10	671.8	65.6	763.0	64.6	835.1	65.3						
TOP-20	793.3	77.5	921.5	78.1	1020.2	79.8						
TOP-30	852.7	83.3	996.1	84.4	1100.4	86.1						
Total by market	1023.8	100	1180.6	100	1278.8	100						
Total, insurance companies	305		245		216							

The above data indicate that the concentration of the market is growing. If the share of the first 10 companies remains practically unchanged (about 65%), the first 20 companies account for 77.5% of premiums in 2015 and 79.8% of premiums in 2017. The distribution of insurance organizations' income is far from the natural distribution. So, for example, TOP-30 accounts for 83.3% of premiums in 2015, and already in 2017 this share has increased to 86.1%.

All of the foregoing allows us to assert that the Russian insurance market operates by the principle of an oligopolistic market far from the market of pure competition. We absolutely agree as to this issue with the researchers that the Russian market has exceeded the concentration limit, after which natural stable functioning ceases and the risks of unexpected collapse sharply increase. The opinion of A. Laikov that the super

concentrated domestic insurance system not only becomes unstable to unexpected damages, but also hinders the development of the income insurance base, replacing the development competition with the competition of redistribution, is quite justified.

Therefore, it is not surprising that the Russian insurance market in 2017 showed results that are not inspiring optimism. According to the Bank of Russia, the annual increase in insurance premiums was 8.3% (15.3% in 2016), and the total premiums for all types in 2017 reached 1.279 trillion rubles. It is quite expected that the dynamics of unprofitableness of the insurance market shows a decline, as the life insurance market grows for a long time, since its loss-making ratio is quite low (Table. 2).

Table 2. Dynamics of unprofitableness of the insurance market in the Russian Federation

Year	2013	2014	2015	2016	2017
Insurance premiums, bln. Rub.	904.4	987.8	1 023.8	1 180.6	1 278.8
Insurance payments, bln. Rub.	420.8	472.3	509.2	505.8	509.8
Losses,%	46.52%	47.81%	49.74%	42.84%	39.86%

From the point of view of a buyer of insurance service, a question arises of the practical significance, the price and value of insurance, the validity of the insurance tariff with a tendency to reduce the level of unprofitability. The dynamics of insurance premiums has a positive growth pattern (Fig.4).

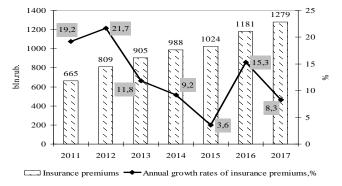


Fig 4. Dynamics of insurance premiums in the Russian Federation

However, if to "clear" the indicator of total premiums from life insurance fees, we get a different picture (Fig5.).

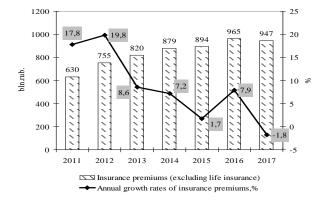


Fig 5. Dynamics of insurance premiums in the Russian Federation without taking into account life insurance

In fact, the market is shrinking without premiums on life insurance, experiencing stagnation against the background of inflation and a decline in KASKO (comprehensive and collision car insurance) and corporate insurance segments that have become profitable in recent years. In our opinion, the development of life insurance remains doubtful because of the significant risks caused by aggressive sales of life insurance policies through banks, which is accompanied by a lack of understanding by customers of the product at the stage of purchase and the lack of understanding of the real profitability of such a policy.

In our opinion, overcoming the internal threats of the insurance market will be facilitated by a "reset" of the goal setting of insurance supervision and a self-regulatory organization of the All-Russian Union of Insurers.

It is obvious that market development is possible only in the situation of improving its qualitative indicators: increasing the availability of insurance services for the population, developing a competitive environment, increasing the level of insurance penetration. At the heart of the goal setting for insurance supervision there should be the planned development of the market. From the point of view of the insurance activity state regulation model development for Russia, approaches to regulating the insurance business of the International Association of Insurance Supervisors (IAIS) are of interest. Obviously, "regulation is not an abstract concept, but rather one in which supervision must make sound decisions about what should be regulated, and what methods should be used in doing this» (Turbina, 2008). In order to protect policyholders, the state should not hinder the development of the market, but should contribute to the creation of new market niches and segments. However, it is necessary to increase the importance of identifying and evaluating all risks in the company's activities and finding effective methods of managing them. To do this, insurers must comply with certain standards and regulations.

Recent years, risk management systems are undergoing significant changes. International industry standards for risk management include Solvency I (solvency requirements for European insurance companies) and Solvency II (a synthesis of 13 guidelines on solvency in the form of three chapters: 1. Directives, 2. Requirements, 3. Norms). The introduction of a risk-based approach and elements of the Solvency II model into the insurance supervision system in the Russian insurance market should occur very gradually, meaningfully, in the long term, as insurers become ready for it. When implementing this approach, it is necessary to take into account the influence of conceptual differences in approaches to the basic elements of the system of state insurance regulation in Russia and abroad. The practices of building a risk management system in Russia and in the world are seriously different. In the world practice, the government formalizes risk management standards based on self-regulating organizations (SROs), the tasks of building a risk management system are put by owners in front of management; risk management serves as an additional efficiency tool for the

companies. In the Russian practice, the state creates regulatory requirements on the basis of a regulator, and Russian business owners regard the cost of risk management as involuntary.

The activities of the All-Russian Union of Insurers, as a SRO insurance organization, should be focused on the development of the insurance market. To realize this goal, it is necessary to update the market development strategy taking into account the current realities and development of the country's economy. Evident is importance of introducing professional standards, financial literacy and standards for protecting the rights of policyholders as part of the strategy. In this regard, it is important to form the opinion of the insurance community on a whole range of issues: a differentiated approach to insurers, regulatory requirements for supervision, assessment of the relevance of the idea on proportional regulation of the market, preparation of a package with proposals on insurance legislation, development of approaches with the Central Bank and principles for innovation of supervision (for example, risk-oriented supervision). Goal setting of the Russian Union of Insurers as a SRO of insurers should be focused on the possibilities of developing the insurance field, voluntary types of insurance, the preservation of insurance entities, increasing competition and creating new types of insurance. In this regard, it is important to form the opinion of the insurance community on a whole range of issues: on a differentiated approach to insurers, regulatory requirements for supervision, assessment of the market relevance to the idea of proportional regulation, preparation of a package of proposals on insurance legislation, and development of approaches and principles to innovations in supervision jointly with the Central Bank. The path to civilized insurance lies through improving the financial literacy of the population and building the skills of effective protection of financial rights.

## 4 Summary

In world practice, the state's activities are aimed at reducing the uncertainty of entrepreneurial activity, and the state is the subject of ensuring security. In Russia, the state is at the same time the subject of security and a source of uncertainty (for example, regarding legislative initiatives). We have to talk about the huge difference in approaches to standards in Russia and in the world. In the world, a general concept is given, and companies develop detailed corporate standards on its basis. In Russia, there are very detailed state standards, and companies are trying to "place" their standards as to fit them to the public ones. For insurance companies, the main risks are legislative, credit, regulatory, financial and interest risks.

Thus, to manage the internal risks of the insurance system, it is necessary to change the qualitative approach of the insurance system to insurance and to see the growth points in changing the goal-setting of the system, changing the ideology of the insurance community, and, most importantly, forming insurers and insurers' attitude to insurance as a civilized cover mechanism damage. Ideally, the balance between interests of consumers of insurance services and the interests of market

participants should be observed in the name of its qualitative development.

#### 5 Conclusions

We believe that the main problems of the Russian insurance market are concentrated in the following areas:

- The relationship to the insurance mechanism on the part of the supervisory authorities and society leads to an imbalance of the economic interests of insurers and their customers.
- It is difficult to predict the further development of the market in conditions of general uncertainty in the legal field.
- It is necessary to introduce standards, improve the systems of corporate management by insurers, primarily in terms of risk management, solvency, compliance of assets with obligations, and transparency.

Key elements of effective supervision for the Russian insurance market in modern conditions:

- The state body exercises the supervisory function through the phased implementation of standards and "rules of the game". Implementation of the principle of capital adequacy provided by the Solvency II model is necessary.
- Implementation of reporting in XBRL-format. The aspect of automation of insurance activities is closely related to the use of financial technologies. It is obvious that the business models and competitive advantages of companies will be determined by the level of technological innovation.
- SRO of insurance organizations will perform the function of developing the insurance market.

At the same time, at the level of each insurer, the owners of the business will be focused on building a corporate management model for an insurance company, which allows taking into account the variety of risks and ensuring the financial stability of insurance operations.

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# DEVELOPMENT OF A MULTIFACTOR FORECASTING MODEL FOR DEVELOPMENT OF GLOBAL CRYPTO CURRENCY MARKET

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Abstract: Accelerated rates of development of the digital money market and their integration into the system of economic, operational, financial and other processes determine the need for a comprehensive study of this phenomenon. Particularly topical is the fact that discussions at the state level over the prospects of legalization of the crypto currency market and the possibilities of using its instruments in the economic activities of economic agents have intensified in recent months. Despite at times polar views and approaches that have been formed at the moment among Russian experts regarding solution of this issue, the development of cryptology is extremely rapid regardless of its regulation. This causes and actualizes the conduct of scientific research in the field of assessing the prospects for the development of this market in order to predict possible effects and risks for the national economic system. Part of this paper is devoted to the solution of these issues aimed at developing a multifactor model for the development of the crypto currency market taking into account the impact of a system of fundamental and conjuncture factors on it. In accordance with the goal, such tasks have been solved as the analysis of the crypto currency market capitalization dynamics and, based on the methods of economic and mathematical modeling, identification of the parameters determining the trajectories and the dynamics of its development. Based on the methods of scenario analysis, the developed econometric model allowed a medium-term forecast to build for the development of the market under study.

Key words: crypto currency, multifactorial analysis, digital money, bitcoin, modeling, scenario forecasting, legalization of the crypto currency market

# 1 Introduction

Accelerated rates of development of the crypto currency market and its integration into the system of economic, operational, financial and other processes determine the need for a comprehensive study of this phenomenon. The fact that special attention is paid to the issues on the regulation of the crypto currency, the expediency of its legalization in the Russian Federation both from the public regulatory sector and from the business community, gives particular relevance to this issue in the conditions of the Russian economy. Despite the fact that to date, in Russia, as well as in the absolute majority of the countries of the world, there has not been formed an unambiguous legal space regulating the market of crypto currencies and other components of the new reality called "digital economy", the paces of cryptology development are very fast, regardless from its regulation at the level of individual national economies. Suffice it to say that if at the beginning of 2017 the world market of crypto currency was estimated at \$ 14 billion, then by the end of the first quarter of 2018 it was just over \$ 277 billion. A similar situation occurs in Russia's "crypto space". According to the Coin Dance service1, the weekly turnover of BTC / RUR is 0.2% of all "bitcoin transactions". Such trends should undoubtedly be studied and analyzed, including through the prism of developing forecasting estimations in order to understand the prospects for developing the market under study and making the most adaptive decisions that will not only level out possible negative effects, but also form a system of targeted measures aimed at obtaining macroeconomic, budgetary, social and other benefits (Elshin & Abdukaeva, 2017; Awadallah & Gamal Saad, 2018).

The urgency of these issues predetermines the need for a comprehensive and systematic analysis that reveals the features and prospects for the development of the main components of the digital economy, in particular the crypto currency market.

The world market of crypto currencies is reviewed within the framework of this study based on a multivariate analysis, including an analysis of its components; the parameters of Russian digital money market development are estimated, and scenario forecasts of its development for the period up to 2021 are also being developed.

### 2 Methodology

Crypto currencies play an increasing role in the world financial system. To date, the global market for crypto currency consists of more than 1,570 digital currencies with a total capitalization of more than 300 billion USD.

For the first time, the term "crypto currency" was used after the appearance of the payment system "Bitcoin" which was developed in 2009 by a person or a group of people under the pseudonym of Satoshi Nakamoto (Nakamoto, 2008).

It was bitcoin that became the foundation of the "world" of digital currencies. This system is a complex calculation process with subsequent encryption and creation of an electronic code. The emission of the number of "coins" is limited to 21 million pieces. It is assumed that the last "coin" will be mined by 2140, what is argued by the settlement system used in the production of the crypto currency (Savelichev, 2017; Kantorovich, 2002).

It should be noted that the dynamics of the market of crypto currencies is exerted by a whole set of factors, with the greatest impact among them from speculative factors which are formed mainly as a result of information impact.

So, for example, one of the most important indicators in the analysis of the crypto currency market is the level of interest shown by the society to the digital currency. This interest is formed by the demand for the crypto currency, and it is also one of the pricing factors (Lo & Wang, 2014; Villalobos Antúnez, 2001).

In the Russian Federation, public interest in crypto currencies can be traced using the Google Trends tool (Fig 1). Dynamics of popularity is estimated on 100 points system. Numbers indicate the level of interest in a topic for a certain period of time. 100 points mean the highest level of popularity of the request, 50 - the level of popularity of the request is twice lower than in the first case, 0 - the level of popularity of the request is not higher than 1% of the level in the first case.



Fig 1. Google requests for bitcoins in Russia in the period from  $2015\ \mathrm{to}\ 2018$ 

Important impact on stock quotes of "digital money" is caused by the dynamics of global legalization of the market under investigation.

To date, we can unequivocally state that a single (unified) approach to the legal regulation of crypto currency relations in the world community has not yet been worked out. At the same time, the crypto currency is considered by many world regulators as a promising tool in the monetary and credit policy of national economies.

<sup>1</sup> Statistical information service CoinDance: https://coin.dance

<sup>2</sup> https://trends.google.ru/trends/

In order to identify trends that demonstrate the attitude of countries to the crypto currency, and also to obtain a more detailed info about its legal status in different countries, an analysis was made reflecting the status of crypto currency for each quarter from 2013 to 2017 in 29 countries.

The following system of legal status assessments for crypto currencies was adopted as a basis:

- 1- negative attitude to crypto currencies / complete ban;
- 0 the status of crypto currencies is not defined;
- 0.5 the question of legalization is being considered;
- 1 recognized as private money, commodity, asset;
- 2 legally recognized, taxed.

The results are shown in Fig 2, in Table 1.

The realized analysis shows that in most states the legal status of crypto currencies is debatable and unsettled. At the same time, despite the heterogeneity of the attitude of national governments to the crypto currency market, the latter, judging from the data in Figure 1, shows a progressive positive trend due to the growing

Table 1. Analysis of the legal status of crypto currencies

trends of its legalization in various countries of the world (the average of the estimates for each quarter form a time series with a pronounced linear trend). This allows us to conclude that with each analyzed period the level of confidence of the world community in crypto currencies is growing.

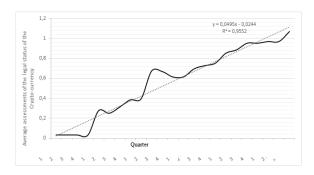


Fig 2. Average assessments of the legal status of crypto currency (the schedule is formed on the basis of the data from Table 1)

Country		20	13		2014			2015			2016				2017				
Country	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Russian Federation	0	0	0	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	0.5	0.5	0.5	0.5	0.5
Germany	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Croatia	0	0.5	0.5	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Sweden	0	0.5	0.5	0.5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
South Korea	0	0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2	2
Thailand	0	0	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
China	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
USA	0.5	0.5	0.5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Singapore	0	0	0.5	0.5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Bulgaria	0	0	0.5	0.5	0.5	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Norway	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Ukraine	0	0	0	0	0	0	-1	-1	-1	1	1	1	1	1	1	1	1	1	1
France	0	0	0	-1	-1	-1	0.5	0.5	0.5	1	1	1	1	1	1	1	1	1	1
India	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Australia		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
Belgium	0	0	0	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
Canada	0	-1	-1	-1	-1	1	1	1	1	1	1	1	1	2	2	2	2	2	2
Cyprus	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Denmark	0	-1	-1	-1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Hong Kong	0	0	0	-1	-1	-1	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0
Israel	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	1	1
Japan	0	0	0	-1	-1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2	2	2	2	2	2	2
New Zealand	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	-1	-1

Slovenia	0	0	0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Spain	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
United Kingdom	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Bulgaria	0	0	0	0.5	0.5	2	2	2	2	2	2	2	2	2	2	2	2	2	2

Thus, the analysis of key factors affecting the global digital money market and presented in a concentrated form allows us to conclude that the crypto currency market is a multistructural system of economic relations with respect to the exchange of the crypto currency formed as a result of generation of many factors of technical, speculative, legal, and other nature.

In general, it should be noted that the capitalization of the global crypto currency market is characterized by an exponential trend (Fig 3). Significant momentum to the market capitalization growth occurred in the second and third quarters of 2017 is associated with the activation of investors from China and India in this period of time, as well as with the legalization of crypto

currency in Japan, which equaled it with a payment facility (Luther, 2016; Aivazyan, & Mkhitaryan, 1988). The fall of the same market in early 2018 is due, according to most expert assessments, to a number of negative news. First, this was regulatory tightening in South Korea. Second were the claims of the US Commodity Futures Trading Commission in relation to the exchange Bitfinex (Vranken, 2017; Elshin, & Abdukaeva, 2017).

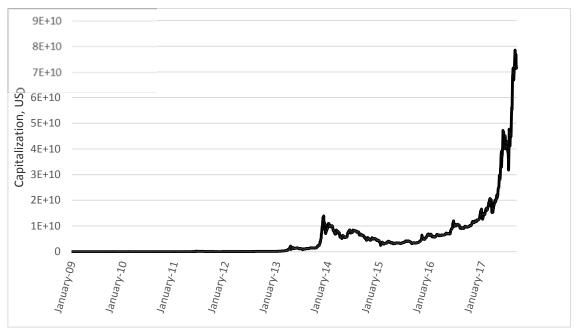


Fig 3. Dynamics of bitcoin market capitalization, USD

Continuation of the formed tendencies in the future means essential reorganization of the established institutes of regulation of economic-operational processes in the world. Within the framework of the present study, predictive assessments for the development of the world crypto currency market in the medium-term period have been carried out confirming the proposed assumption.

The basis for the development of forecast estimates was the developed regression model that reveals the relationship between the volume of market capitalization of bitcoin and the parameters characterizing the directions and features of the

development of the crypto currency market. The following features were attributed to them: the difficulty of mining coins, gh / sec.; the number of Google queries about crypto currency; legal status of bitcoin; number of transactions in bitcoins, units.

The content of the main model parameters which reveals the peculiarities of the relationship between the world bitcoin market capitalization and the parameters that determine its generation, is presented in Table 2.

Table 2. Initial data for econometric analysis

		Facto	rs		
	Y	X1	X2	X3	X4
Period, quarter	Bitcoin market capitalization	Hashrate, GH / s	Number of Google queries	Legal status of bitcoin	Number of bitcoin transactions
1 qr. 2012	46591410.7	1475555.0	1.7	0.0	6694.2
2 qr. 2012	48991055,0	1620088,5	2.0	0.0	19992.8
3 qr. 2012	101781510.5	2263459.3	2.3	0.1	32307.1

4 qr. 2012 128450830.1 3226971.6 0.2 32745.4 2.7 367230158.0 4150878.7 5.7 0.2 52434,7 1 qr. 2013 0.3 2 qr. 2013 1332012692,8 13293059.8 16.3 53333,7 3 qr.2013 0.3 49075.3 1247923200.0 69969221.1 9.0 4 qr. 2013 6072328393.1 595629505.5 40.3 0.3 60055.5 1 qr. 2014 8544263836.3 3028207019.0 41.0 0.6 63994.9 2 qr. 2014 6696937303.0 10305771340.6 18.7 0.6 62786.4 3 qr. 2014 6931102599.3 24509552066,7 19.3 0.6 67325.5 4 qr. 2014 4797617690.7 38713987923,7 19.0 0.6 81849.1 1 qr. 2015 3453208694.2 45088238804.3 17.0 0.7 95974.2 2 qr. 2015 3349374573.8 48416574424.8 14.0 0.7 108648,7 3 qr. 2015 3695976654.1 54434023929.2 18.0 0.7 131465.3 74869182537,9 164427.8 4 qr. 2015 5177198177.8 22.7 0.8 1 qr. 2016 6230291537.6 147395899339.4 25.3 0.9 199751,4 195688280160,7 2 qr. 2016 8144581893.4 23.7 0.9 222032.2 3 qr. 2016 9726831786.9 217928657422.9 22.0 0.9 220648,7 4 qr. 2016 11961989119.5 280452874631,6 264025.1 26.0 0.9 1 qr. 2017 16703072992.6 432703451040.1 37.3 1.0 281798.0 32234283384.5 67.3 1.0 291787.4 2 qr. 2017 598188897868.2

Undoubtedly, this list of factors is not complete, but, in our opinion, it forms to a significant extent the basic foundations that reveal the parameters and trends in the development of the digital money market. It is also important to note that this list of factors was formed based on the results of econometric analysis and filtration of a wider range of statistical indicators. However, the correlation dependencies found between them predetermined the list of factors used in this paper (Wilson, & Yelowitz, 2015).

### 3 Results and Discussion

As a result, the following regression model was obtained; it reflects the relationship between the global crypto currency market and the analyzed parameters:

MC = a + 0.047X1 + 176834636.6X2 + 6953481977X3 - 53146.4X4

### Where:

MC - market capitalization of bitcoin in the world (Market Cap);

X1 - Complexity of coin mining, gh / sec.

X2 - The number of Google requests for crypto currency

X3 - Legal status of bitcoin.

X4 - The number of transactions in bitcoin, units.

The resulting statistical significance parameters for the obtained model are presented in Table  $3,\,4.$ 

Table 3. Parameters of model regression statistics

Regression statistics				
Multiple R	0.990998295			
R-square	0.98207762			
Adjusted R-square	0.977860589			
Standard Error	1077250094			
Observations	22			

Table 4. Estimated parameters of regression model coefficients and their statistical significance

	Coeff.	St. Error	t-statistic	P-val	
Intercept	268565991.9	558787138.1	0,480623074	0.636911306	
Hashrate, GH / s	0.046687555	0.004841087	9.644023492	2.62681E-08	
Number of Google queries	176834636.6	25640540.82	6.89668123	2.58,655E-06	
Legal status of bitcoin	6953481977	2052492505	3.387823323	0.003498766	
Number of transactions in bitcoin	-53146,41939	11562,90567	-4.596285823	0.000257086	

The data presented indicate that the calculated regression substantially high approximates the initial series to a significant degree. The corresponding coefficient of determination  $R^2$  is 0.98. Consequently, the equation obtained within the framework of implementation of multi-iterative calculations and actions, adequately describes the initial data. Therefore, it seems reasonable and justified to use the constructed model in the

process of creating predictive models on the crypto currency market development.

Based on the data of scenario programming for the transformation / development of the presented factors (Table 5), Figure 6 presents scenario forecasts of the bitcoin market capitalization for the period up to 2021.

Table 5. Scenario parameters for generation of factors determining the bitcoin market capitalization value

Factors	The quarterly rate of change factors in the quarterly average for the II quarter of 2017, %			
Factors	Inertia scenario	Pessimistic scenario		
Hashrate, GH / s	136.30%	110%		
Number of Google queries	122%	100%		
Legal status of bitcoin	103.20%	100%		
Number of transactions in bitcoin	98.10%	100%		

According to the inertial scenario, growth rates are determined on the basis of the quarterly growth rate for the period of 2016-2017. It was in this period of time when crypto currency began to increase dramatically in the world market, forming a trend for

its development for future periods of time. The growth dynamics of the indicators used in the pessimistic scenario are determined on the assumption of stabilization of key factors determining the dynamics of the crypto currency market.

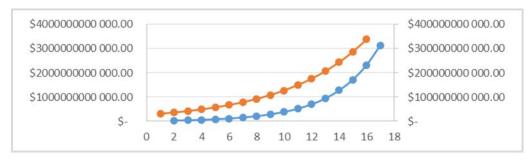


Fig 4.Scenario forecast of the bitcoin market capitalization for the period up to 2021, billion dollars

### 4 Conclusions

Thus, proceeding from the predictive assessments of the crypto currency market development in the world, it should be noted that regardless of the current positions of different countries to the crypto currency, the growth rates of this market will be significantly increased. The "integration" of national economies into this process will largely determine their competitiveness through the degree of integration into the system of international operations in the economic and financial spheres. At the same time, this degree will be determined by the speed of decision-making aimed at determining the status of the crypto currency and its legalization in the regulatory and legal field of the state.

### 5 Summary

In accordance with the received data, it is expected that by the beginning of 2021 (by the 1st quarter) in accordance with the inertial scenario of development, the volume of market capitalization of bitcoin will reach the level of 3.1 trillion \$\\$, in accordance with the pessimistic - \$ 338.0 billion, which, nevertheless, is almost 3 times higher than current values.

It should be noted that, in accordance with the inertial scenario, bitcoin's capitalization is estimated as extremely significant. This is due to the fact that, methodologically, within this scenario it is assumed that the market growth parameters that have been formed in 2017 will remain the same in the future. At the same time, it should be noted that in 2017 the growth of BTC's market capitalization amounted to about 600% in the period from the first to the third quarter , which, in our opinion, was based on increased excitement and, accordingly, the active growth of speculative demand. In all likelihood, in the future, the increased growth in demand will decrease, and growth will stabilize, which will lead to more even trajectories of the crypto currency market development in the future. In this connection, it seems

appropriate to define a pessimistic scenario as a basic one proceeding from the conservative rates of development of the underlying factors in the market under study, and which is the scenario largely conforming to the logic of the stagnant growth rates of the BTC exchange rate that outlined in early 2018.

The presented data which reveal the prospects for the development of the global crypto currency market, demonstrate a very significant growth rate of the market capitalization of crypto currency in the world. Based on the information that the bitcoin share in the total volume of the crypto currency market is about 45%, and also being guided by the hypothesis that the altcoins generate their development dynamics being in the fairway of the BTC exchange value, the forecast parameters of the global crypto currency market could be determined. Thus, in the pessimistic scenario which provides for limiting the dynamics of the factors determining the parameters and prospects for the development of the crypto currency market, the market volume by 2021 will reach 707.1 billion US dollars, which is 4.7 times higher than the current value. Within the framework of the inertial scenario, the expected volume of crypto currency market capitalization in the world will reach the level of 6.6 trillion dollars. It is important to emphasize that in the case of the inertial scenario of the crypto currency market development, its share in the total volume of global transactions will reach about 5%, and in the case of the pessimistic (baseline) scenario - 1%3.

### 6 Acknowledgements

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<sup>&</sup>lt;sup>3</sup> McKinsey, Global Payments Industry Study (2016): the global market volume of global transactions is estimated at 155 trillion\$ https://ripple.com/use-cases/

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# DEVELOPMENT OF FORECASTING MODEL FOR CRYPTOCURRENCY EXCHANGE RATE DYNAMICS USING STOCHASTIC ANALYSIS TOOLS

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Abstract: Accelerated rates of the crypto currency market development and its integration into the system of economic, operational, financial and other processes determine the need for a comprehensive study of this phenomenon. Particularly actual is the fact that discussions at the state level on the prospects of legalization of the crypto currency market and the possibilities of using its instruments in the economic activities of economic agents have intensified in recent months. Despite at times polar views and approaches that have been formed among Russian experts at the moment regarding the solution of this issue, the development of cryptology is extremely rapid regardless of its regulation. This causes and actualizes the conduct of scientific research in the field of assessing the prospects for the development of this market in order to predict possible effects and risks for the national economic system. Part of this paper is devoted to the solution of these questions aimed at finding methodical approaches to forecasting the dynamics of the crypto currency market development based on the "foresight" of future fluctuations in the value of "digital money" using special economic and mathematical tools.

Key words: crypto currency market, bitcoin, stochastic analysis, forecasting, autoregression models.

### 1 Introduction

Today there is a deep transformation of the traditional money and finance world. Innovations in the financial sector, new technologies, tools and systems entail serious and profound changes in habitual financial institutions. One of the most important stages of these transformation processes was the emergence of crypto-currencies accompanied by the rapid development of related technologies and the lack of a clear picture of the future landscape of ecosystems.

For today, various states demonstrate an ambiguous attitude to crypto-currencies. Some countries consider bitcoin as a commodity, the latter as a digital asset, others are recognized it as a currency. However, despite the uncertain legal status, most crypto-currencies are inherent in some functions performed by monetary units. For example, the most common crypto currency "bitcoin" to date can be used as a means of payment, as a measure of value, and also as a means of accumulation (Cheah & Fry, 2015; Sulkarnaeva et al, 2018).

Integration of the global crypto currency market into the economic turnover of national economies significantly transforms the usual regulatory mechanisms. The growth of the crypto currency market increases the pressure on monetary circulation, which accordingly affects the national economy as a whole. In this regard, it seems relevant to study the main directions that limit or, on the contrary, expand the range of regulation of financial markets and the development of the national payment system due to the integration of business processes into a "crypto space". The feasibility of this study is largely due to the fact that any violation of institutional reality based on traditional regulatory instruments may entail certain consequences, such as the violation of financial stability, which will undoubtedly affect the development of real sectors of economy (Elshin & Abdukaeva, 2017).

It should be noted that at the current time, even despite the exponential growth of the global crypto currency market in recent years, many economists and statesmen consider its influence on macroeconomic and financial stability as insignificant. The basis of this approach is the extremely low volume of the crypto currency market in the overall balance of

the payment system. For example, in the Russian Federation, the weekly turnover of Bitcoin is only 0.006% of cash and 0.001% of the money supply (Elshin & Abdukaeva, 2017).

At the same time, in the foreseeable future, a scenario is likely to include a further activation of the market under investigation and its multi-structural integration into national economic systems, which makes it necessary to pay special attention to this issue today from the scientific and expert community. A significant contribution to the accelerated growth in the capitalization of the global crypto currency market can be made not only by its popularization as a progressive tool used in transactions, but also by the further growth of the exchange rate (as a result of the factor expressed in the limited emission of crypto currency (for example, Bitcoin emission is limited to 21 mln. units), and due to speculative processes as a result of speculative operations in crypto-exchanges (Nakamoto, 2008).

In connection with the foregoing, at the current time it is extremely urgent to search for and develop a special toolkit that allows us to anticipate and forecast adjustments to exchange rates of modern "digital money".

For the sake of justice, it should be noted that at the current moment in the scientific publishing space it is extremely rare to find works devoted to this topic. Mostly questions are of a research nature and aimed either at an expert assessment of current and forthcoming prospects for the development of the market under consideration, or on the use of special methods of exchange technical analysis that reveals the features and trends of exchange rate fluctuations of "digital money".

At the same time, it seems expedient within the framework of scientific research activities to use special methods of economic and mathematical modeling that involve the use of progressive tools and mechanisms.

The absence of a monetary body authorized to maintain the stability of the monetary system leads to a strong volatility in the crypto currency rate. The rate relative to fiat money is formed exclusively due to the demand and supply for the crypto currency; therefore, the daily fluctuations of the exchange rate can exceed 25% (Bouoiyour & Selmi, 2015; Villalobos Antúnez, 2016).

This adversely affects its use as a settlement currency in trading transactions and generates motivation for speculation. In addition, predicting a change in the exchange rate is a very nontrivial task: using a fundamental analysis for prediction of the volatility of exchange quotations is ineffective, since the rate does not depend on the economy of a particular country; the use of technical analysis is also ineffective, because it is impossible to determine the state of the market due to the formation of demand and supply caused by individuals' willing to buy or sell certain products or services around the world (Bariviera et al, 2017).

### 2 Methodology

In our opinion, one of the most effective mechanisms for predicting time series is the use of autoregressive moving average models (ARMA, ARIMA). This approach is particularly relevant in the absence of effective tools for forecasting exchange rate fluctuations of this kind for "financial assets" characterized by uneven fluctuations of rates over time, the absence of a "binding" to underlying assets, high level of speculative demand, and so on.

ARMA and ARIMA models are an important class of parametric models that allow describing both stationary and non-stationary series. The aim of this paper is to determine an autoregression model and the integrated moving average with the minimum

number of parameters on the basis of which reliable short-term forecasts can be made.

The empirical and expert analysis has demonstrated the expediency of using bitcoin as the object of research. This is due to a number of reasons, the main ones of which are presented below:

- The dominant share in the total world capitalization of crypto-currencies (about 45%)<sup>1</sup>
- The most popular crypto currency, the fluctuations in the rate of which completely determine the volatility of the absolute majority of other types of crypto currencies in the market

Returning to questions of methodological nature, it should be noted that the use of the models considered in the work involves the implementation of five major iterations:

- Construction of time series
- Checking the series for stationarity (as a result, the class of the model used is ARMA or ARIMA).
- 3. Selection of model parameters
- Estimation of reliability and adequacy of the constructed model

Development of forecast parameters of the time series under study.

The modeling process applied to the object of research considered in this paper, is presented below with a detailed description of the sequence of solved iterations.

The calculations were carried out for data reflecting the dynamics of the "bitcoin" crypto currency exchange rate. The series describes the cost of bitcoin in the period from 01.10.2016 to 18.03.2018. (Fig 1) The source of the data was the virtual bitcoin wallet service "Blockchain.info" <sup>2</sup>. The calculations were carried out using the forecast analytical software Eviews and IBM SPSS.

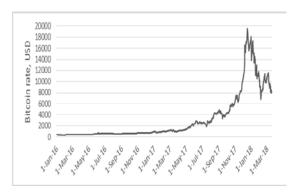


Fig 1. Dynamics of the change in the rate of crypto currency "Bitcoin" in the period from 01.10.2016 to 04.03.2018 in USD

Modeling of stationary time series, or series which can be reduced to stationary ones, can be performed using the autoregressive moving average class models (ARMA) which is a combination of two models: an autoregression of order p and a moving average of order q. In the generalized form. For non-stationary data, Box and Jenkins proposed the ARIMA model (p, d, q), which after taking d consecutive differences can be reduced to a stationary form (Box, & Jenkins, 1994), where , , q are the structural parameters characterizing the order for the corresponding parts of the models - autoregressive, integrated and moving average.

The model selection methodology consists of several stages.

<sup>2</sup> Virtual bitcoin wallet service URL: https://blockchain.info/ru/

### 3 Model identification

At the initial stage of the study, it is necessary to find out whether the series under study has the property of stationarity.

The stationary series is a series which behavior and properties in the present and future coincide with the behavior in the past.

The stationarity of the series can be estimated using various methods. The basic methods for checking the stationarity of a time series are Dickey-Fuller extensions, and also the construction of an autocorrelation function (ACF) and a partial autocorrelation function (PACF). The calculation of the autocorrelation function is performed using the following formula:

$$\rho_k = \frac{\gamma_k}{\gamma_0} = \frac{cov(k)}{var} = \frac{cov(y_k; y_{t-k})}{var(y_k)}; \|\rho_k\| \le 1$$

A partial autocorrelation function (PACF) is defined as a particular correlation between the values  $\mathbf{y}_{-}$  and  $\mathbf{y}_{-}$ —"purified" from the influence of intermediate variables on them (Kantorovich, 2002). For the initial series, the autocorrelation function and the partial autocorrelation function were constructed (Fig 2).

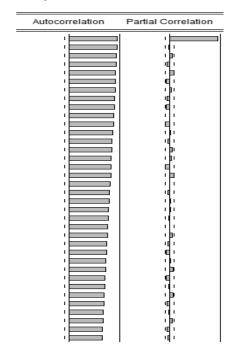


Fig 2. Autocorrelation function ((Autocorrelation) and partial autocorrelation function (Partial Correlation)

The autocorrelation function constructed is characterized by a slow decrease in the autocorrelation function coefficients over the decaying exponential from the value of the coefficient close to 1. The partial autocorrelation function has a high autocorrelation coefficient on the first lag, and values close to 0 on subsequent lags.

Thus, we can conclude that the initial time series is nonstationary.

In addition to visual analysis, an extended Dickey-Fuller test (ADF test) was carried out to verify the stationarity of the time series. The test consists in testing the null hypothesis about the presence of a unit root in the equation:

$$y_t = \alpha y_{t-1} + \varepsilon_t$$

The decision on the stationarity of the time series is adopted in the case when the calculated estimates of the test are greater than

<sup>1</sup> https://coinmarketcap.com/coins/

the observed statistics t  $_{\text{obs}}$  (t  $_{\text{crit}} > t_{\text{obs}}$  ). The test results are shown in Table 1.

Table 1. Results of The Adf Test

		T-statistic	Prob.*
Augmented Dickey - Fuller Test Statistic		-0.742350	0.8334
Test Critical Values:	1 % level	-3.444158	
	5 % level	-2.861522	
	10 % level	-2.570019	

\* Machinnon (1996) One – Sided P- Values

For the test series under study t  $_{\rm obs}$  = -0.74. Since the values obtained with different importance levels (1, 5 and 10%) have values less than t<sub>obs</sub>, then the hypothesis of nonstationary time series is accepted.

Thus, the simulation of the bitcoin crypto currency rate was carried out based on the autoregressive integrated moving average (ARIMA) model.

### 4 Criteria for selecting model parameters

After selecting a model, you need to choose the corresponding parameters. After taking the first difference, the original series was reduced to a stationary form, so the parameter d=1.

To simulate the dynamics of the change in the crypto currency rate, the following models were tested: ARIMA (1,1,1), ARIMA (1,1,2), ARIMA (2,1,0) ARIMA (2,1,1), ARIMA (2,1,2).

The basis for choosing the model was the functions constructed by autocorrelation function and partial autocorrelation function, as well as the calculated Akaike criterion (3) and the Bayesian information criterion (4).

These criteria allow choosing the best model from the group of candidate models. The advantage is given to the model, the values of AIC and BIC of which are minimal. The calculation is made by the following formulas:

$$AIC = ln \hat{\delta}^{2} + \frac{z}{n} r,$$
 
$$BIC = ln \hat{\delta}^{2} + \frac{\ln n}{n} r$$

Where  $\overline{\delta}^2$  a residual sum of squares divided by the number of observations,

r is the total number of terms in the ARIMA model.

The results of the calculation are shown in Table 2.

Table 2. Model selection based on AIC and BIC criteria

	AIC	BIC
ARIMA (2,1,1)	12,162,015	12,19668655
ARIMA (2,1,2)	12,086,669	12,13,000,837
ARIMA (1,1,2)	12.163773	12,19844515
ARIMA (1,1,1)	12,166,205	12,19220874
ARIMA (2,1,0)	12,181,602	12,20760531

The ARIMA model (2, 1, 2) has the minimum BIC and AIC criteria.

$$\Delta X = 32, 3 - 1, 329 \\ \Delta X_{t-1} - 0, 585 \\ \Delta X_{t-2} - 1, 602 \\ \varepsilon_{t-1} - 0, 845 \\ \varepsilon_{t-2} + \varepsilon_{t}$$

Thus, the final model took the following form:

Qualitative estimates of the obtained model parameters are given in Table 3

Table 3. Model parameter estimates

	Coefficient	Standard error	t-stat.	p-value
С	32,328	8,913	3,627	0
AR	-1.329	0.01	-16.595	0
AK	-0.585	0.029	-7.4	0
d	1			
MA	-1.602	0.04	-29,523	0
MA	-0.845	0.04	-15,742	0

### 5 Getting forecast values

With the help of the received model, the bitcoin crypto currency rate was forecast for 10 points ahead. The prediction results are shown in Fig 3.

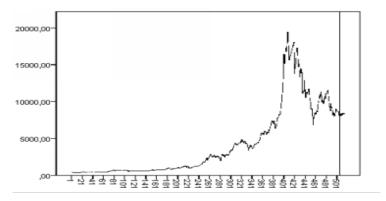


Fig 3. The forecast values of the bitcoin rate obtained with ARIMA (2, 1, 2)

Indicators which indicate the quality of the model obtained are given in Table 4.

Table 4. Qualitative characteristics of the model

Statistics	Average value
Stationary R-Squared	0.871
R-Squared	0.999
RMSE	165.93
MAPE	4,182
MaxAPE	39.607
MAE	102,682
MaxAE	634,788

### 6 Results and Discussion

The reliability and adequacy of the results obtained were confirmed by comparing the actual and forecast parameters of the bitcoin rate, and also proceeding from high R-squared value (Fig 4).

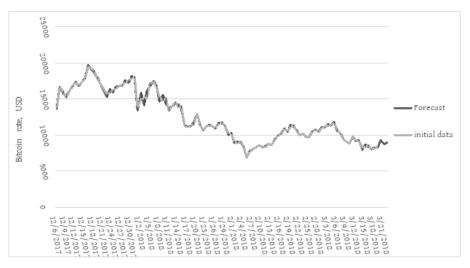


Fig 4. Convergence of forecast and actual data estimating bitcoin / USD exchange rate

As can be seen from the presented graph, the forecast values describe the forthcoming corrections with high accuracy, which is confirmed by the extremely high level of the forecast daily trend change. At the same time, undoubtedly, there are also minor discrepancies between the absolute values of the series, what is completely permissible and falls within the scope of the forecast error (Mustafina et al, 2017).

The obtained results in many respects testify to the prospects of the chosen forecasting tool based on the use of autoregressive algorithms and integrated moving average. However, it should be noted that the model constructed requires further improvement. So, for example, it seems appropriate to apply models of stochastic volatility in connection with the high variability of the study series (Vranken, 2017). Undoubtedly, given the extremely low (if not to say rudimentary) level of the crypto currency market development in the Russian Federation

in terms of commodity turnover support it should be noted that at the current time there is a low level of demand on the part of the business community for this kind of model. However, taking into account the dynamically growing speculative demand in the crypto currency market, and also relying on the increased activity of state regulators in the sphere of legalization of the crypto currency market in the Russian Federation for some time past, the interest and importance to this kind of methodological tools is becoming increasingly important. It is enough to note that only in 2017 a whole series of large-scale research projects on this subject was implemented, for example, such studies as "Scenario modeling of the development of the Russian currency market in the Russian Federation and its impact on the development prospects of settlements for air transport services' in the activities of PJSC Aeroflot, and the "Legislative regulation of the introduction and practical application of modern financial technologies". Undoubtedly, such an intensification of activity on the problem posed is due in large part to the fact that at the end of 2017 the President of the Russian Federation approved the assignment to the Government of the Russian Federation in the field of regulation of the crypto currency market in the national economy. In January 2018, the Ministry of Finance jointly with the Central Bank developed and published a draft federal law "On Digital Financial Assets".

### 7 Conclusions

Taking into account the above-mentioned, as well as the methodological approaches proposed in the study, the possibilities of regulation of the crypto currency market by the state authorities are greatly expanded, and also they form stable bases for modeling and forecasting financial stability of the national economy due to its integration into the global system of "digital money".

### 8 Summary

Summing up the realized estimations and the developed methodical toolkit, it is necessary to note a very high level of its perspective within the framework of modeling of business processes based on the use of crypto transactions. This is due, first of all, to the urgent need to understand and predict exchange rates of the crypto currency, since its use in economic circulation forms very high risks of financial losses of economic entities caused by its significant volatility.

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### DEVELOPMENT OF INFORMATION COMPETENCE OF STUDENTS IN THE MIDDLE SCHOOL

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Abstract: In the conditions of the rapid growth of information flows and their widespread use as a powerful means of communication, there are the problems of society intellectualization, the creation and introduction of new technologies, based on the effective use of knowledge, as a resource for the development of society. However, the issues, related to the development of information competence in the middle school are still not resolved, and are not brought in compliance with the needs of this stage of education system. Taking into account the urgency of the problem and insufficiency of its development, the study was aimed at determining the level of formedness of information competence of middle school students, and experimental approbation of the organizational and pedagogical conditions for the development of this competence. On the basis of the Municipal Autonomous General Educational Institution "Secondary School no 39 with enhanced education in English" of the Vakhitovsky District of Kazan, a low level of students' ability for independent search, analysis, selection, processing and transferring of information was defined, using the method of expert assessment. A system of methods, aimed mainly at encouraging of students for self-gaining of knowledge, conscious mastering of skills and abilities in the process of active cognitive and practical activity, was proposed.

Keywords: information competence, information and communication technologies, biology, educational activity, knowledge.

### 1 Introduction

The history of society is a complex process, which contains economic, social, political and cultural aspects. Due to this, the society is divided into different periods: formational, civilizational, historical-temporal, etc., complementing each other. However, there is always an inseparable factor information - its search, accumulation, analysis, transformation and use.

The XXI century puts before all types of educational institutions new goals and tasks for the preparation of students, capable of:

- working with information wisely;
- easily adapting in changing life situations, independently acquiring the necessary knowledge;
- clearly understanding where and how the acquired knowledge can be applied in the environment;
- possessing the ability to generate new ideas, to think creatively;
- being communicative and contact;
- self-developing and working at the level of cultural development.

In the period of transition to the information era, it is necessary to prepare the society for rapid perception and processing of large amounts of information, mastering of modern means, methods and technologies of the work. However, the level of knowledge of one person depends on the knowledge of the other. Therefore, it is necessary not only to learn and process information independently, but also to draw conclusions, based on a collective solution, and to master this technology of work.

Informatization of society is a global social process, the peculiarity of which is that the main activity in the sphere of public production is the collection, accumulation, processing, storage, transfer, use, production of information, carried out on the basis of modern means of information interaction and exchange.

To use the modern information and communication technologies, devices for communication and distribution of information, analysis of information resources and making professional decisions, the specialist must know modern ICT tools and have information competence as one of the components of professionalism. Questions of information competence were considered in the works of R.V. Bochkova, G.M. Kiseleva, E.L. Fedotova.

In the scientific literature, the concept of "information competence" is interpreted in the conventionality of such two concepts as "information competence" and "information adeptness".

Competence – is a set of interrelated personal qualities of the individual (knowledge, skills, methods of activity), assigned to a certain range of subjects and processes, and necessary for good productive activity in regard to them.

Adeptness - possession by the person of appropriate competence, including his personal attitude to it and to the subject of activity (Isaeva, 2007; Villalobos Antúnez & Ganga, 2016).

The great teachers of the age consider the interpretation of the concept, formulated by Zaitseva O.B., as the most general definition: "information competence is a complex individual and psychological formation, based on the integration of theoretical knowledge, practical skills in the field of innovative technologies and a certain set of personal qualities" (Babansky et al, 1988).

However, despite the wide variety of definitions of the notion "information competence", it can be concluded that all of them are united by the interdependence between information competence and the ability to work with information, through the use of ICT and possessing of skills for solving everyday educational problems, with the help of new information technologies.

We consider the information competence as the ability to search, analyze, select, process and transmit the necessary information independently, using new information and communication technologies. It includes the ability to group activities and cooperation, using modern communication technologies; as well as the readiness for self-development in the field of information technology (Khutorskoy, 2003).

In modern society, information competence is one of the most required competencies. The purpose of our research is the formation of information competencies of students in the conditions of development of modern society (Gareeva, 2010).

Information competences involve the activity skills in relation to information in educational subjects and educational fields, as well as in the surrounding world; possession of modern means of information (telephone, computer, television, telephone, fax, printer, modem, copier, etc.) and information technologies (media, Internet resources, audio and video systems, e-mail); search, analysis and selection of necessary information, its transformation, preservation and transfer (Kiselev, 2014; Miriago, 2018).

### 2 Methodology

To solve the tasks and check the initial assumptions, a set of complementary research methods was used: the theoretical analysis of the pedagogical literature on the research problem, the study and generalization of advanced pedagogical experience, the pedagogical experiment (control, ascertaining, forming), testing, pedagogical observation, the method of educational cooperation, the method of projects, game methods, case method.

A lot of research is devoted to the method of forming of students' informational competence. At the same time, the process of information competence forming is mostly spontaneous and chaotic. The research of the process of forming this competence on the example of discipline "Biology" shows, that the level of its formation is low. In view of the importance of information competence, we came to the conclusion about the need for its purposeful formation in the educational process. In our work, we proceeded from the fact, that information competence is an integral set of a multitude of components: motivational, communicative, cognitive, value, activity,

reflective and normative-ethical. It includes a system of value orientations, aimed at the development of intellectual personality.

The development of information competencies is of great importance in the process of biological training of schoolchildren. Since the abilities of subjects of educational and cognitive activity for independent search, analysis, selection and transferring of necessary information are formed with the help of real objects of the environment, and modern information and communication technologies. This competence provides students with the activity skills in relation to the information, contained in the school subject, as well as in the surrounding world.

In this study we use the following definition of information competence: it is the readiness to work with information, on paper and electronic basis, manifested in the interpretation, systematization, critical evaluation and analysis of obtained information, from the perspective of current task, in the formulation of reasoned conclusions, the use of received information for planning and implementation of own activity, the structuring of information and its presentation in various forms, and on various media, which are adequate to the needs of the information user (Hilton-Chalfen, 2014).

The experimental work, described in the article, was carried out on the bases of the Municipal Autonomous General Educational Institution "Secondary School № 39 with enhanced education in English" of the Vakhitovsky District of Kazan, (hereinafter - School № 39) and the Municipal Budgetary General Educational Institution "Gymnasium № 90" of the Sovetsky District of Kazan (hereinafter - Gymnasium № 90) among the students of the 7th

and 8th grades. 83 pupils took part in the research. The results obtained were subjected to statistical processing, comparative analysis and interpretation of data. The experiment was accompanied by the collection of statistical data on the results of training by traditional methods, and training with the help of experimental work. For this purpose, the control and experimental training groups were defined. Control group consisted of 43 pupils of the grades 7 "A" and "B" of School № 39. Experimental group included 40 pupils of the grades 8 "A" and "B" of Gymnasium № 90.

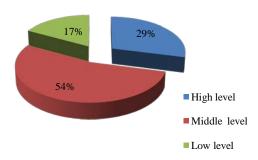
To determine the initial level of formedness of information competence of students, we used the method of expert assessments.

The method of expert assessments is conducted in the format of intuitive-logical analysis of the problem, with quantitative evaluation of judgments and formal processing of results. As a result of processing the experts' opinions, the aggregate data are obtained. They are accepted for solving the problem. The joint use of intuition (unconscious thinking), logical thinking and quantitative assessments with their formal processing allows to obtain an effective solution to the problem.

### 3 Results and Discussion

The results of the ascertaining stage of the experiment on determining the level of formedness of information competence components were approximately the same in the control and experimental groups of students. The analysis of the results of ascertaining experiment confirms the data on the middle, closer to the low, level of formedness of the studied competence (Fig 1).

### Control group



### **Experimental group**

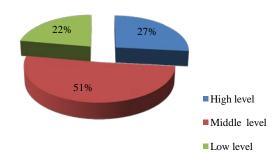


Fig 1. Circular diagram of the level of formedness of information competence in the control and experimental groups of students

The results of the ascertaining stage of experimental work, carried out by us, showed that in the experimental group, 27% of students demonstrate a minimum level of information competence, and only 22% - the maximum. Many students have problems with the search, perception, processing and transferring of information. They can't sum up and record only key information, speak in public, they are embarrassed when making presentations. Despite the high need for the development of information competence, the readiness for such self-improvement in most students is not sufficiently developed: there are no well-defined objectives, systemacity, necessary abilities and skills of information competence.

The reliability of data, obtained in the control and experimental groups, was determined using the Student's test. Statistical values, such as the arithmetic mean, the standard deviation and the coefficient of variation, were calculated. On the basis of these values, the dynamics of formedness of information competence components was revealed.

When selecting a specific method of training for the experimental group, we proceeded from the understanding, that the following results of its application should be observed and diagnosed:

- Increased cognitive activity and independence of students;
- Striving for scientific research;
- Development of mental abilities of students and their effective use;
- Increase in the level of information competence;
- Provision of support of students' self-expression and saving their socio-psychological adaptability (Thouin, et al, 2018).

In our work we used a system of methods, aimed mainly at encouraging of students for self- development and conscious mastering of skills and abilities, in the process of active cognitive and practical activity.

- Method of educational cooperation.
- Project method.
- Game methods.

### Case method.

The method of educational cooperation allowed to encourage the educational and cognitive activity of students, taking into account the individuality of each person, facilitated the independent search for information.

During classes, the students were divided into groups of 4-6 people for more effective work on educational material. At the beginning, the work was carried out individually, each student independently searched for the material on his topic, analyzed, selected the necessary, and found a practical justification for it. Further, the students, who studied the same topic, but who were in different groups, joined together and exchanged information, thus acting as experts on this issue. Returning to their group, they presented new information to the participants of the group. Thus, the students could master the entire material of the lesson only after carefully listening of their teammates, and making the appropriate notes in the notebooks. This method of training does not require additional efforts of the teacher. All students in the class were interested in conscientious fulfilling of this task by their team members, because this could affect the final mark.

An essential condition of the project method is a defense of the projects. During the speech, the students not only reported on the progress of work, defended its results, but also demonstrated their knowledge and experience in solving the project problem. The use of the research method in the course of the project

contributed to the development of the following qualities: the ability to offer different ways of identifying and solving the problem, motivation for creativity, the ability to unconventional thinking, the ability to cooperation, etc.

Game methods or intellectual-creative games stimulate the development of cognitive interests of students; promote the improvement of their intellectual and creative abilities; allow the students to bolster self-esteem and realize their potential in the intellectual and creative sphere through the play; help to communicate.

Conducting of role-playing games allowed us to achieve the following goals in our work: to teach students to sum up the key information of educational material, to recite it in a short form; to develop the skills of text analysis, associative thinking, the independence of judgments; to promote the self-determination of students; to improve communicative abilities; to broaden the horizons of biology; during the role-playing game, the students repeated and generalized the material studied. We used this method in the lessons, when studying the topics related to burnan

At the end of our work, we tested the participants of the experimental group for all the indicators studied. The analysis showed that the majority of students had an interest in the subject and receiving the information, the share of independence in the study increased (Gonzalez & Melo, 2018).

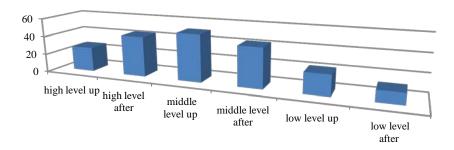


Fig 2. Histogram of the level of formedness of information competence of the experimental group, according to the results of the study

The number of students with a high level of information competence increased from 26% to 43%. They got to know the scientific methods of research and mastered them (Hahnel et al, 2016).

### 4 Summary

Based on the results of the experiment, we can make the following conclusions:

- the process of development of information competence of students can be assessed as insufficiently effective;
- the increase in the level of formedness of information competence of students can be ensured through the development and implementation of effective organizational and pedagogical conditions for the formation of information competence of students.

### 5 Conclusions

Summarizing the received materials, aimed at analyzing and studying the considered issue in the theory and practice of teaching, we revealed a number of problems of:

 theoretical nature, associated with the understanding and interpretation of the phenomenon "information competence", with the absence of its characteristics (essence, structure, content), that causes certain difficulties in its comprehension;

- methodological nature, connected with the lack of programs, guidance papers for teachers, teaching aids, textbooks, teaching materials;
- organizational nature, due to a lack of study time in the learning process.

Thus, during the experimental work, we found that the problem of this research is relevant in pedagogical practice, and its solution requires the search for effective conditions for the development of information competence of students, as well as the determination of methodological aspects of their implementation within the framework of the learning process in the general education school.

The study showed that consideration of pedagogical conditions and the specifics of learning process of students determine the choice of the optimal form of education. The following pedagogical technologies are the means for realization of this program: research, design, information and communication. The implementation of the process of development of research abilities and skills requires the use of the most effective methods of active learning: the method of educational cooperation, project method, game methods, case method.

The comparison of the results, obtained after the completion of the experiment, with the ascertaining part indicates the effectiveness of the selected methods.

### 6 Acknowledgements

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# DEVELOPMENT OF THE MEDIUM-TERM PROGNOSIS OF THE VOLGA FEDERAL DISTRICT DEVELOPMENT USING COMPATIBLE PATTERNS OF ECONOMIC GROWTH

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Abstract: The development of predictive economic growth models, their improvement and adaptation, and the transforming conditions of institutional factors require constant refinement of the methodological tools. Upon that, the most important task is the search for a system of factors that would explain the trends in economic dynamics on the one hand and, on the other hand, would be unified for the whole set of regional systems, what creates the possibility of a comparative analysis for economic growth drivers. This paper is devoted to the investigation of this problem. The object of the study is unified factors of economic growth in the regions of the Volga Federal District. The subject of the study is a system for modeling the parameters of economic dynamics based on the identification of exogenous factors which are uniform for all regional systems. As a result of the implemented estimates based on econometric modeling tools, economic growth models for the regions of the Volga Federal District were determined based on the principles presented above. This allowed using the methods of scenario modeling to develop a system of prognostic assessments of their economic development for the period up to 2020, as well as to justify the system of measures for state regulation of regional development in the conditions of cyclical development of the national economic system.

Keywords: modeling of economic dynamics, regional system, scenario prediction, unified factors of economic growth, factor analysis

### 1 Introduction

The questions of constructing prognostic models on the economic growth of regional systems with regular frequency arise and damp within the scientific and expert research discussion space. The theory of prediction and modeling of economic dynamics, despite its seemingly extensive elaboration within the framework of various kinds of traditional and non-traditional approaches, is still far from complete state and requires further improvement and refinement of the concepts of structural and logical analysis, and the paradigm and patterns of comparative analysis.

To date, the scientific community has developed a very large number of methodological approaches that form the basis for the development of economic growth models. At the same time, three main directions of research are distinguished: traditional, evolutionary and institutional, and synergetic (Ivanter et al, 2007; Villalobos Antúnez & Bozo, 2010).

Each of them operates with its own set of tools and factors that reveal the characteristics of macroeconomic generation. At the same time, the entire set of key factors affecting economic growth can be presented in concentrated form as follows:

- Price changes;
- Adjustment of interest rates;
- Investment activity;
- Savings:
- Adjustment of the money supply
- Growth / decrease in the level of employment;
- Innovative activity, shaping the change in labor productivity;
- Income of the population;

In fact, Their conjunction and combination between themselves, determines the differentiation of scientific views and approaches to building models of economic growth. Thus, it can be stated that the diversity of views and scientific approaches to the study of economic dynamics is rather multidimensional, complex and often contradictory (Safiullin et al, 2017; Elshin & Abdukaeva, 2017; Aksyanova, 2010; Folarin & Folarin, 2018).

### 2 Methodology

In this paper, the authors attempt to apply the identified set of factors affecting the parameters of economic growth within the framework of building unified economic growth models for the regions under study of the Volga Federal District. At the same time, an important methodological element was the definition of such factors, which on the one hand were standardized from the point of view of their unification to the models being developed, and on the other hand, characterized the macroeconomic dynamics applied to the group of regions of the Russian Federation under study.

In the course of solving the task, the following unified factors were identified and scientifically substantiated from the set in question, which have statistical significance for the constructed regression models that estimate the level of their influence on the dynamics of the gross regional product of the Volga Federal District: consumer price index, the number of unemployed and the dollar rate, indirectly characterizing the investment activity of economic entities. In all fairness, it should be noted that, undoubtedly, during the implementation of the statistical and correlation analysis for the set of regions studied, other factors were also significant (with reference to a specific region), but adhering to the concept of implementing factor analysis based on a unified system of indicators, these factors were not taken into account in the study (Yule, 1897; Fisher, 1922; Mingazova, 2002). In our opinion, the implemented approach which is based on a comparative evaluation of a unified system of factors, allows not only to compare the degree of reaction of regions to a changing group of homogeneous indicators, but also broadens the research range in the development of measures of state regulation in the field of regional development.

Further, on the example of the Republic of Tatarstan, we demonstrate the process of modeling the dynamics of economic growth using a selected set of factors. As a result of the economic modeling procedures, the following regression model was obtained, reflecting the impact of the analyzed set of indicators on the region's gross regional product:

GRP  $_{RT} = 11045316.5 - 92229.7 \text{ CPI} + 28847.2 \text{R} - 8315.3 \text{NE}$ 

Where:

GRP  $_{\rm RT}$  - gross regional product of the Republic of Tatarstan, million rubles:

CPI - consumer price index, in% to the previous year;

R \$ is the average annual value of the dollar exchange rate;

NE - number of unemployed, thousand people.

The results of the statistical significance parameters of the obtained model are presented in Tables 1, 2.

Table 1. Parameters of model regression statistics

Regression statistics				
Multiple R	0.907896478			
R-square	0.824276014			
Adjusted R-square	0.771558819			
Standard Error	252186.2694			
Observations	14			

Table 2. Estimated parameters of regression model coefficients and their statistical significance

	Coefficients	Standard Error	t-statistic	P-value
Intercept	11045316.574	2534112.157	4.359	0,001
CPI	-92229.666	23143.125	-3.985	0.003
Dollar exchange rate	28847.158	8320.773	3.467	0.006
Number of unemployed	-8315.301	2905.427	-2.862	0.017

The data presented indicate that the calculated regression substantially approximates the initial series to a significant degree. The corresponding coefficient of determination  $R^2$  is 0.91. Consequently, the equation obtained within the framework of multi-iterative calculations and actions adequately describes the initial data (Freedman, 2005). Therefore, it seems reasonable and justified to use the constructed model in the process of developing scenarios for modeling and prediction the region's economic growth.

Similarly, using the methods of multi-iterative calculations and the selection of statistically significant unified factors, the assessments of the effect of the considered set of parameters on the dynamics of the gross regional product for other regions of the Volga Federal District have been implemented (Table 3.4). The obtained estimates of the regression equations also very closely approximate the predicted values of the statistical series.

Table 3. Parameters of the regression equation and their significance

Regions	СРІ	Number of unemployed	Dollar exchange rate	R-square	Adjusted R- square
Republic of Bashkortostan	-79016.24	-6095.13	20858.17	0.8	0.74
Nizhny Novgorod Region	-47483.22	-5314.04	12845.99	0.77	0.71
Mari El Republic	-2714.38	-2945.09	1972.94	0.84	0.79
The Republic of Mordovia	-3825.89	-3527.67	3458.56	0.76	0.69
Udmurt republic	-20029.87	-2636.79	7162.15	0.83	0.69
Chuvash Republic	-8382.06	-3159.17	1699.96	0.86	0.74
Perm Region	-37047.46	-5364.17	13594.18	0.81	0.66
Kirov region	-14582.99	-2380.78	3254.36	0.86	0.74
Orenburg region	-19597.42	-7070.88	6521.543	0.92	0.90
Penza region	-8556.65	-4855.52	4768,356	0.8	0.74
Saratov region	-12063.96	-4943.65	4696.11	0.86	0.81
Ulyanovsk region	-13470.36	-2653.00	5,064.43	0.88	0.78
Republic of Tatarstan	-92229.66	-8315.30	28847.15	0.82	0.77
Samara Region	-46435.70	-7654.70	19184.48	0.79	0.73

### 3 Results and Discussion

The regression models developed for the regions of the Volga Federal District form stable prerequisites for constructing predictive estimates, based on those models, and also on scenario modeling of homogeneous exogenous factors for the resulting equations.

Scenario modeling of the factors generating the dynamics of the economic development of the Volga Federal District regions was mainly based on the data of the predictive analysis published by the Ministry of Economic Development of the Russian

Federation for the period up to 2020<sup>1</sup>. The prediction is formed for the medium-term period based on the parameters of strategic planning established by the above-mentioned regulators (Table 4). In order to standardize the results of the predictive estimates for the studied set of regions, the scenario values of exogenous factors were formed on the basis of the trends proposed in the Prediction, in accordance with the average Russian values. Thus, using equal conditions (in terms of the scenarios on the predicted dynamics of development of the macroindicators under study in

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<sup>&</sup>lt;sup>1</sup> Ministry of Economic Development of the Russian Federation / Prediction for the long-term social and economic development of the Russian Federation for the period until 2020: M. March, 2013

accordance with the average Russian parameters), a prediction for their development was obtained for all regions of the Volga Federal District on the basis of a unified system of explanatory factors. At the same time, it should be noted that the developed toolkit for constructing models on the economic growth of regional systems can use other scenario parameters for the development of exogenous factors, of course, taking into account regional specifics. However, in this study, the attempt to

work out a modeling process and a medium-term prediction of the gross regional product development dynamics for the regions of the Volga Federal District is realized intentionally on the basis of "standardized" parameters of scenario prediction of the factors studied. This, in our opinion, it will allow us to look more universally at the parameters of the future development trends of regional systems in unified scenario conditions of transformation of institutional and conjuncture parameters.

Table 4. Scenario parameters of the CPI dynamics for the regions of the Volga Federal District

-	Scenario Title									
n:		Base			Objective			Conservative		
Region		CPI								
	2018	2019	2020	2018	2019	2020	2018	2019	2020	
Republic of Bashkortostan	101.6	101.9	101.9	101.6	101.9	101.9	101.9	101.9	101.9	
Mari El Republic	102.5	102.8	102.8	102.5	102.8	102.8	102.8	102.8	102.8	
The Republic of Mordovia	101.1	101.4	101.4	101.1	101.4	101.4	101.4	101.4	101.4	
Republic of Tatarstan	102.2	102.5	102.5	102.2	102.5	102.5	102.5	102.5	102.5	
Udmurt republic	101.4	101.7	101.7	101.4	101.7	101.7	101.7	101.7	101.7	
Chuvash Republic	101.4	101.6	101.6	101.4	101.6	101.6	101.6	101.6	101.6	
Perm Region	101.4	101.7	101.7	101.4	101.7	101.7	101.7	101.7	101.7	
Kirov region	102.0	102.3	102.3	102.0	102.3	102.3	102.3	102.3	102.3	
Nizhny Novgorod Region	103.1	103.4	103.4	103.1	103.4	103.4	103.4	103.4	103.4	
Orenburg region	101.9	102.2	102.2	101.9	102.2	102.2	102.2	102.2	102.2	
Penza region	101.6	101.8	101.8	101.6	101.8	101.8	101.8	101.8	101.8	
Samara Region	101.5	101.8	101.8	101.5	101.8	101.8	101.8	101.8	101.8	
Saratov region	101.2	101.5	101.5	101.2	101.5	101.5	101.5	101.5	101.5	
Ulyanovsk region	102.5	102.8	102.8	102.5	102.8	102.8	102.8	102.8	102.8	

<sup>\*</sup> The dynamics of the consumer price index in the context of the regions of the Volga Federal District was determined in accordance with the growth parameters estimated in the Prediction (the actual level of the consumer price index for the region was adjusted by the average Russian consumer price index growth rate)

Table 5. Scenario parameters for the dynamics of the number of unemployed for the regions of the Volga Federal District

		Scenario Title								
Daning		Base			Objective			Conservative		
Region		Number of unemployed								
	2018	2019	2020	2018	2019	2020	2018	2019	2020	
Republic of Bashkortostan	107.4	104.5	101.7	107.4	101.7	96.1	113.0	110.2	107.4	
Mari El Republic	22.4	21.8	21.2	22.4	21.2	20.0	23.5	22.9	22.4	
The Republic of Mordovia	17.6	17.1	16.6	17.6	16.6	15.7	18.5	18.0	17.6	
Republic of Tatarstan	66.7	64.9	63.2	66.7	63.2	59.7	70.2	68.4	66.7	
Udmurt republic	41.2	40.1	39.0	41.2	39.0	36.9	43.4	42.3	41.2	
Chuvash Republic	31.3	30.5	29.7	31.3	29.7	28.0	33.0	32.2	31.3	
Perm Region	78.5	76.4	74.3	78.5	74.3	70.2	82.6	80.5	78.5	
Kirov region	34.7	33.8	32.9	34.7	32.9	31.1	36.6	35.7	34.7	
Nizhny Novgorod Region	72.7	70.8	68.9	72.7	68.9	65.1	76.5	74.6	72.7	
Orenburg region	46.0	44.8	43.6	46.0	43.6	41.1	48.4	47.2	46.0	
Penza region	29.6	28.8	28.0	29.6	28.0	26.5	31.1	30.4	29.6	
Samara Region	67.4	65.7	63.9	67.4	63.9	60.3	71.0	69.2	67.4	
Saratov region	57.1	55.6	54.1	57.1	54.1	51.1	60.1	58.6	57.1	
Ulyanovsk region	24.8	24.1	23.5	24.8	23.5	22.2	26.1	25.4	24.8	

<sup>\*\*</sup> Scenario parameters for the indicator dynamics are formed, based on parameters of dynamics of the indicator "Total number of unemployed citizens" taken from the Medium-Term Prediction of the Social and Economic Development of the Russian Federation to 2020

Table 6. Scenario parameters for the dynamics of the US dollar exchange rate

	Scenario Title								
Region	Base		Objective			Conservative		ve	
Region	2018	2019	2020	2018	2019	2020	2018	2019	2020

Dollar exchange rate, RUR / USD	64.7	66.9	68	64.2	66	67.4	70.3	70.8	73.2

The obtained scenarios for changing the values of exogenous factors made it possible to develop on the basis of the previously formed regression models for the analyzed set of factors the predictive parameters for the values of the gross regional product for the period up to 2020 (Fig 1).

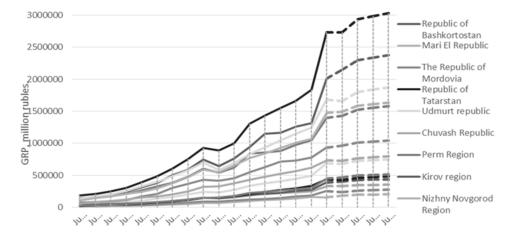


Fig 1. Medium-term prediction of the gross regional product parameters for the the regions of the Volga Federal District (baseline scenario)

### 4 Summary

In accordance with the predictions obtained for the medium-term development of the regions studied, it was revealed that the following regions will have the greatest growth dynamics: the Republic of Bashkortostan, the Republic of Tatarstan and the Samara Region. Average annual rates of their growth will be about 105 % per year. In many respects, this is due to the fact that these regional systems are more sensitive to positive adjustments of the investigated factors (Fotheringham & Wong, 1991).

Taking into account that in the prediction of the Ministry of Economic Development there are considered the scenarios with very favorable dynamics of the factors studied in the present work, their positive adjustments will have a positive impact on economy of the regions that are more sensitive to them.

In general, it should be noted that the growth rates of economic dynamics in the regions of the Volga Federal District are estimated at the level about 101.1-105.5%, taking in account a deflated predictive values of the gross regional product indicators. Despite the positive dynamics, the projected growth rates are clearly insufficient for the majority of the regional economic systems to enter the growth trajectory ahead of the world economy. This, in turn, determines the potential for reducing their global competitiveness and, as a result, a strategic lag in the transition to a long-term development path in accordance with the principles of the "fourth industrial revolution". In this connection, undoubtedly there is a very urgent problem of developing special measures of state regulation in the field of growth intensification. One of such tools can be the proposed algorithms for economic growth modeling. The developed toolkit allows, in addition to implementing the prognostic modeling of regional economic growth, to identify the factors of its dynamics (from the set of a single system of macroindicators) and to develop mechanisms of state regulation of regional development on this basis.

### **5 Conclusions**

Thus, it can be stated that the algorithm laid in the basis of the research toolkit for determining the sensitivity of regional economic systems to a unified system of factors forms stable bases for the development of measures of an adapted state policy. Its adaptability is expressed, first of all, in understanding the degree of regional response to the transforming parameters

of fundamental factors and in the possibility of development on this basis of specific targeted measures aimed at "smoothing out" the negative effects that arise as a result of the crisis phases of economic dynamics. The estimates which determine the reaction of regional economic systems to the "standardized" set of exogenous factors indicate the need to implement a differentiated state policy in the sphere of regional development. It seems absolutely expedient to apply to the regions of the corresponding system of state incentive measures which are the most "sensitive" to the adjustments of the investigated factors, while it seems obvious that for regions that are less sensitive to the assessed parameters, a somewhat different model of state impact in different phases their economic development should be applied. For example, based on the study, it is quite obvious that regions which in their essence belong to the category of "donors" need more "tough" measures of state regulation in the context of manifestations of crisis processes in the national economy. This is due to their more acute "sensitivity" to changes occurring in the market and institutional environment. At the same time, this "rigidity" should be expressed, first of all, in the increased level of state support measures in the crisis phases of their cyclical development with the aim of smoothing the negative effects. On the contrary, under conditions of economic revival and growth, attention should be shifted to the regions of the second cluster, characterized by intensification of economic growth due to inadequate response to positive impulses generated in the external and internal environment (Waegeman et al, 2008).

In conclusion, it should be noted that the findings are largely supported by the conceptual approaches proposed in the study, based on the use of the so-called "standardized" set of factors in the process of building the regional economic growth models. As the study showed, this allows more accurate looking at the degree of response of the analyzed subjects to the macroeconomic indicators that are transformed in time and are represented in a single system of coordinates.

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# DEVELOPMENT OF THE METHOLODY FOR ASSESSING THE ECONOMIC GROWTH OF THE REGIONAL ECONOMIC SYSTEM ON THE BASIS OF THE COMPATIBLE SYSTEM OF FACTORS (BY THE EXAMPLE OF THE VOLGA FEDERAL DISTRICT)

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Abstract: Development of economic growth predictive models, their improvement and adaptation to the transforming conditions of institutional factors require continuous refinement of the methodological tools. At the same time, the most important task is the search for a system of factors that would explain the trends in economic dynamics on the one hand and, on the other hand, should be unified for the entire set of regional systems, what creates the possibility of a comparative analysis of economic growth drivers. This paper is devoted to the investigation of this problem. The object of the study is unified factors of economic growth in the regions of the Volga Federal District. The subject of the study is a system for modeling the parameters of economic dynamics based on the identification of exogenous factors which are uniform for all regional systems. Economic growth models for the PFD regions are determined as a result of the implemented estimates based on econometric modeling tools and the principles presented above what allowed using cluster analysis methods to group them in accordance with the level of response and sensitivity to the changing parameters of the analyzed macroindicators.

Keywords: economic dynamics, regional system, economic growth factors, cluster analysis, factor analysis

### 1 Introduction

The questions of constructing prognostic models of the economic growth of regional systems with regular frequency arise and damp in the discussion space of scientific and expert research. Despite the fact that in the modern scientific space the methodological approaches to forecasting the development of the territories are viewed from various angles, the practice of regional forecasting nevertheless reveals a number of problems caused by the accuracy and validity of the prognostic estimates being developed and their comparability. Mostly, such a differentiation in the assessments obtained on the basis of the application of various methodological approaches is usually due to the appropriate selection of the research tools, as well as the choice of exogenous factors (the explanatory parameters used in the economic growth models) which differ significantly within the frameworks of a study of a particular regional system (a part of the territory of a state characterized by relative homogeneity of socio-economic indicators (Bertalanffy, 1962; Elshin & Abdukaeva, 2017; Dorzhu & Ondar, 2018). Of course, this is a very reasonable modeling mechanism, since the national

economy regions, being its structural elements, generate various parameters of their development based on various points of their economic growth. At the same time, in our opinion, such a "multifactorial" approach does not accurately allow for determining the degree of regional economic systems' reaction to the transformation of the common for all system-shaping set of traditional factors formed within the various schools of economic thought. At the same time, an understanding of the degree of homogeneous factor influence on the parameters of the economic dynamics of different subjects is a very important task. This predetermines the need to develop special methods for modeling the development of regions on the basis of a unified tool that allows them to measure the sensitivity of their responses to a "standardized" set of exogenous parameters (Ivanter et al, 2007; Bariviera et al, 2017; Villalobos Antúnez, 2016).

It should be noted that the development of unified economic growth models for regional systems should be based on relevant scientific theories that reveal the features of their economic growth. The theory of forecasting and modeling of economic dynamics, despite its seemingly extensive elaboration within the framework of various kinds of traditional and non-traditional approaches, is still far from complete and requires further improvement and refinement of the concepts of structural and logical analysis, the paradigm and patterns of comparative analysis.

### 2 Methodology

A sufficiently large number of scientific papers are devoted to the issues of forecasting and modeling the development of regional socio-economic systems, determination of the aggregate of the factors generating macroeconomic trends. All of them are conditionally subdivided into groups depending on the belonging of researchers to a particular economic school (neoclassical, neo-Keynesian, neo-institutional, etc.). It is important to note that one of the key differences between them is the process of selecting factors that determine macroeconomic generation.

However, despite the polarity of views between representatives of Keynesianism and neoclassicism expressed primarily in the interpretation of the expectations of economic agents that determine the paradigm of modeling economic growth, their system of identified factors that generate macroeconomic trends unites them. These include fluctuations in price indices, interest rates, money supply, employment, external conjuncture factors, etc. (Table 1).

Table 1. Key approaches to the interpretation of factors that generate phase shifts in economic cycles (Fedorenko et al, 1958; Goodwin, 1967).

Theory Key factors of economic growth				
	Keynesian theory of economic cycles			
The model of cyclical development of the Samuelson-Hicks economy	The fluctuation of prices and interest rates. Mechanisms of demand change on the part of economic agents are formed as a result of the macroeconomic effects of the multiplier an accelerator, having both positive and negative effects			
The Kaldor Model	Savings and investments, a function of income, expressed by a non-linear (logistic) dependence			
Model Tevez	The conjuncture development of the money market, which contributes to the change in the volume of investments in the economy			
Fischer's imperfect competition model	Monetary policy of the state or unexpected internal conjuncture shifts			
	Neoclassical theory of economic cycles			
The Friedman model	Adjustments to the money supply caused by a change in political structure			
Houghtree model	Phase shifts in cycles are formed in the financial capital markets as a result of periodic adjustments in the level of interest rates against a background of growth / decrease in the volume of lending to the real sector of the economy by the banking system			
The Goodwin model	The main generator of phase shifts in the cycle is growth or, conversely, a reduction in the level of employment			
The study of Charles Nelson and C.	The most important component of the emergence of cyclical fluctuations are technological			

	Plosser	innovations that generate a change in output
ĺ	The study of Prescott and Kydland	Business cycles are a consequence of the periodically changing expectations of economic agents
		(firms and households) that are transformed as a result of changes in labor productivity (due to
		technological shifts), as well as external conjuncture factors that predetermine investment
		activity in the economy

Thus, it is possible to distinguish the following set of key factors affecting macroeconomic dynamics:

- price changes;
- adjustment of interest rates;
- investment activity;
- savings;
- adjustment of the money supply
- growth / decrease in the level of employment;
- innovative activity forming the change in labor productivity;
- income of the population;

and etc.

Their combination and mixing between themselves, in fact, determines the differentiation of scientific views and approaches to building the economic growth models. Thus, it can be stated that the diversity of views and scientific approaches to the study of economic dynamics is rather multidimensional, complex and often contradictory (Nelson Charles & Plosser, 1982).

Using the identified set of factors influencing the parameters of economic growth, this study attempts to apply them in the framework of building economic growth models unified for the studied population of regions. One of the most important tasks set in the work was the cluster analysis based on the systematization of common for all regions parameters generating economic dynamics. In connection with this, an important methodological element was the definition of such a single factor that would characterize the macroeconomic dynamics applied to the entire set of studied subjects of the Russian Federation: the regions of the Volga Federal District (Safiullin, 2017; Elshin & Abdukaeva, 2017).

### 3 Results and Discussion

Table 2. Parameters of model regression statistics

In the process of the task solving, based on the results of the correlation analysis, three indicators were identified: CPI - the consumer price index, NE - the number of unemployed, and K\$ - the US dollar rate which characterizes the investment activity of economic entities.

The selected factors are not related (a low value of the correlation coefficient), if there is a high connection with the dependent variable. The absence of multicollinearity of the factors is a prerequisite for regression analysis and clustering procedures.

Further, by the example of the Republic of Tatarstan, we demonstrate the process of modeling the economic growth dynamics applying a selected set of factors used in the economic growth models by various scientific schools discussed above.

As a result of the economic modeling procedures, the following regression model was obtained reflecting the impact of the analyzed set of factors on the GRP of the region:

GRP  $_{RT} = 11045316.5 - -92229.7 \text{ CPI} + 28847.2\text{K}\$ - 8315.3\text{NE}$ 

Where:

GRP  $_{\mbox{\scriptsize RT}}$  - gross regional product of the Republic of Tatarstan, million rubles:

CPI - consumer price index, in % to the previous year;

K \$ is the average annual value of the dollar exchange rate;

NE - number of unemployed, thousand people.

The results of calculation of the statistical significance parameters for the obtained model are presented in Tables 2, 3.

Regression statistics				
Multiple R	0,907896478			
R-square	0,824276014			
Adjusted R-square	0,771558819			
Standard Error	252186.2694			
Observations	14			

Table 3. Estimated parameters of regression model coefficients and their statistical significance

	coefficients	Standard Error	t-statistics	P-Value
Intercept	11045316.57	2534112.15	4,359	0,001
CPI	-92229.66	23143.12	-3,985	0.003
Dollar exchange rate	28847.15	8320.77	3,467	0.006
Number of unemployed	-8315.3	2,905.42	-2,862	0,017

The data presented indicate that the calculated regression substantially approximates the initial series to a significant degree. The corresponding coefficient of determination  $\mathbb{R}^2$  is 0.91. Consequently, the equation obtained within the framework of implementation of multi-iterative calculations and actions, adequately describes the initial data. Therefore, it seems reasonable and justified to use the constructed model in the

process of developing scenarios for modeling and forecasting the region's economic growth.

Similarly, using the multi-iterative calculation methods, the assessments of the influence of the considered factors' set on the GRP dynamics for other regions of the Volga Federal District have been implemented (Table 4).

Table 4. Parameters of the regression equation and their statistical significance

Regions	СРІ	Number of unemployed	Dollar exchange rate	R-square	Adjusted R- square
Republic of Bashkortostan	-79016.24	-6095.13	20858.17	0.8	0.74
Nizhny Novgorod Region	-47483.22	-5314.04	12845.99	0.77	0.71
Mari El Republic	-2714.38	-2945.09	1972.94	0.84	0.79
The Republic of Mordovia	-3825.89	-3527.67	3458.56	0.76	0.69
Udmurt republic	-20029.87	-2636.79	7162.15	0.83	0.69
Chuvash Republic	-8382.06	-3159.17	1699.96	0.86	0.74
Perm Region	-37047.46	-5364.17	13594.18	0.81	0.66
Kirov region	-14582.99	-2380.78	3254.36	0.86	0.74
Orenburg region	-19597.42	-7070.88	6521.543	0.92	0.90
Penza region	-8556.65	-4855.52	4768,356	0.8	0.74
Saratov region	-12063.96	-4943.65	4696.11	0.86	0.81
Ulyanovsk region	-13470.36	-2653.00	5,064.43	0.88	0.78
Republic of Tatarstan	-92229.66	-8315.30	28847.15	0.82	0.77
Samara Region	-46435.70	-7654.70	19184.48	0.79	0.73

The obtained values of the regression equations on the basis of a unified set of exogenous factors made it possible to realize a cluster analysis of the PFD regions in terms of the degree of impact from the analyzed set of parameters on the gross regional product.

A hierarchical cluster analysis was chosen in the capacity of the main tool for grouping regions by selected features. In the process of calculations and evaluations, the informationautomated package SPSS was used. Preliminary results of calculations allowed determining the number of enlarged groups (clusters) with similar drivers of GRP growth within the limits of the analyzed set of factors (Rand, 1971).

To assess the proximity of individual objects and clusters, as well as to demonstrate the sequence of regions merging into homogeneous groups, a dendrogram was constructed based on the results of hierarchical clustering (Fig 1).

# Mari El Republic The Republic of Mordovia The

Dendrogram using the method of intra-group relationships

Republic of Tatarstan 2 Fig 1. Dendrogram using the intra-group relationships method

Republic of Bashkortostan

The data presented on the dendrogram show the main regularities in the formation of clusters located at a relatively large distance from each other. Interpretation of the results of the hierarchical analysis demonstrates the presence of three clusters.

After completing the final stage of cluster analysis using the k-means method, the values for the final cluster centers were obtained (Table 5).

Table 5. Cluster final centers

	CPI	Dollar exchange rate	Number of unemployed
Cluster 1	- 85622.96	43655.47	-11469.29
Cluster 2	24852.67	15208.22	4288.72
Cluster 3	-7205.22	6110.98	-3796.96

- 128 -

The evaluation of the clustering reliability (the coefficient of explanatory ability) is estimated at 92.2%.

### 4 Summary

So, the analysis results made it possible to identify the features of the GRP formation for the regions of the Volga Federal District within the framework of the concept of using a unified system of statistically significant factors. This opens up new opportunities for interpreting the drivers of their economic growth in a unified system of coordinates and for developing relevant proposals aimed at optimizing and improving the mechanisms for their development, both in the crisis conditions and in the growth phases of the economic cycle.

So, for example, based on the received estimates, it should be noted that the most "sensitive" regions to the fluctuations in the consumer price index are the regions of the first cluster. The CPI growth there by 1% forms the prerequisites for reducing GRP by 0.04-0.06% in monetary terms (low values of elasticity coefficients are due to the fact that the exogenous and endogenous parameters in the developed models of economic growth used indicators in the absolute value scale).

The Cluster 3 regions demonstrate the response to the changes in the factors considered, which is very similar but has a slightly lower level; those regions are characterized with a higher level of reaction to the growth of unemployment in the economy (the elasticity coefficient is of the order of 0.02%), as well as fluctuations in the external economic situation reflected in concentrated form in the volatility of the national currency.

Regions of the second cluster are less susceptible to fluctuations of the studied set of factors as evidenced by lower values of the elasticity coefficients. Such a reaction may be due to a number of reasons, the main ones being expressed, apparently, in a lower level of integration of business processes into a system of global reproductive processes. The existing organization of socioeconomic processes forms a special way of evolutionary trends expressed in a lower level of sensitivity to the external conjuncture and, as a consequence, in a weaker response to corrective macroindicators.

Thus, it can be stated that the algorithm put in a research toolkit for determining the sensitivity of regional economic systems to a unified system of factors forms stable bases for the development of adapted state policy measures. Its adaptability is expressed, first of all, in understanding the degree of regional response to the transforming parameters of fundamental factors and in the possibility of developing on this basis specific targeted measures aimed at "smoothing out" the negative effects that arise as a result of the crisis phases in the economic dynamics. The received estimates which determine the reaction of regional economic systems to the "standardized" set of exogenous factors point to the need to implement a differentiated state policy in the sphere of regional development. It seems absolutely expedient to apply the adapted measures and mechanisms of state regulation to the regions of the respective clusters. For example, based on the survey, it is clear that regions that are inherently referred to the category of "donors" (regions of the 1st and 2nd clusters) need more "tough" measures of state regulation in the face of crisis processes in the Russian national economy. This is due to their more acute "sensitivity" to changes occurring in the market and institutional environment. At the same time, this "rigidity" should be expressed, first of all, in the increased level of state support measures in the crisis phases of their cyclical development with the aim of smoothing the negative effects. On

the contrary, under conditions of economic revival and growth, attention should be shifted to the regions of the second cluster, characterized by intensification of economic growth due to inadequate response to positive impulses generated in the external and internal environment.

### 5 Conclusions

In conclusion, it should be noted that the findings are largely based on the conceptual approaches proposed in the study, based on the use of the so-called "standardized" set of factors in the process of building regional models of economic growth. This allows, as the study showed, to more accurately look at the degree of response of the analyzed subjects to the macroeconomic indicators that are transformed in time and represented in a single system of coordinates.

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# DEVELOPMENT OF THE STOCHASTIC MODEL FOR THE MEDIUM-TERM FORECASTING OF CRYPTO-CURRENCY RATE (BY THE EXAMPLE OF BITCOIN)

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Abstract: "Overflowing" the national economic systems, active growth of the global crypto-currency market forms a new type of economic relations. Despite the fact that at the current time a single (unified) approach to the legal regulation of the crypto-currency market has not yet been worked out in the world community, the crypto-currency is considered by many world regulators as a promising tool in the monetary policy of national economies. In this regard, it seems extremely urgent to solve the problem that reveals the features of the development of the market under study, as well as the possibility of its forecasting for the medium and long periods of time. The aim of the work is to find and scientifically substantiate the tools and mechanisms for developing predictive assessments of the development of the crypto-currency market. The process of economic and mathematical modeling of time series characterizing the volatility of the bitcoin exchange rate, based on the use of the ARMA class of autoregressive moving average models is the subject of the study. Based on the evaluations and calculations, it is proved that the use of the ARIMA model class in the process of modeling the parameters of the development of the global crypto-currency market allows us to predict with a high level of accuracy not only current but also future digital currency rate adjustments.

Keywords: crypto-currency market, forecasting, time series modeling, stochastic analysis, bitcoin

### 1 Introduction

Today there is observed a profound transformation of the traditional world of money and finance. Innovations in the financial sector, new technologies, tools and systems entail serious and profound changes in habitual financial institutions. One of the most important stages of these transformation processes was the emergence of crypto-currencies accompanied by the rapid development of related technologies and the lack of a clear figure for the future landscape of ecosystems (Lo & Wang, 2014).

For today, about 1500 types of crypto-currencies operate in the world. A number of them have a high capitalization, and another number can be compared with a "soap bubble".

Crypto-currency like money is an intermediary tool in the process of market exchange. So, the main function of crypto-currencies for today is the payment of goods and services or the transfer of funds (that is, as a means of payment or exchange) (Elshin & Abdukaeva, 2017; Nikolaev, 2018). Moreover, in spite of the fact that a large number of market players use crypto-currency as a means of payment or exchange for the

purchase and sale of goods and services, few of them recognize crypto-currencies as the unit of account (Nakamoto, 2008; Villalobos Antúnez & Ganga, 2016).

At the same time, a number of market players use cryptocurrency for speculative purposes, making short-term and longterm investments in them and earning on its purchase / sale transactions. During their existence, crypto-currencies (in particular, bitcoin) have proved themselves as a whole as an advantageous object for investment and the level of people's trust in them is getting higher and higher. Thus, we can assume that this category of players in some sense uses crypto-currency as a means of saving in order to continue to receive additional income (Elshin & Abdukaeva, 2017).

Despite the existing skeptical views on the crypto-currency market, the demand for the financial instruments based on crypto-transactions is not weakening; it is only rapidly gaining momentum. In this regard, attention to this tool by the international community, and state regulators is increasing day by day, as evidenced by the dynamics of the legalization of this market in the world (Luther, 2016).

### 2 Methodology

In order to identify trends that demonstrate the attitude of countries to the crypto-currency, and also to obtain a more detailed information of their legal status in different countries, an analysis was made reflecting the status of the crypto-currency for each quarter from 2013 to 2017 in 29 countries.

The following system of assessments of the legal status of crypto-currencies is adopted as a basis:

- -1- negative attitude to crypto-currency / complete ban;
- 0- the crypto-currency status is not defined;
- 0.5- the question of legalization is being considered;
- 1- recognized as partial money, commodity, asset;
- 2- legally recognized, taxed.

The results are shown in Fig1.

The analysis implemented shows that in most states the legal status of the crypto-currency is debatable and unsettled. At the same time, despite the heterogeneity of the attitude from national governments to the crypto-currency market, the latter, judging from the data in Figure 1, shows a progressive positive trend, due to the growing trends in its legalization in various countries of the world (the average of the estimates for each quarter form a time series with a pronounced linear trend). This allows us to conclude that with each analyzed period the level of confidence of the world community in crypto-currencies is growing.

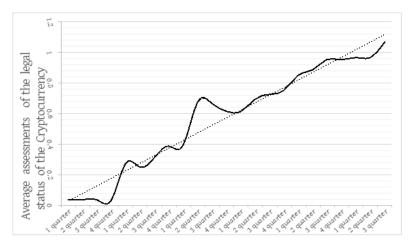


Fig 1. Average assessments of the legal status of the crypto-currency

Despite the impressive dynamics of the legalization and development of the crypto-currency market in the world, it should be noted that the market of "digital money" is still far from its final "maturity". At the same time, taking into account the emerging approaches to the attitude to the crypto-currency in the Russian Federation expressed in the activation of various structures of public authorities to the issues of its legalization and giving it a legal status, the relevance of their functions as a means of saving and accumulating can acquire a new "color" prospects. Suffice it to say that the Ministry of Finance of Russia proposed to include crypto-currency in the country's financial literacy strategy for 2017-2023 (Vranken, 2017).

At the same time, it should be noted that at the current time many economists and statesmen do not consider the factor of the influence from the global crypto-currency market on macroeconomic and financial stability as significant, even despite its exponential growth in recent years, as well as a very serious level of activation on the part of state regulators in the sphere of searching for mechanisms on regulating the crypto-currency turnover. The basis of this approach is the extremely low volume of the crypto-currency market in the overall balance of the payment system. For example, the weekly turnover of Bitcoin in the Russian Federation is only 0.006% of cash and 0.001% of the money supply (Wilson & Yelowitz, 2015).

However, in the foreseeable future, it is very likely that the scenario envisaging further activation of the market under study and its multifaceted integration into national economic systems makes it necessary to pay special attention to this issue today from the scientific and expert community (White, 2015; Perron, 1997).

In connection with the above, at the current time it is extremely urgent to search for and develop a special toolkit that allows anticipating and forecasting adjustments to the exchange rates of modern "digital money".

In all fairness, we should note that at the current moment there are extremely rare works devoted to this topic in the scientific publishing space. Questions of a research nature are mostly aimed either at an expert assessment of current and forthcoming prospects for the development of the market under consideration, or at the use of special methods of technical analysis based on currency exchange data that reveals the features and trends of exchange rate fluctuations for "digital money".

"Dipping" into the analysis of existing approaches in the current practice, aimed at modeling and forecasting exchange rates of crypto-currencies, it can be noted that forecasting the change in exchange rate is a very non-trivial task: using a fundamental analysis to predict the volatility of exchange quotations is ineffective, because the rate does not depend on the economy of a particular country. The use of technical analysis is also ineffective, since it is impossible to determine the state of the

market by virtue of the formation of demand and supply due to data from individuals willing to buy or sell certain goods or services around the world (Boxing & Jenkins, 1994).

Nevertheless, the solution for the question raised in terms of developing tools that allow foreseeing future adjustments in the medium term, is also necessary and, in our view, possible based on the use of autoregressive moving average models ARMA, ARIMA. This approach is particularly relevant in the absence of effective tools for forecasting exchange rate fluctuations for this kind of "financial assets" characterized by uneven fluctuations of rates over time, the absence of a "binding" to underlying assets, high level of speculative demand, and so on.

The purpose of this paper is to identify the autoregression model and the integrated moving average with the minimum necessary order of parameters, on the basis of which it is possible to make reliable short-term forecasts of the crypto-currency's volatility (Kantorovich, 2002).

The empirical and expert analysis demonstrated the expediency of using bitcoin as the object of research. This is due to a number of reasons, the main ones of which are presented below:

- The dominant share in the total world capitalization of crypto-currencies (about 45%)
- The most popular crypto-currency, the fluctuations in the rate of which completely determine the volatility of the absolute majority of other types of crypto-currency in the global market.

The modeling process applied to the object of research considered in this paper, is presented below with a detailed description of the sequence of solved iterations.

The calculations were made for data reflecting the monthly fluctuations of the crypto-currency Bitcoin in the period from 01/01/2014 to 18/03/2018. The source of the data was the virtual bitcoin wallet service "Blockchain.info". The calculations were carried out using the predictive analytical software Eviews, IBM SPSS.

Modeling of stationary time series, or series which can be reduced to stationary ones, can be performed using the autoregressive moving average (ARMA) models class, which is a combination of two models: an autoregression of order p and a moving average of order p. In the generalized form, the ARMA p, p0 model looks like this:

$$\begin{array}{l} Y_t = a_0 + a_1 X_{t-1} + a_2 X_2 \ldots + a_n X_{t-n} + \epsilon_t - \beta_1 \epsilon_{e-1} - \\ \beta_2 \epsilon_{e-2} - \ldots - \beta_n \epsilon_{t-n} \end{array}$$

For non-stationary data, Box and Jenkins proposed the ARIMA model (p, d, q), which after taking d consecutive differences can be reduced to a stationary form (Granger, et al, 1995), where p, d, q are the structural parameters characterizing the order for the

corresponding parts of autoregressive, integrated and moving average models.

The methodology of model selection consists of several stages.

### 3 Model Identification

At the initial stage of the study, it is necessary to find out whether the series under study has the property of stationarity.

The stationary series is a series which behavior and properties in the present and future coincide with the behavior in the past.

The stationarity of the series can be estimated using various methods. The basic methods for checking the stationarity of a time series are Dickey-Fuller extensions, and also the construction of an autocorrelation function (ACF) and a partial autocorrelation function (PACF). The calculation of the autocorrelation function is performed using the following formula:

$$\rho_k = \frac{\gamma_k}{\gamma_0} = \frac{\text{cov}(k)}{\text{var}} = \frac{\text{cov}(y_t; y_{t-k})}{\text{var}(y_t)}; \ |\rho_k| \leq 1$$

A particular autocorrelation function (PACF) is defined as a particular correlation between the values  $y_t$  and  $y_{t-k}$  "purified" from the influence of intermediate variables on them.

For the original series, an autocorrelation function and a partial autocorrelation function were constructed (Fig 2).

Autocorrelation	Partial Correlation		AC	PAC
Autocorrelation	Partial Correlation	1 2 3 4 5 6 7 8 9 10 11 12 13	0.856 0.700 0.538 0.344 0.253 0.193 0.144	0.856 -0.126
		14 15 16 17 18 19 20 21 22 23	-0.023 -0.032 -0.040 -0.046 -0.052 -0.061 -0.069 -0.078 -0.086 -0.092 -0.097	-0.009 0.044 -0.092 0.027 -0.033 0.024 -0.064 0.012 -0.036 0.017

Fig 2. Autocorrelation function and Partial autocorrelation function (Partial Correlation)

The constructed autocorrelation function is characterized by a slow decrease in the coefficients of the autocorrelation function over the decaying exponential from the value of the coefficient close to 1. A particular autocorrelation function has a high value of the autocorrelation coefficient on the first lag, and close to 0 values on subsequent lags.

Thus, we can conclude that the initial time series is nonstationary.

In addition to visual analysis, an extended Dickey-Fuller test (ADF test) was performed to verify the stationarity of the time series. The test consists in testing the null hypothesis about the presence of a unit root in the equation:

$$y_t = \alpha y_{t-1} + \epsilon_t$$

The decision on the stationarity of time series is adopted if the calculated estimates of the test are greater than the observed statistics t  $_{obs}$  (t  $_{crit}$  > t  $_{obs}$ ). The test results are shown in Table 2.

Table 1. Results of the ADF test

		T-statistic	Prob.*
Augmented Dickey – Fuller Test Statistic		3.110313	1.0000
Test Critical Values:	1 % level	-3.588509	
	5 % level	-2.929734	
	10 % level	-2.603064	

For the test series under study t  $_{\rm obs}$  = -3,11. Since the values obtained for different levels of importance (1, 5 and 10%) have values less than t  $_{\rm obs}$ , then the hypothesis of nonstationary time series is accepted.

Thus, the simulation of the bitcoin course was carried out on the basis of the autoregressive integrated moving average (ARIMA) model.

### 4 Criteria for selecting model parameters

After selecting a model, you need to choose the corresponding parameters. After taking the first difference, the original series was reduced to a stationary form, so the parameter d=1.

To simulate the dynamics of the change in the crypto currency rate, the following models were tested: ARIMA (1,1,1), ARIMA (1,1,2), ARIMA (2,1,0) ARIMA (2,1,1), ARIMA (2,1,2).

The basis for choosing the model was the functions constructed by autocorrelation function and partial autocorrelation function, as well as the calculated Akaike criterion (3) and the Bayesian information criterion (4).

These criteria allow choosing the best model from the group of candidate models. The advantage is given to the model, the values of AIC and BIC of which are minimal. The calculation is made by the following formulas:

$$AIC = \ln \widehat{\delta^2} + \frac{2}{n}r,$$

$$BIC = \ln \widehat{\delta^2} + \frac{\ln n}{n} r$$

Where  $\widehat{\delta^2}$ -a residual sum of squares divided by the number of observations.

r is the total number of terms of the ARIMA model.

The ARIMA model (2,1,1) has the minimum BIC and AIC criteria.

Thus, the final model took the following form:

$$\begin{array}{l} \Delta X = 17,\!849 + 0,\!047\Delta X_{t-1} - 0,\!296\Delta X_{t-2} - 1,\!602\epsilon_{t-1} \\ - 0,\!845\epsilon_{t-2} + \epsilon_{t} \end{array}$$

### 5 Results and Discussion

With the help of the received model, the bitcoin crypto currency rate was forecast for 4 points ahead. The results of the forecast are shown in Fig 4.

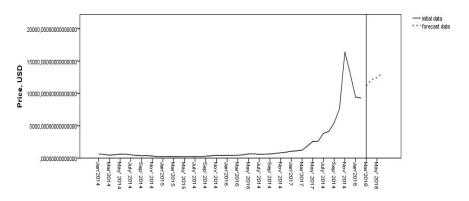


Fig 4.The predicted values of the bitcoin rate obtained with ARIMA (2,1,1)

Indicators which indicate the quality of the model obtained are given in Table  $\boldsymbol{3}$ 

Table 3. Qualitative characteristics of the model

Statistics	Average value
Stationary R-Squared	0.771
R-Squared	0.892
RMSE	165.93
MAPE	4,182
MaxAPE	39.607
MAE	102,682
MaxAE	634,788

The reliability and adequacy of the results obtained were confirmed by comparing the actual and predictive parameters of the bitcoin course, and also on the basis of the high R-squared value (Fig 5).

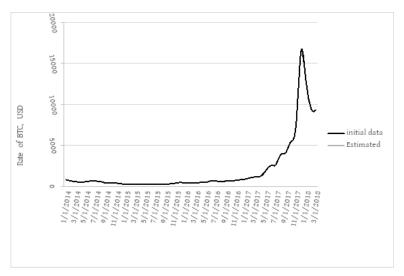


Fig 5. Convergence of prognostic and actual data estimating bitcoin / USD exchange rate

As can be seen from the presented graph, the predicted values describe the forthcoming corrections with high accuracy what is confirmed by the extremely high level of the predicted daily trend change. At the same time, undoubtedly, there are also minor discrepancies between the absolute values of the series, what is completely permissible and falls within the scope of the prognostic error.

So, in accordance with the obtained forecast estimates, the dynamics of the bitcoin course in the next 4 months will take a stable positive trend (Fig 6).

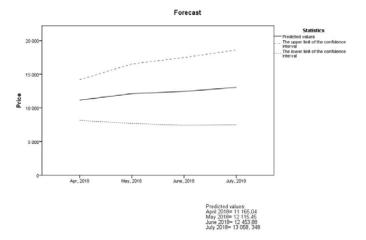


Fig 6. Predicted values

By the end of the third quarter of 2018, its stock price will be about \$ 11,000. It is important to note here that the methodological modeling approaches used in this study allow us to determine not only possible future trends in the fairway of which corrections will occur, but also fluctuations in exchange rates throughout the forecast period of time. The expected slight adjustment in May 2018 will be insignificant and will not affect in any significant way the positive overall predicted trend within the analyzed period of time.

### 6 Summary

The obtained results in many respects testify to the prospects of the chosen forecasting tool based on the use of autoregressive algorithms and integrated moving average. However, it should be noted that the model constructed requires further improvement. So, for example, in connection with the high variability of the study series, it seems appropriate to apply stochastic volatility models.

Summing up the realized estimations and the developed methodical toolkit it is necessary to note a very high level of its perspective within the framework of business processes modeling based on the use of crypto-transactions. This is due, first of all, to the urgent need to understand and predict exchange rates of the crypto-currency, since its use in economic circulation forms very high risks of financial losses of economic entities caused by significant volatility.

### 7 Conclusions

In view of the above, the methodological approaches proposed in the study greatly expand the opportunities for predicting and forecasting the parameters of the digital money market development for a period of 3 to 4 months, which forms a firm basis for developing medium-term behavior patterns of economic agents involved in the process of crypto-transactions. In addition, the trends of recent months characterized by the activation of the legalization processes of the world's crypto-currency market, including Russia, actualize the need to predict the market under study for more "deep" time horizons than is accepted in most models of technical analysis, which is an integral part of the generation of analytical estimates on the exchanges. As calculations show, the presented methodical approach is able to solve issues that are so important for today's economy.

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# DIAGNOSTICS AND FORECASTING OF MEDIUM-TERM BUSINESS CYCLES: METHODOLOGY OF THE ANALYSIS AND ITS APPROBATION BY THE EXAMPLE OF PLANNED ECONOMY IN THE USSR

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Abstract: The development of socio-economic systems is characterized by the cyclical dynamics of the changes taking place there. These changes affect various aspects and levels of economic system and its structure, forming a number of regularities. Among them, of considerable interest are the regularities of economic cycle's development. No less interesting is the fact which factors influence the structure of the reproduction processes of the national economy, as well as the processes by which the main economic agents make decisions. The latter, in turn, largely determine the nature and dynamics of phase shifts within the economic cycles. The object of our study is the evolution of national economy for the period from 1947 to 1990 in the context of modeling medium-term expectations of economic agents to identify the trajectories of cyclical development phase shifts formed as a result of the transformation of behavioral models. This allowed not only to identify the parameters of medium-term economic cycles within the analyzed period within the time horizon under consideration, but also to scientifically substantiate them using the multivariate analysis methods and the main drivers of phase shifts in the identified cycles. The methodology of the research is based on the tools of economic and mathematical modeling of the studied set of factors, the mechanisms of cross-correlation analysis of time series, generalization and grouping methods, and the descriptive analysis. Based on the developed methodology for constructing cycles of rapid development and its approbation to a system of statistical data characterizing the growth dynamics of the planned economy in the USSR, the effectiveness of the developed toolkit for identifying the cyclical development of the economy has been proved, what is confirmed by comparing the obtained economic cycles with the data of other Russian researchers.

Key words: medium-term economic cycles, prediction, national economy, phase shifts, rapid development cycles, economic growth modeling, factor analysis.

### 1 Introduction

Analysis and diagnosis of the cyclical development of the administrative-command economy has a number of specific features. They were expressed in the fact that traditional, classical tools and mechanisms for regulating macroeconomic generation do not have a stable institutional basis (Maximo & Perez, 2002). At the same time, in order to understand and define the paradigm of transformational processes in the economy, it is necessary to determine precisely the leading mechanisms that trigger the transformation processes which formed the basis for phase shifts within the cycles. In the economic system which belongs to the administrative-command type, these mechanisms have a qualitatively different structure (in contrast to the market economy) what in turn determines the unique features of the generated cyclic shifts (Chaffin & Talley, 1989).

In other words, the study of the USSR planned economy cycles, as well as of any other cycles characteristic to the administrative-command system, should take into account the above-mentioned features. Taking into account also the fact that state intervention in the economy is aimed in large part at adjusting the institutional and conjuncture parameters of a dynamically changing social environment, the need to use factors that take into account this fact in the model becomes the most important task in the theory of cyclical development of a planned economy (Berge & Jordà, 2011; Villalobos Antúnez & Bozo, 2010).

### 2 Methodology

Earlier, within the framework of publishing a number of author's works devoted to the topic of modeling economic cycles on the basis of constructing and evaluating the expectations of economic agents, we presented in some detail the methodological apparatus that reveals the features of identification of cyclical fluctuations in the economy of short-, medium- and long-term nature, based on the construction and evaluation of the expectations of economic agents. In a concentrated form, this concept can be presented in the form of an assumption that cyclic development cannot be characterized as a regular phenomenon occurring in time, on the contrary, the irregularity of changes in the phases of economic cycles is quite a natural process. Thus, the determination of an occurrence probability of these phases and their duration is represented by a complex function with a set of undefined variables. In this connection, there is a need to develop, scientifically substantiate (verify) and approbate models of cyclic fluctuations based on such factors that would have a high level of sensitivity to changes in the external and internal environment of the economic system. Such factors, as already noted and justified above, are, first of all, the expectations of economic agents. Their identification and quantification greatly contribute to an understanding of fluctuations of economic activity in the future, and, as a consequence, the prediction of phase shifts in economic cycles (Chauvet & Hamilton, 2006; Kolesnikova & Kamasheva, 2017).

The methodology used in this study is based on the use of a multi-factor approach, that is, the identification of a set of factors that affect the expectations of economic agents, and, consequently, the economic activity of the system as a whole. In this approach, the analyzed factors are first combined into subindexes, which are the sum of a set of weighted average estimates for the components being analyzed. Based on this system of indicators that characterize certain types of activity and behavior models, and on the index method, an integral (composite) or consolidated index is calculated - the "Rapid development cycles index". In this case, this work refers the rapid development cycles to periodic stable fluctuations in the expectations of economic agents with special types of regularities that are subject to a change in short-, medium- and long-term conjuncture and institutional factors and form the conditions for phase shifts in economic dynamics on the basis of transforming current and mental assessments of the upcoming transformations in the future, which allows on the basis of known postulates of the expectations theory to improve the quality of the regional prediction, timely predict the turning points of the phase shifts of the economic cycle, depending on the programmable (identifiable) parameters of the expectations of economic agents.

Since the expectations theory is the basis for the study of cyclic development, simulated cycles will have significant predictive properties and predict the turning points of any cycle depending on the composition of the factors used and the magnitude of their lag values (Marat et al, 2016)

The prediction horizon is determined by the lag values of the factors that fit into the paradigm of logic and scale of the cycle under study (Table 1). The lag size in a model is determined by the average length of the cycle phase.

Table 1.	Prognostic horizons	of simulated cycl	les of rapid	d developmen	t depending o	n their length and scale

No.	Length of the analyzed cycle, years	The value of the applied lag, years	Prognostic period, years	
			min	max
1	40 - 60	8-10	8	10
2	7 - 12	5	5	=
3	2 - 4	1-2	1	2

Thus, the methodology for working out rapid development cycles that is implemented in the paper allows us to evaluate and predict the phase shifts of the economic cycle, depending on the definition of the scale of lag values (Elshin, 2017).

In a generalized form, the structural-logical scheme for simulating cycles of rapid development is presented in Fig 1. (Elshin, 2017).

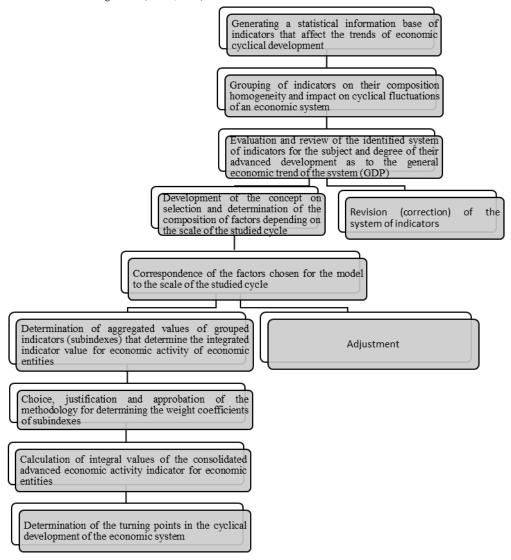


Fig 1. Structural and logic scheme for modeling the rapid development cycles

The search for solutions aimed at identifying the system of factors for the subject and the degree of their rapid development relative to the general economic trend of the system (industrial production index) was realized through the use of cross-correlation analysis tools (Gumerov et al, 2008).

### 3 Results and Discussion

Based on the results of cross-correlation analysis, the final composition of the factors included 19 units of the originally defined list of 52 units.

The index method of analysis provides for the decision of a question on a choice, and a substantiation of a methodology of definition of weighting coefficients of subindexes. In our study, the method of taxonomic analysis was used as the most methodologically "rapid" method for determining weight coefficients. It is based on the determination of distances between points in a multidimensional space, the dimension of which is determined by the number of factors participating in the model

The implementation of the above methodological procedures allows us to proceed to the final stage - construction of the so-called composite index of rapid development (IOD). The value of this indicator which estimates the expectations of economic agents consists of calculated series of indicators, or subindexes.

In the form of a formula, the calculation of IOD is as follows:

$$II = W_1 * I_{Ii} + W_2 * I_{2i} + W_3 * I_{3i} + W_4 * I_{4i} + W_5 * I_{5i} + W_6 * I_{6i} + W_7 * I_{7i}$$

Where *Ii* is the value of the leading development index (IOD);

*I* - the period value (year in our case);

 $I_{Ii}$  - index of urban development in the i- th year;

 $I_{2i}$  - index of human capital in the i- th year;

 $I_{3i}$  - index of production and resource development in the i- th year;

 $I_{4i}$  - index of institutional and cultural development in the i- th year;

 $I_{5i}$  - index of development of economic activity in the i- th year;

I 6i - index of scientific research potential in the i- th year;

I 7i - capital change index;

W  $_1$ , W  $_2$ , W  $_3$ , W  $_4$ , W  $_5$ , W  $_6$ , W  $_7$  are the weight coefficients of the corresponding indices.

The implementation of this stage allows us to obtain a quantitative and graphical interpretation of the rapid development cycles.

The use of the rapid development cycles laid in the basis of the methodological model and their development diagnostics mechanisms makes it possible to identify the contribution of each factor to the trajectory of the rapid development composite index (Table 3, Figure 2). The values of the indices are defined as the weighted sum of the standardized values of the analyzed series, generalized by the group attribute, constructed on the basis of the factors revealed by the results of the cross-correlation analysis.

Based on the results of the analysis, six subindexes of seven were included in the composition of the factors determining the medium-term cycle dynamics of the rapid development of the USSR's planned economy. We did not include the capital changes subindex, because the factors determining its quantitative assessment are extremely short-term and cannot influence the expectations of economic agents with a long planning horizon.

The lagged parameters under study as well as the weighting factors of the subindexes are defined within the framework of the developed methodological approaches and the studied medium- and long-term developmental cycles (Table 2 and Fig 2)

Table 2. The weight coefficients values for subindexes of the composite index for the USSR's rapid economy development in the period from 1947 to 1990 (medium-term cycles)

No.	Subindex name	Weighting factor value
1	Index of change in urban development ( I $_{\rm 1}$ )	0. 178
2	Human Capital Index ( I 2 )	0. 161
3	Production index ( I 3 )	0. 154
4	Index of social well-being ( I $_4$ )	0. 162
5	Index of economic activity ( I $_5$ )	0. 180
6th	Index of research capacity ( I 6 )	0. 165

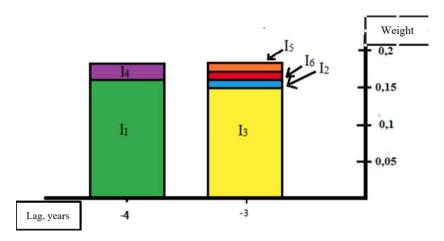


Fig 2. Influence of the aggregative rapid development indicators (subindexes) on the nature and dynamics of the medium-term cyclical development of the USSR economy in the period from 1947 to 1990.

Comparison of the results presented in Fig. 2 for assessing the lag values of the priority development subindexes and their weight coefficients allows us to determine the degree of their individual influence on the macroeconomic generation processes and the cyclical development of the administrative-command economy of the USSR. The implementation of this stage of work is aimed at conducting a comparative analysis of institutions regulating the priority development cycles in the medium-term development prospects.

From the point of view of estimating the weighting coefficient, and the subindexes (in the decrease order of weight values), such as the index of economic activity ( I  $_{\rm 5}$  ), the index of changes in urban development ( I  $_{\rm 1}$  ) and the index of the research potential ( I  $_{\rm 6}$  ), have the greatest impact on medium-term macroeconomic trends). The weight coefficient values for the group of subindexes in the definition of the rapid development composite index are within the range from 0.165 to 0.180.

The lag values for the priority subindexes are characterized by a very significant spread in the presented set. The lowest level of the lag variable (5-6 years) refers to the subindex reflecting the ongoing adjustments in the production sector (production index - I  $_3$ ). The research potential index has the maximum value. It is noteworthy that the economic activity index (I  $_5$ ) describing changes in economic agents' expectations, due to a result of the transformation processes in the "consumption - savings - investment" model, also has a very high value of the lag variable (11 years).

### 4 Summary

So, the results of the experimental evaluations demonstrate that the dynamics and speed of phase transformations in the mediumterm rapid development cycles of the administrative-command economy in the USSR were most affected by the subindex which estimates the expectations of economic agents regarding the changing production conditions in the economy. Thus, one can observe the synchronism of classical and administrative-

command mechanisms for the generation of medium-term economic cycles based, primarily, on the basis of overproduction crises.

In addition, subindexes related to the institutional group and forming representations of economic entities on the prospects for the development of human and urban potentials have a significant influence on the medium-term cyclical fluctuations in the planned economy.

There were obtained results based on the evaluations and calculations according to the methodological approaches outlined above, the results determine the nature and trends of the medium-term cyclical development of the USSR economy (Fig 3)

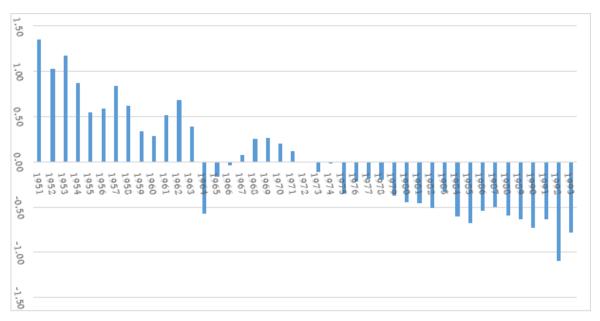


Fig 3. Medium-term cycles of rapid development of the economy in the USSR in the period from 1951 to 1990.

During the period from 1951 to 1990, 4 medium-term cycles of rapid development have been identified (Table 3).

Table 3. Medium-term cycles of rapid development in the economy of the USSR in the period 1951-1990.

Medium-term cycle of rapid development	Short-term cycle of rapid development	Downward phase	Upward phase
1955-1964	1955 - 1960	1955 - 1957	1957 - 1960
1933-1904	1960 - 1964	1960 - 1962	1962 - 1964
1964-1975	1964 - 1975	1964 - 1969	1969 - 1975
1975 - 1985	1975 - 1980	1975 - 1978	1978 - 1985
1973 - 1983	1980 - 1985	1980-1983	1983-1985
1005 1002	1985 - 1990	1985-1987	1987-1990
1985 - 1993,	1990	1990 - 1987	1987 - 1993

According to the developed methodological approaches, the cycles of rapid development form a system of expectations of economic agents whose change predetermines real changes in the economy with a certain lag in the model. Since in this case

we are analyzing the medium-term developmental cycles which subindexes have lag values on average about 5-6 years, the real cycle trajectory should have a shift by the corresponding number of years (Fig 4).

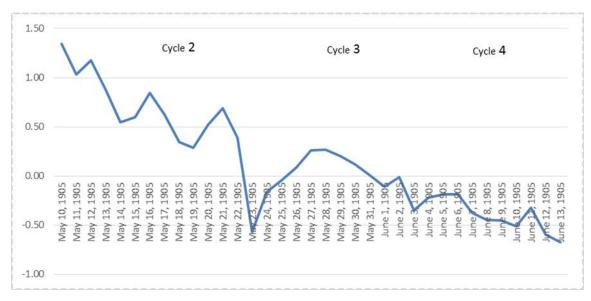


Fig 4.Pedictive assessment of the medium-term cyclical development of the economy of the USSR

### 5 Conclusions

The developed structural and logical model for assessing the rapid development cycles based on the modeling of the leading indicators system characterizing the institutional and conjuncture transformations; it allows us to accurately identify future shifts in the economy with a lag of 5-6 years. This effect is achieved as a result of the conceptual framework laid down in the developed methodology, which is based on the principle of programming the expectations of economic agents regarding the prospects for the medium-term development of socio-economic processes. Thus, with a high degree of confidence and validity, it can be argued that the methodological apparatus used allows not only to identify cyclical fluctuations in the economy, but also to predict phase shifts within the cycles 5 to 6 years prior to their formation. In addition, the proposed conceptual model allows us to largely escape from traditional prediction models based on the extrapolation of cyclical economic data for future periods. The predictive functions of the model are provided as a result of the estimated adjustments to the expectations of economic entities that form the basis for current, medium and long-term trends in the socioeconomic development of the national economy. Thus, it can be stated that the model tools provides predictive diagnostics of the cyclical development of the economy, which largely ensures the accuracy and predictability of measures developed by public authorities aimed at the maximum possible smoothing of negative trends. In other words, the implemented approach promotes an expanded understanding of the prospects for phase shifts within the cycles and thereby "warm up" optimistic sentiments at the time of a decline in expectations and, on the contrary, "cool down" the excessive business activity of economic agents during periods of intense expectations about the long-term trend (Yakovets, 1997; Chauvet & Piger, 2008).

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### DISCURSIVE VALENCY AND ASPECTS OF ITS IMPLEMENTATION

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Abstract: The article deals with the valency of the word and its associative possibilities in the space of literary discourse, reveals author's priorities in the figurative interpretation of the lexme типина / silence in the works by I. A. Bunin, characterized by its lexical-semantic compatibility at the level of binary compounds and within the expanded context. The analyzed ways of verbalization of the author's meanings at the level of contact and distant bonds made it possible to reveal cognitive-mental and emotive spheres of the poet's consciousness, as well as to interpret the phenomenon of I. A. Bunin's Universum as a complex phenomenon, which determines its uniqueness and originality in Russian literature. It is stated that the textual realization of words within the conditions of literary discourse leads to the integration of various aspects of reality and recreates the author's perception of the world, based on the inseparable, interpenetrating unity of objective and subjective, logical and sensual, rational and emotional. The research is based on the synthesis of traditional and modern methods for analyzing the realization of a literary word: component, discourse-text analysis of names, as well as cognitive-hermeneutic text analysis, which allows to elicit the correspondence existing between units of text, the information coded by them and the mental structures behind this information, or their elements by studying the nature of the links between them. The authors come to the conclusion that the literary space of the author's texts is conductive to the actualization of the hidden possibilities of the word, expose the symbolic components of the lexemes being examined, pointing to the author's individual idea of silence as a sign of overcoming time and space, conjugate with fundamental values and axiological categories and associated with harmony, happiness.

Keywords: semantics, syntagmatics, the factor of the unconscious, associativity of speech, phenomenological valency.

### 1 Introduction

The change of worldview and cognitive benchmarks in modern science led to the humanitarization and axiologization of cognition, thus defining its "human dimension". "The anthropological turn" can be related to the aspiration of man thinking to enter those spaces of thought where internal intentions that make the researcher take "a step beyond the horizon" are reproduced in order to consider what is beyond the bounds of the actual possible and find means of expression for those spaces where the replacement of scientific (and not only scientific) paradigms occur (Yusupova et al, 2016).

Modern linguistics lays emphasis on researching the interdependence of linguistic consciousness of the native speaker and the compatibility of words in language and speech, which "reflects their essential, profound characteristics associated with the images of specific objects in the natural language" and thereby reconstructs a certain fragment of the linguistic image of the world. Accent is put on the study of discourse space with due consideration of both lexical and predicative units within the boundaries of the text, as well as the minute, nano-deep elements of meaning that remain outside the usual decoding of words and utterances (Yusupova et al, 2016; Rakhimova et al, 2017; Fatkhutdinova, 2015).

The study of subject and non-subject discursive syntagmatics based on the material of fiction can contribute to determining the structure of the language invariants of the entities under consideration, as well as their variants. The investigation of associative and figurative images, that reflect the author's individual style of the writer, makes it possible to define the correspondence that exists between the units of the text, the information coded by them and the mental structures behind them, or their elements, by studying the nature of the relations between them (Worth, 1963; Fauconnier, 1994).

### 2 Methodology

The material for analyzing the compatibility of lexical and predicative units in the literary discourse was the works by Ivan Alekseyevich Bunin, where the combinations of words carry "the emotional potential of great strength", allowing the reader

as if "to get into the characters, penetrate into their inner world, master the usual current time, the usual vision of a familiar landscape, exacerbating the intuitive sense of nature ...", they show not only the ability to view the world in their own way, but also the essence of the literary and aesthetic position of the writer, revealed by him in the following statement: "Regardless of what is described and what place in the works of a writer the things, nature, tangible world are, there is a need for figurativeness, that is, the ability to evoke the reader's sense of being and visibility of the described" (Fedoulova-Touja, 1983; Villalobos Antúnez & Bozo, 2010).

Analysis of images of perception in the works by I. A. Bunin points to the important role of the acoustic component, which determines the artistic and semantic whole of his works. The process of selecting the lexical material associated with acoustic perceptivity and its semantic-descriptive analysis further revealing both the idiostyle of the poet and the philosophical and spiritual understanding of the world (Bunin, 1929; Mamedov, 2017)

Aiming at the consideration of syntagmatic objects in the sphere of discursive development of speech predetermined the nature of the combination of traditional and modern research methods: the methods of component and distributive text analysis of names, that enables to find out a range of semantic variations of linguistic units; the cognitive-hermeneutic text analysis, that suggests penetrating into the deep layers of the author's intention, disclosing an implicit content of the text.

### 3 Results and Discussion

The lexeme silence (stillness) chosen for analyzing in the text space of Bunin's works undergoes a number of semantic transformations, revealing implicit information that mirrors "possible worlds" with various fullness and representing a stereoscopic holistic associative image in accordance with the author's intentions. Since "silence is a natural phenomenon transported into the human world", the implementation of this lexeme in the text "highlights" those structures of knowledge that are related to the conceptualization of reality and are a projection of mental and spiritual activity of man (Arutyunova, 1976).

The observations show that the lexeme тишина / silence, used by the writer primarily to describe the natural world, can simultaneously emphasize in its semantics both this "absence of noise, silence", and this "rest, peaceful state", fixed for a given word in the dictionary .The fact that there is a lexical ambiguity, manifested here in combining the sound and non-sound meanings of the word, is obvious (Ozhegov & Shvedova, 1999). This is indicated by the attributive combinations such as "night", "midnight", "early morning", "evening", "winter", "mountain" silence, "silence of the mountains", "silence of the night", as well as expansion of compatibility in the binary formations at the expense of more extended substantive-attributive blocks: transparent stillness of the first spring days, cool stillness of the morning, the stillness of Sunday morning, the stillness of a bright summer morning, the stillness of the village May dawn, the silence of the thick forests, the silence of the cemetery alley and so on.

The state of quietness accentuated by the lexeme is supplemented by a spatial component: Bunin's silence is deep, i.e. enveloping and overwhelming all the surrounding space. Projecting onto the inner world and thus acquiring the subject, silence does not lose the connotation of rest: In the deep silence, the nightingale's deep singing was reverberating distinctly and carefully over the garden («The Last Day»); Everything was drowning in these unusually mild twilight, in the deepest silence of the earth, the warm night («Mitya's Love»).

Bunin's principle of representing the world, based on the ability to synesthetically sense the perceptive property, goes back to "the idea of the whole" and is verbalized in the syntagmatic compounds of lexical units related to the emotional and perceptual spheres: No one, like you, gives me that sense of soft quiet ... that light («The Liberation of Tolstoy»); I <...> began to wait for her, lying on the Turkish couch, listening to the drowsy silence of the manor and the already languorous, afternoon singing of the birds in the garden ... («Natalie»).

Silence is always conjugated with the inner world of the subject (the narrator) and is evaluated as an event of inner being, as indicated by the epithets, such as sad, sullen, strained, heavy, terrible, dead, lifeless, nasty), etc: and the languishing silence of the house and my monotonous reading were broken only by the steps of my tutor «In the Beginnings of the Days»; <...> we are waiting, sitting in a breathless silence and dusk «Arsenyev's Life. Youth».

Association of silence with death, the other world creates emotionally loaded images of perception of the surrounding world, defined by the author within the expanded context. The model "silence – death" includes the emotions and psychological states such as horror, loneliness, emptiness, grief, etc, At nightfall there fell a stunned silence, emptiness. The museum's house is a large, three-story building - it stands on a cliff above the port («Diaries» (1900-1909); I, who knew the stony silence, I, who knew the desolation of darkness («The Inscription on the Gravestone».

In the complex sentences of the pronominal-conjunctive type, silence is depicted in detail, thanks to which a complete picture of this phenomenon is created. At the same time, the descriptive nomination of a high degree of the feature presented by the subordinate part, on the one hand, replenishes the deficiency of the lexicon, which focuses on the relevant semantics, on the other, orienting itself on eventuality, makes it possible to differentiate, concretize and verbally individualize the representation of a high degree of sign: And in the world there fell such terrible silence that only the excited heartbeat of Ignat remained «Ignat»; And such a grievous silence of the sky-high kingdom clung to all these gloomy mountains, which excluded the slightest sign of life «Little Romance »; The silence is such that your giving deep-drawn sigh seems to echo all over upper part «Diaries», etc. The specificity of the cited pronominalconjunctive sentences is that they concentrate on expressing the quantity intensifying semantics rendered in a descriptive way in reliance on the situation of the effect / result realized by the subordinate part.

In a number of cases, the semantics of the lexeme silence have the presence of the meanings opposite in their nature. The word тишина (silence) develops author's individual figurative meanings, which include the associative seme 'connected with harmony / disharmony'. I. A. Bunin writes in "Sukhodol": And the deep stillness of the evening, the steppe, the deep Russia reigned over all ... (Sukhodol). Here silence is a state of desolation. Compare: Silence — and desolation, not impoverishment, and desolation ... «The Golden Bottom».

In the author's interpretation the association of silence with desolation appears in spatial images, which is manifested in expressive constructions with semantics of intensity: There are many desert roads and fields in Russia, but it is yet to seek such solitude, such silence. And the coachman said to me: "That, sir, is Muravsky's road ... «Muravsky's Road». The opposite of the meanings of one and the same word is connected with the understanding of different nature of silence. Here, silence arises from the absence of motion, inactivity of a person, society, state and conveys the idea of unnatural, disharmonious.

In the story "Croppers", the lack of movement is associated with the natural state of fields and forests, silence is associated with freedom and harmony of the world: And they were walking and singing in its eternal field silence, simplicity and primitiveness with some epic freedom and selflessness «Croppers»; There was great stillness above empty fields, above ravines, under the whole of the great Russian steppe «The Last Date».

A special aesthetic effect is achieved when used in the context of lexemes, marked by negative and positive evaluations. This association of lexemes contributes to the emergence of axiological ambiguity in the contexts under consideration, which induces a sense of awe and mystery in the mind of man An ambivalent assessment of silence becomes the basis of the fictious situation presented in the story "The Golden Bottom":– Ah, what silence! – I say. - This is no end of it! – the studentnephew agrees with a sullen irony <...> Indeed, silence, the dreadful, damn it, silence, silence! «The Golden Bottom». All these examples illustrate that the sense content of the analyzed unit is enriched with the sign that 'reflects axiological values'.

In Bunin's poetic world, silence as a stable state is also comprehended in ontological correlation with the fundamental values of being, with the most important axiological categories. Silence is understood not as a complete absence of sounds, but as something existing, closely connected with the world. This view in human culture is conceived as a state that is natural for religious consciousness, which does not accept the idea of absolute emptiness, i.e., detachment from God, for such detachment is death. The semantics of this lexeme can be supplemented with the sign 'divine', and verbalization of the meaning occurs at the level of lexical compatibility (sacred, unearthly, etc.) and within predicative units, realizing the attribute features of the lexeme through descriptive nominations: All was silent / In a humble and sacred silence, / And the sun brightly lit up the dome / In an incomprehensible height) «Aya Sophiya»; Only God is eternal. He is in the night unearthly silence"; There was such silence was, / That the voice of God was heard in it, / Great, eerie for the earth / And distinct not to the earthly ear, / But only to the immovable spirit («Like the smoke of a fire, the cloud went on ... ».

It is significant that in the depiction of silence there take place an oxymorons as the dominant feature of Bunin's idiostyle, manifested in author's individual acoustic images (reverberating silence): I was alone in the whole universe, / I was like its god - and it was me, / Only me who heard that premature / Voice of the abyss in the quiet silence «I Was Alone in the Midnight World », or within the whole utterance with opposition of singing nightingales, daytime noise to silence, etc.: And such enchanted silence reigned around, - there were nobody but the nightingales resounding from the end to the end of the park «Mitya's Love»; Impressive silence replaces the noise of the day and merry songs of the villagers «Antonovka Apples».

Bunin's characteristic anthropocosmic attitude is expressed in the idea of the immortality of nature, its infinity and incomprehensibility, explicating the symbolic layer of the meaning of the lexeme of тишина (silence). The author's meaning "silence – mystery, enigma" is realized most often in the context of an expanded context: And the eternal silence of these fields, their mysterious silence ... «Arsenyev's Life. YouthAnd when I looked up, I again thought that this month was the pale image of some mystical vision, that this silence was a mystery, a part of what is beyond the cognizable ... why all this is not simple, but full of some deep and mysterious meaning?".

Philosophical interpretation of Bunin's silence in the eponymous story leads to the level of its symbolic comprehension, silence here appears as a sign of the existence of another, unearthly being, in which happiness is possible. The silence in this story is not the absence of sounds, but something "that has no name in our language": Life has stayed somewhere beyond these mountains, and we enter the blessed country of that silence, which has no name in our language, which Bunin himself called the Deep, Eternal Silence: It seems to me that someday I will merge with this eternal silence, at the threshold of which we are standing, and that happiness is only in it.

### 4 Summary

The observations have shown an axiological ambiguity of silence in the material under consideration. In the context of Bunin's works, the semantics of this lexeme includes the semes

such as 'soundlessness', 'silence', 'desolation', 'oblivion', 'emptiness', 'lifelessness', which is especially characteristic of descriptions of nature and the environment of the characters. The projection of silence onto the inner world of man actualizes the symbolic components of this lexeme, pointing to the author's individual idea of silence as a sign of overcoming time and space, connected with fundamental values and axiological categories and associated with harmony and happiness. These meanings are realized within the framework of contact (binary) compatibility and at the level of the extended context providing distant communications and relations of the concepts. In the descriptive nominations of a high degree of feature, realized within predicative attributive relations, the subordinate part, along with the metatext semantics, also expresses the modular semantics of the evaluative and emotive character.

### 5 Conclusions

Consideration of the discursive valency of the lexeme silence in the works by I. A. Bunin is a confirmation of his words about the inseparable unity of nature and man: "... One cannot separate man from nature, for every motion of air is the motion of our own life ...".

To the specific methods of the author's conveying silence, one can refer the synesthesia of meanings that combines the multidirectional characteristics of the described state, as well as the axiological ambiguity of perception, the combination of opposite evaluations of this phenomenon.

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### EXPRESSIVE INCOMPLETE SENTENCES IN TATAR AND FRENCH LANGUAGES

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Abstract: The present stage of development of linguistics is characterized by keen interest in comparative studying of languages. The problem of comparative studying of languages is a subject of linguistic researches in many works of domestic and foreign scientists. Article reveals features of realization of expressional syntax of the Tatar and French languages. Expressional offers of incomplete structure of the Tatar and French languages are specialized syntactic means and serve for realization of category of an emotional expression. An integrated approach to studying of the syntactic units presented in different system languages in several aspects is represented relevant: substantial, structural, culturological within axiological approach and also from positions of linguistic and extralinguistic meanings that opens access to studying the way of worldview of representatives of different nationalities. The scientific novelty of a research is as well that in it the syntactic units of different structure languages functioning in different societies are for the first time studied in the comparative plan. The research showed existence of similar typological lines that, in turn, demonstrates a certain similarity of the Tatar and French languages belonging to various language families. The existing divergences are shown generally in the field of structure of the studied offers in the compared languages.

Keywords: emotional and expressional offers, emotional and expressional factor, communicative situation, incomplete sentences; parcelled designs; connecting designs.

### 1 Introduction

The specifics of any language are shown in the course of the comparative analysis of the concrete language facts within similar categories of the learned languages. Data on lines of similarity and difference between the compared languages allow promoting by prevention of interference to more reliable acquisition of a foreign language.

The modern linguistics is designed not only to be engaged in studying of language, but also to solve problems of mutual understanding between people in all spheres of life. The emotional and expressional incomplete sentences considered in this work connect basic expressional function of language and the basic functional purpose that serves as means of expression of semantic volume category of an emotional expression. The expressional task of these offers based on a pauzation consists in violation of smoothness of a current of the text that opens broad lands for implication (Malinovich, 1983). Incomplete sentences depend on sense of the main sentence and independently do not function since they would not be understood (Polezhayeva, 2013; Villalobos Antúnez, 2013).

Besides, such factors as the combination on one time base of the factual event and the emotional relation speaking to this event which is the synchronous act and also specific intonation allow to combine in structure of an incomplete sentence sense of the main thing and subordinate clause at the same time therefore the syntactic position of the main clause remains not replaced only formally (Zakiyev et al, 2007; Khabibullina & Vassilieva, 2015).

### 2 Methodology

In the course of work various general scientific and linguistic methods of the analysis are used: deductive and inductive methods of a research, correlation of the language and social phenomena, an observation method over language material, the semantic, syntactic, contextual, derivational analysis. In work linguistic methods and receptions of the analysis of the actual material are used: comparative and comparative which allows defining similarities and differences between two compared languages; to define system compliances and discrepancies between the compared languages; to establish the reasons of similarities and distinctions. The considered receptions of a comparative and comparative method and model of typological researches are purposefully used for definition of linguistic

universalia. Object of a research dictated need of use of text methods: methods of complete text analysis and the contextual analysis are applied to establishment of emotiv subjects and emotiv structure of texts; need of consideration of functional and stylistic features of a text emotivity demanded attraction of a method of the functional and stylistic analysis; by consideration of emotiv language means and their combinations in texts the method of the distributive analysis and a method of emotiv valency was used (Abdullina et al, 2016).

### 3 Results and discussion

There are various points of view concerning the nature of emotional and expressional offers of incomplete structure. Many researchers consider transformation incomplete in independent offers result of separatization of complex sentences (<u>Sadykova</u> & Aleeva, 2014; Timofeeva et al, 2017).

It should be noted that in syntax of modern Tatar and French languages wide dissemination of emotional and expressional offers of quasi-additional structure which are considered as "parcelled designs" is observed. Emergence of parcelled designs is connected with manifestation of features of live informal conversation in the literary language. The specified designs in Tatar became a subject of special studying in F.S. Safiullina's works (Safiullina, 1978).

Emergence of connecting designs, according to M.Z. Zakiyev, is directly connected with communicative partitioning and a word order. In a stream of live informal conversation especially important rheme as a part of a complex rheme from the usual place moves out of intonational limits of the offer. But as the subject of this especially important rheme absolutely coincides with a subject of the previous offer, this rheme semantic is not made out as the separate, following offer, and joins previous Zakiyev, 1992).

In the analysis of structure of the text, V.G. Gak considers parceling as the phenomenon opposite to a super-compound sentence, "execution of one statement in a number of intonational isolated pieces". According to the scientist, these speech units separate points as independent offers. Possibilities of parcelling separate sentence parts in both languages are various. Structurally less connected elements which the uniform and isolated members treat most often are exposed to parceling. The main members, additions, except for circumstances, in much smaller degree are subject to parceling (Gak, 1981).

Emotional and expressional offers of incomplete structure in our work are considered as "parcelled designs" which are used independently and serve for expression of expressional syntax of the Tatar and French languages.

Incomplete sentences in both languages may contain some coordinative, subordinating conjunctions:

He quit them all. Forever. François did not see such table as this. And these writers! Always ready to exaggerate! This is the madman ... even worse! Zombie!

Let's address consideration of those conditions which allow emotional and expressional offers of incomplete structure to function as volume language units in the semantic relation. A constant in these offers is the fact of objective reality, and a variable - the emotional relation speaking to this fact:

Such beautiful eyes! And curls too. Atasa – is peasant. His father – is a peasant. Poor. Le notaire est mort. Je l'ai aperçu tout à l'heure au bord de la route. Pauvre type . / The notary died. I just found him on the edge of the road. Poor guy. Olga! Qu'estce qui vous amène ici? Surprise! / Olga! What brings you here? Surprise!

Concentration to incomplete structure of two semantic lines indicates the difficult semantic volume concluded in structure of

these offers. Manifestation of the language economy allowing keeping balance in language is shown these. For the purpose of achievement of the total sintactic-semantic characteristic of these offers it is necessary to specify that they serve expression of subjected semantics of the person. Intensive expression of emotional and expressional values is reached by various level means and therefore the quantity of markers considerably increases. The emotional and expressional syntax is just that transitional sphere of language structure where separate elements of a subsystem adjoin and often duplicate each other that demonstrates mobility and mutually permeability of subsystems of language (Zamaletdinov & Faizullina, 2015).

One of important and possible ways of systematization of syntax of the offer is the morphological criterion which became a basis for a research of expressional offers of incomplete structure of the Tatar and French languages. The following structural kinds of incomplete sentences of the Tatar and French languages differ:

1. Incomplete sentences of the compared languages where parcelled subject with simultaneous replacement with his another (uniform):

Even the dog won't abandon itschild. Neither cat, nor wolf. Here the scope, width is felt. Not the latitude of fields, but breadth of soul. All this I wanted to tell you. Miracle. Imagination is not deception. Oh! That voice ...

2. The incomplete sentences of the compared languages representing parceling of predicates which is also connected to existence of uniformity. Close predicative connection between a subject and a predicate does not allow a gap between them. They are very rare in both languages:

He writes letters every day. Reveals soul secrets. He is the most advanced student now. And hospital attendant. It's me - the victim! Hm, mistake! Quelle chimère est-ce donc que l'homme? What a chimera, a person is? What novelty, what monster, what chaos, what contradiction, what miracle!

3. Partsellirovaniye of additions in incomplete sentences of the Tatar and French languages is also observed not often:

I am not afraid of a draft. And cold weather. They haughtily see more, learn more. Both terrible, and bright future. Tu es un menteur! You are a deceiver! Simulator! Nullity! I am sure that it is him your wife will chose. This monster!

4. The incomplete sentences of two languages including parcelled definitions. In Tatar definition is usually connected with defined by means of an adjunction and an obligatory preposition therefore the separation of such definition is observed very seldom. In Tatar the model of the quasisubordinate clause representing parceling of definitions with repetition of a word from the basic offer was structurally formed:

In the sky the moon flashes. Dim. Ordinary-looking. Kushtiryak - the small village. On Thursday, early in the morning George came unshaven, the face grew with bristle, and it seems to me that the Primo coat crumpled ... Incredibly!

5. Most often the incomplete sentences including parceling of a structural link meet: a predicate - a circumstance:

You have to judge yourself. Under the law of honest doctors. We need the surgeon. Quickly, very quickly. It's her... It's her... My mistake, devil take it! Nobody as it seems to me, thought of it. Such evidence!

At the syntactic level different repetitions belong to means of increase in emotional saturation of incomplete structures:

If you also wanted to walk, there is in it neither joy, nor pleasure! Youth, youth! Silly youth!!! - Why I will swear, Galimzhan aby! So pleasantly, so interestingly! It is chance,

chance! I will have a bust which I wanted. Tenez, docteur Petursson, ceci s'appelle un procès-verbal. Que contient-il? You know, doctor Peturson, - it is called thought process. What does it include? Secret! When it was started? Secret!

From the examples given above it is necessary to conclude that expressional offers of incomplete structure are characterized by existence by specific emotional and estimated lexicon and variety of various level intensifiers. Their role consists in creation of intensive expression of emotions and feelings of speaking.

### 4 Summary

So, in this work the comparative and typological research of emotional and expressional offers in the Tatar and French languages was conducted. Having compared the structural and semantic organization emotional and expressional offers in the Tatar and French languages, we came to a conclusion that they are under construction by means of a certain set of means of an emotional expression, namely:

- Analyzing a way of expression of emotions in emotional and expressional offers of the compared languages, we were convinced that it can be expressed by both full and incomplete sentences.
- 2. Incomplete sentences in Tatar and French are the most widespread and numerous. In substantive emotional and expressional offers of French constantly shown intensifying function is implemented in the form of a definite article while in the specified offers of Tatar this function is performed by an accessory affix.

The regular systematically confirmed reproducibility of emotional and expressional offers confirms the basic functional purpose of these units, namely - to express the expressional relation speaking to the fact of objective reality.

### 5 Conclusion

The expressivity problem as language phenomenon always was in the center of attention of many linguists as it is connected with expression of the subjective relation speaking to a subject of the speech. However the phenomenon of expressivity is so many-sided that the subject cannot be exhausted by already existing research works and demands further studying. Incompleteness (accession and parceling) in both languages are feature of emotional and expressional syntax and serve for underlining of semantic pieces and simplification of their understanding. Activization of emotional and expressional offers of incomplete structure in both languages is explained in the most part by development of oral forms and realization of category of an emotional expression syntactic level.

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## FLORISTIC DIVERSITY AT BIOLOGICAL STATIONS OF KAZAN FEDERAL UNIVERSITY

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Abstract: The main aim of floristic research is to study the flora of a particular territory. Especially important are such studies on sites used for educational, familiarization purposes. The northwestern part of the Botanical Garden of the Kazan Federal University (KFU), its Geostation and their surrounding territories are used for conducting summer botanical training for students - bachelors in biology. In the course of the research, an inventory of floristic composition, floristic wealth, flora structure according to biomorphological, ecological features and economic significance of species was carried out, and adventive species were identified. For the study of flora, stationary and route-based methods of research were used. The route-based survey schemes were plotted taking into account the maximum number of different biotopes. Occurrence and abundance of species were determined on stationary sites, counts were conducted every 2-3 weeks. The role of the species in the community was judged by the integral coefficient of phytocenotic significance (PCS). The higher the value of the PCS, the more phytocenotically meaningful the corresponding species is. This indicator is especially important for species of meadow communities having the same abundance or projective coverage.

The flora under study involved no species listed in the Red Book of the Republic of Tatarstan and Russia.

Keywords: flora, flora structure, vegetation, species diversity, botany

## 1 Introduction

The Botanical Garden of Kazan University was established in 1806. The first planting of plant collections was in the courtyard of the university. Later, in 1829, a plot of 5 hectares was purchased on the shore of Lake Kaban, located in the center of the city. At present the Zoobotanical Garden of Kazan is located here. The botanical garden was laid down under the guidance of the professor of botany A.A. Bunge, later the work was supervised by the scientist - gardener N.P. Krylov. In the prerevolutionary period, the garden was an educational and auxiliary institution of KSU and was open to public visits (Gapchenko & Iund, 1957). After the October Revolution of 1917, the general devastation in the country led to the death of almost all the plants in the greenhouses of the garden and the open-ground collection, so the Botanical Garden lost all value for the university and the city. Restoration of the garden and collections started in 1924 by a student scientific group of nature lovers under the guidance of Professor A.Ia. Gordiagin and university teacher S.I. Petiaev. In summer 1926, the garden was again open for visits, and scientific and educational work was carried out there. A new stage in the development of the Botanical Garden at Kazan University began in 1984, when the university was allocated a new territory near the state farm "Berkutovsky" with an area of about 200 hectares. In 1986, Associate Professor of the Department of Botany R.G. Ivanova partially did geobotanical descriptions of vegetation and brief descriptions of the flora of the natural areas of the garden. At present, there is a need to make an inventory of the flora of the north-western part of the Botanical Garden, in connection due to the fact that it is planned to be used as a base for educational practice for university students (Smirnov, 1974; Villalobos Antúnez, 2015).

Other surveyed territories were the University's Geostation and its vicinity. In 1958, the Kazan Magnetic Observatory was transferred under the auspices of the Department of Geophysical Methods of Exploration of Mineral Resources, on the territory of which the base of students' educational practice began to form. At present, it is the base of training practice for students of geophysicists, oil workers, hydrogeologists, biologists, etc. Flora and vegetation surveys of this territory have not yet been conducted (Muratet et al. 2008).

The objective of this research was to study and compare the floristic diversity of the territories of the bases of educational botanical practices - the inventory of floristic composition, the richness of flora, the structure of the flora according to biomorphological and ecological features. Such studies allow us to identify the most interesting, rare plant species, the mechanisms that affect the distribution of species in a humandominated environment (Pyšek et al, 2002; Malyshev et al, 1994; Demina et al, 2012).

## 2 Methodology

The material was collected from 10.07.2015 to 28.09.2017. Routine and stationary research methods were used to identify the most complete species composition of the flora (Kulikova, 2006; Shcherbakov & Maiorov 2006). Routine survey schemes were laid taking into account the maximum number of different biotopes. Species affiliation is given in accordance with the report by S.K. Cherepanov. The occurrence and abundance of species were determined on stationary Raunkier's sites - 1×1 m. 25 such sites were laid down in the Botanical Garden during the northwestern transect and 2 sites S=100 m<sup>2</sup>, with five Raunkier's sites placed diagonally for more accurate recording of indicators. In the vicinity and on the territory of the Geostation in different ecologo-cenotic conditions, a similar number of registration areas was laid down. All counts were conducted every 2-3 weeks. The role of the species in the community can be judged by the integral coefficient of phytocenotic significance (PCS). It is the product of the average projective cover of a species for its occurrence. The higher the value of the PCA is, the more phytocoenically meaningful the corresponding species is. This indicator is especially important for species of meadow communities having the same abundance or projective coverage (Cherepanov, 1995; Shekarbaghani, 2017).

## 3 Results

Discussion of the results will begin with a systematic analysis of

Flora of the northwestern part of the Botanical Garden is represented by 80 species of higher vascular plants of 64 genera, 23 families, 3 classes, 2 divisions; flora of the Geostation includes 283 species belonging to 197 genera, 67 families, 5 classes, 4 divisions (Table 1).

Table 1. Taxonomic structure of the flora

Division, class	Number of species		Number of genera		Number of families		Number of orders	
	Bot. garden	Geostation	Bot. garden	Geostation	Bot. garden	Geostation	Bot. garden	Geostation
Equisetophyta Equisetopsida	1	5	1	1	1	1	1	1
Polypodiophyta Polipodiopsida	=	7	-	6	-	4	=	1
Pinophyta Pinopsida	-	3	1	3	-	2	-	2
Magnoliophyta Magnoliida	70	228	55	161	20	50	18	35
Magnoliophyta Liliopsida	9	41	8	26	2	10	2	10
Total	80	283	64	197	23	67	21	49

The main core of the flora of the Botanical Garden is represented by 12 families. The families are arranged in descending order by number of species as follows: Asteraceae (28%), Fabaceae (13%), Poaceae (12%), Caryophyllaceae (10%), Rosaceae (6%), Scrophullariaceae (6%), 4% for Polygonaceae, Brassicaceae and Plantaginaceae, 3% for Apiaceae and Rubiaceae. Flora of the vicinity of Geostation included 23 families identified. The first place in the number of species belongs to the family Asteraceae -18% of the total number of species. Further in descending order, Fabaceae (9%), Rosaceae (8%), Poaceae, Caryophyllaceae and Brassicaceae (7%), Lamiaceae (4.5%), Poligonaceae (4%), Ranunculaceae and Apiaceae (3.5%), Scrophulariaceae and Cyperaceae (3%), etc.

During the research, the degree of participation of species in the composition of the vegetation cover was revealed. When characterizing the grass cover, both meadow and forest communities, it is highly importance to establish quantitative relations between species included in its composition. Quantitative analysis of the grass cover was carried out using the method of visual appraisal of the projective cover. Based on the obtained data, it is possible to identify plant species having the largest projective coverage. For the Botanical Garden, these are Lotus ambiguous - 30%, Fragaria viridis 28%, Achillea millifolium – 20%, Carduus acanthoides – 18%, etc. For the territory of the Geostation and its vicinity, these are Equsetum arvense – 20%, Lathyrus vernus – 20%, Hypericum perforatum - 15%. Consequently, these species can be considered conservative elements of the flora, which are in relative equilibrium with modern conditions of existence.

The smallest projective cover was noted for the following plant species of the Botanical Garden: Stellaria graminea -5%, Melilotus albus -3,3%, Crambe tataria -3,5%; for the territory of the Geostation and its vicinity - Geranium pratense -3%, Solidago virgaurea -2%. For these species, the current conditions are apparently far from optimal.

Analyzing the occurrence of species on the sites, it is possible to identify species with the coefficient of occurrence equal to 60 - 70%. These are not common species. The north-western part of the Botanical Garden: Trifolium pratense, Galium mollugo, Achillea millefolium. In the territory of the Geostation and its vicinity, there are more such species: Aegopodium podagraria, Geranium sylvaticum, Urtica dioica, Veronica chamaedrys, Glechoma hederaceae. The majority of species have a coefficient of occurrence in the range of 30-50%. There are species with a very low occurrence rate of 10-20%. In the Botanical Garden such species are Medicago sativa, Medicago falcate, Stellaria graminea, Diantus deltoides; In the Geostation - Solidago virgaurea, Fragaria vesca. This indicates that the main types of

plant communities are unevenly distributed, confined to certain phytocenotic and ecological conditions.

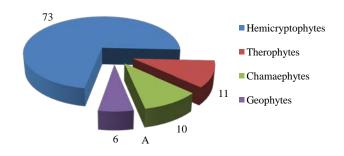
In addition to the above indicators, the phytocoenotic significance (PCS) was calculated. Just a few species show the highest rates. In the Botanical Garden, these are Fragaria viridi and Achillea millifolium, both of which have the same coefficient of 1400. In Geostation, there is only one species -Dactyli sglomerata. These species are edificators, the main environment-forming species of the community, the victors in the struggle for existence.

The group of highly abundant species may include species with PCS above 650. For the north-western part of the Botanical Garden they are: Lotus ambiguus, Millium effusum, Rhinanthus minor, Gallium mollugo, for Geostation - Gallium mollugo only. The presence of the semi-parasite (Rhinanthus minor) among them indicates the unfavorable situation prevailing in the plant community. Many species have very low PCS indices, less than 100; this is confirmed by the fact that the existing biotic conditions for these species are of little use for optimal life activity. For example, these are species such as Agrimonia eupatoria, Stellaria graminea, Diantus deltoids, etc. (Botanical Garden), Melica nutans, Anthriscus sylvestris, Viola tricolor, Polemonium caeruleum (Geostation), etc.

Floras of the north-western part of the Botanical Garden and the vicinity of Geostation strongly differ in their biomorphs. Only herbaceous forms are characteristic for the flora of the north-western part of the Botanical Garden. In the flora of the Geostation and its vicinity, there are herbaceous forms, as well as shrubs and trees. Moreover, herbaceous species are 246 (87%), shrubs - 20 (7%), trees - 17 (6%).

During the research, the analysis of the floras of the studied areas was carried out according to life forms (according to Raunkier). This analysis showed that the dominant form of the flora of the north-western part of the Botanical Garden is hemicryptophytes, comprising 73%, 11% of terophytes, 10% of hamefites. The prevalence of hemicryptophytes in general is typical for the temperate zones of the Northern Hemisphere. Identification of a fairly large number of terophytes, more characteristic of arid zones, is associated with a specific biotope and the presence of adventitious species, and hamefites (numerous in tundra and deserts) - with diverse terrain conditions.

The territory of the Geostation and its vicinity is characterized by the dominance of hemicryptophytes - 52%, terophytes - 16%, geophytes - 9%. A detailed analysis of the structure of the investigated floras is shown in Fig 1.



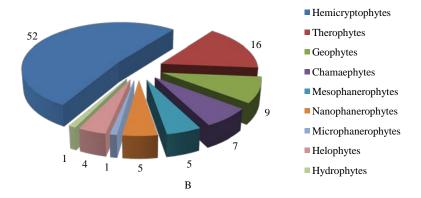


Fig 1. The structure of the flora subject to life forms (according to Raunkier), %: A - the north-western part of the Botanical Garden; B - Geostation and its vicinity

The conducted analysis made it possible to identify adventive (invasive) species in the flora. These species are studied in connection with their specific adaptations to various natural ecosystems and related environmental conditions (Kühn & Klot, 2008; Pyšek et al, 2003).

According to the time of immigration: archaeophytes - ancient adventive species - Spergula arvensis, Capsella bursa-pastoris, Vicia tetrasperma, Centaurea cyanus, Setaria viridis, kenophytes - new adventive species - Lepidium densiflorum, Medicago sativa, Matricaria recutita, Conyza canadensis (for the northwestern site of the Botanical Garden). For the territory of the Geostation and its environs - archaeofits: Consolida regalis, Polygonum arevastrum, Viola arvensis, Sisymbrium officinale, Descurainia Sophia; kenophytes - Amaranthus retroflexus, Bunias orientalis, Rosa rugosa, Amelanchier ovalis.

By immigration: xenophytes - unintentionally or accidentally broght, or feral species - Spergula arvensis, Capsella bursa-pastoris, Lepidium densiflorum, Vicia tetrasperma, Matricaria recutita, Conyza sanadensis, Setaria viridis (for the northwestern part of the Botanical Garden). For the territory of the Geostation and its vicinity - kenophytes - Amaranthus retroflexus, Polygonum arevastrum, Arabidopsis thaliana, Bunias orientalis, Capsella bursa-pastoris, Lepidium densiflorum.

By the degree of naturalization: ephemeroids - not naturalized, not self-seeding species - Lepidium densiflorum, Matricaria recutita; epecophytes - naturalized and spreading in secondary, disturbed biotopes, species forming field and waste phytocenoses - Spergula arvensis, Capsella bursa-pastoris, Medicago sativa, Centaurea cyanus, Setaria viridis; agriophytes - naturalized and spreading in natural phytocenoses species - Vicia tetrasperma, Conyza Canadensis (for the north-western part of the Botanical Garden). In the territory of the Geostation and its vicinity - ephemerophytes - Lepidium densiflorum, Calendula officinalis; epekofity - Consolida regalis, Amaranthus retroflexus, Polygonum arevastrum; agriophytes - Cannabis sativa, Lupinus poliphyllus, Heracleum sosnowskyi, Sambucus racemosa, Conyza canadensis.

According to phytocenotic association, the vascular plants of the northwestern part of the Botanical Garden are divided as follows: meadow are represented by 47 species, weeds – 23, forest - 15, steppe - 7 species. This indicates that the vegetation cover has undergone a long-term transformative man-made influence, as a result of which the number of weed species increased in the herbage and the specific gravity of forest and steppe species decreased. The predominant group are meadow species. For the Geostation, the distribution is as follows: forest plants - 143 species, meadow - 87, weeds - 44, steppe - 5. This territory and its vegetation cover has undergone less

anthropogenic influence; the herbage includes a fairly large number of forest species, which are the predominant group.

The analysis of the flora according to biomorphological and ecological features showed that perennials are the most common for the territory of the Botanical Garden, represented by 63 species, which is 78% of the total number of species; annuals - 8 species (12%), biennials - 10%. The dominant group involves the following biological types distinguished on the basis of breeding methods: rod-root plants - 21 species, long-root plants - 10, short-root plants - 8, root-shooters - 7, loose-bush - 6, creeping - 3, above-ground - 2. In the territory of Geostation, perennials also prevail - 188 species (71%). Annuals - 50 species (19%), biennials - 10%. Based on the methods of reproduction, the following biological types can be distinguished: taproot species - 40 species, long-root plants - 46, short-root plants - 30, root-shoots - 8, loose-bush - 14, creeping - 15, aboveground - 8.

Perennials constitute a group of so-called "prevailed", dominant plants, which are the main consumers of moisture and nutrients, the main producers of phytomass, firmly occupying their place in the phytocenosis. Other biomorphs constitute the so-called "ingredients" group, i.e. plants subordinate "to the prevailed".

Analysis of data on the economic significance of species made it possible to distinguish among them medicinal species - 39 species (62%), food - 8%, poisonous - 13% and economically insignificant - 17% (un the northwestern part of the Botanical Garden). In the territory of the Geostation and its vicinity there are: medicinal herbs - 127 species (45%), food - 3%, poisonous - 14%, economically insignificant - 38%.

The investigated flora included no species listed in the Red Book of the Republic of Tatarstan and Russia.

# 4 Conclusion

Flora of the Geostation and the adjacent territories is much richer than the flora of the north-western part of the Botanical Garden in terms of species diversity, biomorphs and economic significance. The vicinity of the Geostation is more preferable for holding summer trainings for undergraduate biologists.

# 5 Summary

- Flora of the northwestern part of the Botanical Garden is represented by 80 species of higher vascular plants of 64 genera, 23 families, 3 classes, 2 divisions; flora of the Geostation includes 284 species belonging to 198 genera, 67 families, 5 classes, 4 divisions.
- The core of the flora of the north-western part of the Botanical Garden is represented by 12 families; the vicinity of the Geostation - by 23 families. The first place in the

- number of species in both floras is occupied by the family Asteraceae
- Analysis of the structure of the flora by biotypes indicates that the predominant group are perennials, the most common among which are taproot, long-rooted and short-stemmed plants.
- 4. The predominant life form in the studied flora are hemicryptophytes.

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# FORMATION OF ADAPTIVE SUBJECT COMPETENCIES FOR FIRST-YEAR STUDENTS, FUTURE CHEMISTS: EXPECTATIONS AND REALITIES

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Abstract: The article presents the analysis of the expected and formed subject competences of first-year students of bachlor degree in the direction of 44.03.01 " Pedagogical education. Chemistry " in the adaptation period of study in the first semester. Organization of a complex system of teaching chemical and methodical disciplines during the first semester of training contributes to the formation of theoretical and applied base of the student for the further formation of a young specialist, future chemistry teacher. This system of training of students contributes to the formation of General cultural (OC), General professional (OPC), professional (PC) and special (SC) competencies in accordance with the requirements of the new level standard. The analysis of the results of the study of the issue of formation of adaptive subject competencies of first-year students in the assimilation of chemical and methodological disciplines is presented. The ranking of competencies according to the reduce of importance for the assimilation of the discipline was carried out by students of 1-2 courses at the beginning of the study of disciplines and at the end of the courses. The factors that explain the results of the analysis of the expected and obtained results on the formation of competencies are identified and new methods of classroom and extracurricular work with students in the process of training and training of a competent young specialist are identified.

extracurricular work with students in the process of training and training of a competent young specialist are identified.

The applied nature of the importance of this work is determined by practical recommendations for the formation of the student's basic subject competencies, starting with the adaptation period of the 1st course.

Key words: competence, student, University, chemical education, teacher, practice.

## 1 Introduction

One of the main aspects of the implementation of higher education is the question of formation of graduates' professional competencies, considered as a certain range of professional issues. Within the framework of professional training of bachelors-students, future teachers of chemistry, the question of theoretical and practical training acquires a special meaning. Practice shows the need to form professional competencies of students, starting with the first classroom lessons, deepening and expanding the full range of acquired and practiced competencies of the future specialist (Baydenko, 2009; Kamaleeva et al, 2016; Tahavieva & Nigmatullina, 2017; Golikova et al, 2015).

The relevance of the topic of our study is determined by the contradiction between the increased requirements for the personality of a young specialist, a chemistry teacher, and the level of professional competence of graduates in accordance with the requirements of potential employers (Lerner, 1981; Zelenko & Mogilevskaya, 2009; Villalobos Antunez & Bello, 2014).

Due to the smooth immersion of school education in the process of implementation of the Federal state educational standard of the new level, adjustments were made to the methodology of University teaching of chemical and methodological disciplines and training of young qualified specialists. These issues were partially covered by us earlier from the standpoint of the system of practices in the training of a student, a future teacher of chemistry. The analyses of the main characteristics of teaching chemical and methodical disciplines to students were made, starting from the 1st semester, at the direction of 44.03.01 "Pedagogical education (Kosmodemyanskaya et al, 2017; Kosmodemyanskaya, 2016). Chemistry", in accordance with the curriculum of training of young specialists by the Federal state educational standards of the 3-rd level (FSES 3+).

Research questions include determining the correspondence between the proposed acquired competencies of professional skills of students in chemical and methodological disciplines and the results obtained by future teachers of chemistry. These research questions include the analysis of the formed competences taking into account deepening of independent work of students of chemical education in the system "school – bachelor (University) – school".

The purpose of the study is to determine the compliance of the professional competencies of students, future teachers of chemistry, being formed and the formation of competencies as a result of the educational process for the training of young professionals.

The purpose of the first part of the study includes determining the level of preparedness of students of chemical education for professional activities in the framework of the implementation of continuous and variable system of practices, providing competence in future professional life. The aim of the second part of the study is to analyze the existing independent work of students of chemical education in the system "school – bachelor (University) – master (University) – school" to address issues of personnel training.

## 2 Methodology

In accordance with the aims and the objectives of our study, theoretical and empirical methods were used, including pedagogical observation, ranking, statistical and reflexive analysis in the processing of research results.

## 3 Results and Discussion

1. In the basis of the solution of the problems of the studied question are the main provisions of the technology of training in the management of educational and cognitive activity and the formation of social and professional competence of a young specialist / graduate.

We have considered the features of the formation of professional competences of students, future teachers of chemistry, training of students in the direction 44.03.01 "Pedagogical education. Chemistry". At the beginning of the first stage, the features of the formation of professional competencies were studied in the training of 43 students and undergraduates in the master's program "Chemical education" from the standpoint of training practices for 2 years of training (2015/2016 and 2016/2017 academic years). The results of the study contributed to the correction of curricula and methods of classroom and extracurricular work on chemical and methodological disciplines of the 1st course. The analysis of students 'work (pedagogical observation, interval and alternative (dichotomous) measuring scales) showed incomplete understanding of the main criteria of the subject competences of first-year students in the disciplines of "Didactic games in teaching chemistry" and "Introduction to inorganic chemistry" (1st semester). They are basic for further study of chemical and methodical disciplines of training of

The analysis of normative documents during the second stage of the study showed that the FSES 3+ defines a new format of competencies, which is not limited by the addition of General professional competencies of the GC (General cultural) and the PC (professional). GC are more unified if compared with FSES 3+. We considered the following competencies: General cultural (GC), General professional (GPC), professional (PC) and special (SC). Analysis of this range of competences that should be formed among the students of 1st semester of 1st year, revealed the following.

1) There is different quantity of the specific competencies required for the assimilation of disciplines of chemical and methodological directions. For example, in the chemical discipline "Introduction to inorganic chemistry" it is expected to develop 6 competencies: 1 competence in the field of GC, GPC and PC in each, 3 competences in SC. Another situation is observed regarding the assimilation of the methodical discipline "Didactic games in the teaching of chemistry" - 13 competencies, which are distributed as follows: GC (4), GPC (3), PC (5) and SC (1).

- 2) The competencies do not always coincide in the assimilation of these disciplines. For example, this applies to GC and SC.
- 3) The greatest coincidence in the assimilation of competencies is observed in GPC and PC.
- 4) In the discipline "Introduction to inorganic chemistry" we note 3 special competence (SC-1, SC-2, SC-3), and in the methodical discipline "Didactic games in the teaching of chemistry" only one (SC-5).

Thus, at this stage of our study, we note the low points of contact of forming competencies across the whole spectrum of mastering chemical and methodological disciplines by students of the 1st semester of the 1st course.

- 2. At the third stage we conducted a survey of 2 groups of students of the 1st and 2nd courses of direction 44.03.01 "Pedagogical education. Chemistry" on the ranking of the competencies which are the most important for learning a particular discipline. The study involved 52 students.
- 2.1. First-year students ranked competencies at the beginning of the course "Introduction to inorganic chemistry" according to the assimilation of the importance for the discipline's study. 33.33% of students put the competence with the SC-1 code in the first place. The second and the third places has the competence of the SC-3 code (23.81 %). The last in the list is the competence with the OC-3 code (42,86 %). The competence of the PC-1 scored 23.81 % for 4, 5, 6 ranges, but can't qualify for these ranges, as the competences of the SC-2, GPC-2, GC-3 scored more votes of students (33.33, 33.33 and 42.86%, respectively).

Thus, the first-year students are guided by special competencies at the beginning of the course "Introduction to inorganic chemistry".

To determine the compliance with the expected results for obtaining competencies, we offered to the 2nd year students who have completed the course "Introduction to inorganic chemistry", to rank the competence (as the significance decreases) for its assimilation. After analyzing the data we obtained the following results. The students determined the competence of the code SC-3 at the first place in importance (26.09%). The second place is at the competence of the code SC-2 (43.48%). At the third place, according to students, should be the competence of SC-1 (43.48%). The last in the range are the competencies with numbers of GPC-2 (34.78%) and GC-3 (30.43%).

Thus, analyzing the expected and obtained results on the formation of competencies of students in the discipline "Introduction to inorganic chemistry", we concluded that special competencies (SC-1, SC-2, SC-3), according to students, are the most important. A student with these competencies is able to use the knowledge of the theoretical foundations of the fundamental sections of chemistry, chemical experiment skills, basic synthetic methods of production and analysis of chemicals in professional activities in compliance with safety regulations.

2.2. We continued to study the issue of formation of adaptive subject competences of the first-year students in mastering the methodical discipline "Didactic games in teaching chemistry" in terms of ranking of competences (as the importance of the discipline decreases) for its assimilation. Of the 13 competencies, students put in the first place in importance, GPC-2 (26.9 %). In the second place is the competence of GPC-4 (23.1 %). The third line is occupied by the competence of GC-5 (57.7%), PC-1 (23.1%) and PC-4 (15.3%). The special competence of SC-5 was determined by the majority of students (57.7%) for the 8th place. The competence of the GPC-1 is of no interest to students who have not determined its importance. A number of competences is finished with the code GK-2 (26.9%) – the 13th place in importance.

To determine the compliance with the expected results for obtaining competencies, we offered the 2nd year students who

have completed the course "Didactic games in the teaching of chemistry", to rank the competence (as the significance decreases) for its assimilation. After analyzing the data we obtained the following results. Of the 13 competencies in the first place in importance, students put two-PC-7 and GPC-2 (19.3%). The competence of the GPC-2 is also in the second place with the same percentage (19.3%) and on the third line, but slightly less than -15.38%. A rank is closed (13th place) by competence of the GK-2 (30,77%) and GC-4 (19,23%). The following competences did not gain majority of votes: GK-5, PC-1, PC-2 and PC-11.

We've analyzed the data of the survey of students of the 1-nd and the 2-nd courses on the expected and acquired during the study competencies in the discipline " Didactic games in the teaching of chemistry." The leading line, according to students, is occupied by the General professional competence of the GPC-2, which allows for training, education and development, taking into account social, age and individual characteristics, including the special educational needs of students. This competence leads in expected and achievable values, and for the 2nd year students it takes the 1st, 2nd and 3rd places (simultaneously). The 1-year students target (leading 2 and 3) on getting general professional (GPC-4), general cultural (GCC-5) and professional (PC-1 and PC-4) competencies. And the issues, related to the ability to organize the cooperation of students, to maintain their activity and initiative, to develop creativity (PC-7), are not considered, by freshmen, although the 2nd year students gave them the 1st (19.33%) place and the 8th (30.77%). Strangely enough, but students paid little attention to the special competence (Sc-5), defining it the 6th (23.07%), 8th (57.7%) and even 11th (19.23%) places. Namely, this competence determines the readiness for the formation and evaluation of personal, metasubject and subject results in the process of learning chemistry in accordance with the new standards.

## 4 Summary

7.1. While training the students in the direction 44.03.01 "Pedagogical education. Chemistry " the requirements are set for improving the quality and practice-oriented knowledge of future professionals. There is a need for quality chemical education for each student, the need for graduates of this profile to achieve the guaranteed level of training in the discipline that will help them in their future lives (Sagitova et al, 2017).

In the 2016-17 school year, the quality of knowledge of students on the results of the exam in the discipline "Introduction to inorganic chemistry" was 96.2 %, and in the 2017-18 school year is 100.0 %. Analyzing data on test and control works, as well as data on the delivery of laboratory reports for two academic years (2016/2017 and 2017/2018 academic year), we obtain the following results on the quality of knowledge during the current certification. The dynamics of improving the quality of knowledge on control work and delivery of reports by students was 7.69 % (respectively, increasing from 80.77% to 88.46% and from 84.62% to 92.31 %). Positive dynamics (3,84 %) are marked in the results of the students' test works from 92.31% to 96,15 %.

The reasons for improving the quality of knowledge are different and, as our observations on the educational process for two years show, one of the most important reason is a special organization of control of learning. The following forms of current control are planned for this discipline: test and control work. According to the working program of the discipline during the semester, two test works and two control works are carried out. To control special competences (SC-1, SC-2 and SC-3) after each laboratory work all students hand over the work to the teacher, preferably on the same day.

7.2. Currently, classroom and extracurricular learning material on the subject "Didactic games in the teaching of chemistry" involves working on the tasks of an electronic educational resource (EER) of the same name, designed in 2016, at the site of distance learning (edu.kpfu.ru). The first year of testing of the

EER are allowed to make adjustments to the tasks, directed on formation of professional and special competences with students. In the 2017/2018 academic year, the positive dynamics for students who perfectly mastered the discipline "Didactic games in teaching chemistry" (according to the differentiated test) was 11.54%, increasing from 23.08% to 34.62%. This was preceded by the final work of the control, which also showed a positive dynamics of 12.71% (from 42.06% to 54.77%). Creative tasks include work on educational programs in chemistry on the SES and the FSES for the formulation and solution of research problems on the requirements of the FSES. In the course of methodical classroom training, the situations on modeling of cooperation of students for development of their creative abilities and independence are offered.

Thus, the definition of new methods of classroom and extracurricular work on the study of the discipline "Didactic games in the teaching of chemistry" to first-year students for the formation of General professional, General cultural, Professional and Special competencies has its positive results.

Indeed, a good way to check and confirm the validity of various forms of control of the first-year students is the correlation of the results of theoretical and practical works in comparison with other data on the formation of adaptive subject competencies of the 1st-year students.

## **5 Conclusions**

The right choice of optimal forms and methods of teaching chemical and methodical disciplines within the first semester of first-year students allows us to determine this complex as a base for further study of the cycle of chemical and methodical disciplines. The formation of a student, a future competent chemistry teacher, should be focused on the formation of critical thinking and the use of practice-oriented learning with elements of activity, technological and personality-oriented approaches in accordance with the requirements of the new level of standards. The expectations and results of students in the assimilation of specialized disciplines do not always coincide. But the application of a more advanced model of training future chemistry teachers contributes to the formation of not only General cultural and General professional competencies, but, more importantly, professional and special competencies.

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# FORMATION OF FUTURE TEACHERS' READINESS FOR PROFESSIONAL AND MORAL SELF-DEVELOPMENT

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Abstract: The article is devoted to the problem of forming the readiness of a modern teacher for his professional and moral self-development. Its relevance is connected with the change of traditional social values, and the development of democratization processes, which determined the freedom of choice of spiritual and moral self-determination of young generation. This circumstance increased the degree of social responsibility of modern teachers, and raised the level of requirements for their moral qualities. In this regard, the problem of finding the most effective means of forming the readiness of future teachers for professional and moral self-development at the stage of training at the university is actualized. According to the authors, the disciplines of the module "Pedagogy" have a significant potential in this respect. The paper outlines theoretical provisions, concerning the concept of readiness for self-development, its structural components and criteria. The methods of the research were the following: theoretical analysis of scientific literature and program-methodological documentation, systematization, generalization. The result of the study was the revealing of contensive potential of pedagogical disciplines in the formation of knowledge and skills of professional and moral self-development, as well as the organization of training, based on the resolution of situations of moral choice. The use of the obtained data will help in solving the problem of creation of favorable conditions for the spiritual, moral and personal development and self-improvement of students during the university studies. The article can be recommended to university teachers for the development of curriculum programs, as well as to the future teachers themselves, in order to plan personal growth and professional development.

Keywords: professional and moral self-development, readiness, potential of pedagogical disciplines, situations of moral choice, moral dilemmas.

# 1 Introduction

The processes of changing traditional social values, observed in modern society, led to an acute need for the education system to promote spiritual and moral self-identification, personal growth of the younger generation. This circumstance determined the increase in the degree of social responsibility of modern teachers, raised the level of requirements for the professional and personal component of pedagogical activity: readiness to pursue their professional and moral self-development.

At the same time, among teachers there is a weak concern in this type of activity, its level of quality does not meet the requirements of society. This, in turn, affects the creation of favorable conditions for the spiritual, moral and personal development of students.

In this regard, the need for preparing of teacher for moral self-development at the stage of vocational training at the university has particular urgency. In Federal State Educational Standard 3++ in the field of study "Pedagogical Education" (Bachelor's programme), this task is reflected in the formation of such competencies as: the ability to carry out the spiritual and moral education of students in class and extracurricular activities; to build and implement the trajectory of self-development.

In the opinion of researchers, the process of forming the readiness for professional and moral self-development is hampered by the insufficient level of formation of relevant knowledge; low efficiency of technologies, used in the formation of this readiness; insufficient use of the possibilities of pedagogical education as a whole for this process (Villalobos Antúnez, 2016).

We believe that the problems of forming the readiness for professional and moral self-development can be resolved using the potential of disciplines of pedagogical cycle.

The purpose of this study is to reveal the potential of pedagogical disciplines for forming the readiness for professional and moral self-development of the future teacher (Yusupov & Demyanov, 2017).

## 2 Methodology

The methodological basis of the study is the theories of professional development and self-determination; professional and moral development of teacher research on motivation for professional development through interdisciplinary integration (Vasileva at al, 2017; Cole, 1992; Fakhurtdinova & Konopatskaya, 2015; Auhadeeva et al, 2017; Velea & Farca, 2013).

The methods of the research were the following: theoretical analysis of scientific literature and program-methodological documentation, systematization, generalization (Sockett, 1993; Goodlad, 1992; Fahrutdinova et al, 2014; Fahrutdinov et al, 2017).

Self-development refers to the main categories of pedagogy, and is defined as the continuous process of setting and achieving specific goals by the person, through the change of own activity, behavior, oneself, based on the internally significant motivations and external influences. The essence of self-development is a qualitative change in the vision of the world, of the person himself, his role in this world, reorganization of the individual not only in relation to the world as a whole, in communication with others and oneself, but also the actions, which are actively practiced by the subject (Markova, 2004).

The specificity of moral self-development is in its functional peculiarity, connected with the self-regulation of behavior, on the basis of a change in the value system. In turn, according to V.V. Markova, the professional and moral self-development is a constant, purposeful and conscious self-cultivation of teacher, in order to improve the level of professional and moral selfawareness and behavior. The nature and content of the moral activity and relations of teacher in a professional environment is determined by the pedagogical ethics. It is a set of rules of communication and behavior, conditioned by a specific teaching and educational environment. The meaningfulness of the moral attitude of the teacher is expressed by the concept of "unindifference" - as the ability for compassion, sympathy, understanding, support, communication. The moral pedagogue plans his professional activity, guided by the principles: orientation to the Student, priority of the Student's interests, absolute responsibility, the Student as the goal (Maralov, 2004).

Professional and moral self-development involves the sequential passage of the following stages: the identification of the problems of this process in own activity through self-knowledge; the definition of the goal of self-improvement and creation of the program of professional and moral self-development; implementation of the program in the course of practical activities; reflection and determination of the moral position in professional activity.

Readiness for professional self-development is regarded by researchers as an integrative quality of the personality, characterized by its positive attitude to pedagogical activity; the presence of a critical attitude to the personal result of educational activities, providing an understanding of own pedagogical capabilities; the ability to self-development in the process, on the basis of self-education (Rumyantsev, 2009).

Romanova L.Yu. offers a level dynamics of the complex of appropriate capabilities and skills as the indicator of the formation of readiness for professional and moral self-development. They are reflected in the content of the value-self-actualizing, value-cognitive and value-activity operational components (Romanova, 2012). According to Rybina I.S., the criteria for assessment the level of readiness of future teacher for professional and moral self-development are cognitive, moral-

personal and reflexive-activity (Rybina, 2015). Akhmetova A.I. defines the following criteria of readiness: the desire for moral growth (motivational-value component of readiness), the development of axiological knowledge (cognitive), the development of professionally important capabilities (professional-personal), the formation of reflexive skills and the ability to spiritual and moral development (reflexive component) (Akhmetova et al, 2016).

## 3 Results and Discussion

According to the stated goal, we conducted a comprehensive analysis of the programs of educational disciplines, belonging to the module "Pedagogy", in the field of study "Pedagogical Education" (Bachelor's programme).

We used the research of Vlasova E.A (Vlasova, 2008), who distinguished the following criteria of readiness of the future teacher for professional self-development:

- based on the motivational and objective component professional orientation of the individual (indicator: motivation of professional activity, the need for professional self-development);
- based on the content-operational component the ability to professional self-development (indicators: the content of knowledge and skills in the field of professional self-

- development, the need for professional knowledge and skills, the ability to plan and implement their own professional self-development);
- based on the reflective component the development of reflective skills (indicators: the ability to evaluate own actions in the process of purposeful professional selfdevelopment, the ability to correct professional selfdevelopment).

The potential of pedagogical disciplines was evaluated from the position of their ability to ensure the formation of all components of readiness. Also the thesis, that development and self-development are two parallel and closely interrelated processes, has been used as the basis of the study. In this context, the contensive potential of the module "Pedagogy" was considered in two aspects:

- as the formation of knowledge about the essence of selfdevelopment, its mechanisms, factors and abilities to plan self-development, and to evaluate it individually;
- as the mastering of knowledge about the moral foundations of pedagogical activity and the possibility of own professional and moral development.

Table 1 gives the examples of didactic elements of the content of pedagogical disciplines, which are effective for forming the readiness of future teachers for moral self-development.

Table 1. Didactic elements of the content of pedagogical disciplines and formed components of readiness for professional and moral development and self-development

Disciplines of the module "Pedagogy"	Subjects, questions of disciplines	Formed components and indicators of readiness (knowledge, skills, interests, the needs of professional and moral development and self-development)
History and philosophy of education	"Domostroy" is about the education of morality. Moral education in the writings of K. Ushinsky and L. Tolstoy. Tolstoy's advices on the right life. The life of YA Korchak as an example of the moral position of the teacher.	Motivational: - interest in the process and result of the professional and moral development and self-development of the teacher, the need for self-knowledge.  Substantive-operational: - an understanding of the essence of self-programming and the possibilities of self-development
General principles of pedagogy	Axiological component of the professional culture of the teacher. Pedagogical values. Pedagogical ethics, pedagogical tact. Professionalism and self-development of the teacher's personality. Personal growth and career of the teacher.	Substantive-operational: - knowledge of personal and professional requirements for the teacher, his moral qualities; - knowledge of the essence, mechanisms and conditions of self-development; - knowledge of the essence of professional self-awareness and reflection.  Reflexive: - the ability to design the program of self-education and self-learning.
Theory and methodology of upbringing	Types of pedagogical interaction. Styles of leadership, styles and positions of the teacher in communication. Pedagogy of cooperation and technology of pedagogical support. The ratio of upbringing, development and self-development. Self-education of personality.	Motivational: - the need for professional knowledge, skills and skills in self-education and self-development. Substantive-operational: - knowledge of the moral foundations of professional interaction and communication; - Knowledge of the characteristics of self-education: self-regulation, self-control, self-instruction, self-report; - Ability to develop self-upbringing programs.
Didactics	Didactogeny and its consequences. The educational environment and health of pupils. Psychological climate of the school.	Substantive-operational: - knowledge of the influence of the teacher's attitudes on the results of educational activity.  Reflexive: - the ability to assess the consequences of their actions from the moral point of view as a manifestation of responsibility for the result of their work.

The potential of pedagogical disciplines was also considered through the possibility of training organization, based on the solution of pedagogical situations, grounded on the need for moral choice (moral dilemmas).

In the conditions of education democratization and freedom of choice, the requirements to the individual responsibility of the teacher for the consequences of pedagogical decisions increase. This responsibility increases in the situations, containing moral dilemmas. The criterion of responsibility is morality. The studies have shown that the development of moral position of personality occurs mainly due to the situations of moral choice, which require a person to abandon his own desires and interests, to make conscious efforts for the sake of others (Beituganova, 2016). Only the ability to self-development allows the teacher to make the right decision and with a free moral choice to reach a higher level of responsibility in professional activities.

Table 2 gives the examples of situations, containing moral dilemmas, which can be used when studying the module "Pedagogy".

Table 2. Situations of the moral choice

The choice between different kind of moral behavior	Short description of situation
the choice between professional values	Should you, for motivation purposes, to slightly overestimate an assessment for a weak student who actually performed the work at the limit of his abilities, tried very hard, but did not reach the required criteria.
the choice between your interests and others' interests	The control work, which you prepared children for a whole week, is broken because of the need to prepare a responsible for school event called "Meeting with War Veterans". How to be?
the choice between personal beliefs and public opinion	The teacher of history who gave the pupil an assessment of "satisfactory" is asked to be more loyal to him and not "spoil the certificate," because he has an excellent mark on mathematics, the Russian language and other complex subjects, and the history teacher simply could not find an approach to him.
paternalism or self-determination of a child	When pupils choose the profile of education in the upper grades, should the teacher reorient the pupil if he sees that his interests and inclinations do not correspond in any way to his abilities.
personal values or professional values	The pupil asks to study with him on the eve of the control work, but the teacher promised to help his elderly parents this day.

## 4 Summary

The results of the research show that the disciplines of the module "Pedagogy" effectively contribute to the formation of all components of students' readiness for professional and moral self-development: motivational and objective, contentoperational and reflective. It is expedient to form the components of readiness on the basis of acquisition of theoretical knowledge about the essence of the processes of selfdevelopment and reflection, understanding of the moral foundations of pedagogical activity, development of cognitive interests and needs. The content also provides the opportunity to organize training by using situations, containing moral dilemmas, the resolution of which will contribute to the formation of skills for the professional and moral behavior of future teachers.

## 5 Conclusions

The necessity of forming the readiness for professional and moral self-development is due to the fact, that its achievement is the main condition for the effective professional and pedagogical

The strategy of forming the moral readiness of the future teacher presupposes the enrichment of the traditional education with humanitarian ideas about the self-awareness, moral feelings, attitudes, norms of behavior; the inclusion in the educational process of activities, stimulating the search for appropriate professional and moral forms of communication. The results of the research prove that pedagogical disciplines have a great contensive potential for implementing this strategy.

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# FUNCTIONING OF THE MYTHOLOGICAL PLOT IN THE STORY "KURBAN-ROMANCE" BY I. ABUZYAROV

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Abstract: The works by I. Abuzyarov as an original phenomenon in the modern Russian historical and literary process has not received a scientifically consistent and aesthetically good conceptualization and re-evaluation thus far. In the meantime, the realization of the phenomenon of cultural frontier in the writer's works makes them significant to reveal the fictious and aesthetic nature of Russian-language prose, understanding its status in relation to the literature of metropolis and mainstream. The concept 'sacrifice' is important for I. Abuzyarov who reproduces one cultural codes and deconstructs the other ones. This is a central, dominant theme in his works, most fully realized in the novel "Kurban-Romance". The methodological system for studying the works by I. Abuzyarov from the standpoint of the features of the functioning of mythological story lines in them is based on the theory of transculturalness and the mythopoetic approach to the analysis of literary text.

As a result of the conducted investigation, it has been established that in the novel "Kurban-Romance" the traditional mythological plot about Ibrahim and Ismail becomes an object of deconstruction. The ceremony of offering sacrifice, on the one hand, and victimization of another person, on the other hand, is opposed to selfsacrifice – denying oneself for the sake of the well-being of others. The deconstruction of a traditional mythological narrative is accompanied by the transformation of the semantics of key images of Islamic mythology. Musical allusions and reminiscences, intertextual relations to ancient myths are a way of revealing the logic of events being characteristic for neomythological reality. The results obtained are significant for understanding the originality of the creative method of the writer, the principles of his poetics and style, as well as the tendencies of modern historical and literary process.

Keywords: Russian literature, mythological plot, the ceremony of offering sacrifice, the theme of self-sacrificingness, deconstruction.

## 1 Introduction

I. Abuzyarov is a modern Russian writer, laureate of numerous awards, whose works have attracted the attention of critics and literary scholars. The article by D. Uffelmann, which investigates the post-colonial perception of post-communist reality using the example of I. Abuzyarov's novel "Chenghis-Romance" and analyzes the features of the image of subordinate masculinity under the guise of nomadic culture (Uffelman, 2017; Sulkarnaeva et al 2018). We consider the works by I. Abuzyarov not so much in the context of postcolonial discourse, but rather as a phenomenon of cultural frontiers, literature that is realized in intercultural dialogue.

The writer in his works reproduces and synthesizes certain cultural codes and deconstructs the other ones. From this point of view, the theme of a victim is the central one, dominant in the writer's work, is of particular interest. Self-sacrificingness is one of the key concepts in the human mind, especially in the consciousness that retains its religious backgrounds or is based on settled moral values. As a universal motif, it permeates all art, from myths (Prometheus), biblical and Quranic tales to the heroes of Soviet literature. Variations of this motif are diverse: it comprehends the semantics of the sublimity, and the fateful impending doom of man over it, and its meaninglessness for a free individuality. In Russian literature of the nineteenth and twentieth centuries, unlike the western literature, this motif remains relevant, but, unlike the eastern one, it is problematized (Kurganov, 2001).

# 2 Methodology

Investigating the fictious and aesthetic nature of I. Abuzyarov's prose, in whose work different cultural traditions interact, we refer to the theory of transculturalness, which assumes "the state of virtual belonging of one individual to many cultures" (Berry & Epstein, 1999). The conception of the proposed study was influenced by the works by domestic and foreign scholars, covering the analysis of this phenomenon (Tlostanova, 2004; Bhabha, 1994; Meletinsky, 2000). The theoretical and methodological basis of the study are also the works by well-

known scholars (Eliade, 1989), in which the methodology of the mythopoetic analysis of the artistic text is developed. To solve the tasks set, intercultural approaches are expected to be used, the effectiveness of which has been revealed in a number of works (Birova, 2013; Smirnova et al, 2016; Krylov, 2017; Golikova et al, 2017).

## 3 Results and Discussion

The theme of offering sacrifice in "Kurban-Romance (2006) is exposed on several structural-content levels. Firstly, the ceremony of offering sacrifice, actualizing spiritual and moral values, connected with the Muslim consciousness, is described thoroughly and in detail. The actions of the characters who decided to offer a cow in sacrifice on Kurban Bairam are motivated by a certain idea: "Rabbyam, take this poor sacrifice for poor Marysya, - Vitosh said out aloud that we all have said to ourselves many times".

Secondly, the theme of sacrificingness and love becomes the subject of self-awareness of the characters. In the conversation of young people who met in "Music Café" after the ceremony of offering sacrifice, several important aspects of this theme are highlighted: what or who is sacrificed, in the name of what and to whom. Krysya projects the victim's collision onto troubled relations between Stasik, Marysya and Vitusya, and raises a number of questions, which primarily have a moral and psychological meaning and concern the choice that a person makes, sacrificing oneself for the sake of the well-being of others. First Vitosh, then Vitusya, and finally Yunus (or Yusya) introduce these problems into the religious and philosophical context. Vitosh explains the essence of the feast of sacrifice to Marysa and tells about the readiness of prophet Ibrahim to sacrifice his son Ismail to God. For Ganusya, the meaning of the rite of offering sacrifice is that Ibrahim and Ismail elevate the love for God above the love for man. Vitosh sets the sacrifice to God against the sacrifice to man, believing that the latter offends Ibrahim's feat and will not be taken. In response to these words, Yusya emphasizes that the sacrifice must be performed organically and naturally – "with all of one's heart", without the participation of the intellect reasoning about it, continually -"throughout life", one is not to demand compensation, to come with the readiness at any moment to give up the values being vital for people: "... but only a person who sacrifices wholeheartedly throughout all his life can go over this bridge, thin, like an edge of blade, and get to paradise. And for the sake of the Highest, being ready to sacrifice his own life whether it be life with a beloved woman at any, even at this last minute" These arguments do not contain any objection to Vitosh and go beyond the bounds of such logic, asserting certain high-order truths (Khabibullina et al, 2016; Villalobos Antúnez, 2015).

Thirdly, the theme of sacrifice is revealed in the narrative through the motif of self-sacrifice. The things done by Marysya in the name of the love-mate take the form of self-sacrifice. She sacrifices her professional future for the sake of Stasik's happiness, denying herself the possibility of creative self-realization – the value to be important for her inwardly. In order to meet Stasik, Marysia gets out of hospital and protects him with her selfless love from the attacks of friends in "Music Café".

Comparing Marysya to a holy cow animal begins with the coincidence of the name: milkmaid Maria, "like Mother of God, having come down into the farm directly from Raphael's canvases" [13, p. 9], calls the cow, chosen for ritual killing, Marysya. The cow has "the eyes very black, fathomlessly sad". Marysya's eyes are sad and unfathomable, too. The narrator, observing Stasik, Vitusya and Marysya behave in "Music Café", identifies Marysya with a sacrificial lamb: "And our Marysya <....> our meek sacrificial lamb, whose deaths we tried to avert at the expense of a heifer with a Russian name, meekly smiled only. And her eyes became even sadder". Stasik turns out to be a

kind of supreme deity who accepts sacrifices. It is in this way that he appears in the eyes of both Krysya and Vitosh: "And this deed of Ibrahim is a reproach to all of us who has forgotten that there is a boundary between who you imagine yourself to be and who you actually are". Then Vitusya rebukes Marysya for her denying everything she has for the sake of the other person.

In "Music Café" Stasik refuses Marysya's request to play the violin and hurts her painfully. The narrator deliberately activates the mythological complex, recalling the legend of Paganini, who, in order "to better play, made the violin strings from the tendons of his beloved girl" The analogy between the trembling of Stasik's musical fingers on the warm neck of the cow at the moment of its slaughter and the trembling of his hands holding "a burning" violin is also not accidental: "I do not know why he refused. <...> frightened, may be, for his reputation as a musician, not having been scared for the human reputation, as he has done many times before. Or his fingers still remembered the trembling and vibration of the cow's neck. And now he felt the same trembling in the neck of the violin, the strings of which with the cord went to Marysya, - who knows?".

Finally, Marysya becomes a victim no longer metaphorically, but in reality, when she together with Vitusya appears to be one of the donors for Stasik who is in a comatose state. The sacrifice, offered by two loving women, is the hardest, since Stasik is doomed to forgetfulness. After seeing the photograph taken at the passing-out concert of the ballet school, in which Marysya and Vitusya, being bosom friends at that time, "on points, in white tutus of small swans", "looked like two fluffs on the mirror-like stage to be blue from the spotlights", he recognizes two angels in them who were descending to him, when he was lying in coma.

Stasik was an inspirer of the idea of offering in Kurban-Bairam. The cow in sacrifice is intended to substitute for the human sacrifice. Marysya's friends, who performed this rite, hoped for her miraculous recovery. However, the story reveals the action of a different logic of events, referring to the model of the oldest ritual and reviving it in all its cruelty - human sacrifice, which takes the form of self-sacrifice. Marysya's and Vitusya's self-sacrificingness is the highest reality, being tragic in its authenticity, that is expressed not in ritual actions, but in their very life practice. The religious ritual of making sacrifice, if not abolished, then recedes before this self-sacrificingness necessary for the continuation of life and the preservation of the inner basis of being.

Substitute of a sacrificial animal for a man is in the mind of the character suffering from "strange amnesia": "It seems they came to help me go over a bridge, thin, like a stretched violin string, and sharp, like a nerve, like a saber blade, to the other side of the river". Both killed women in this case are identified with sacrificial animals, which according to Islamic eschatology are destined to help a person cross the Sirat Bridge. In the second variant of the development of events, the characters' ritual function gives way to their fulfillment in their lives: to preserve, protect, and save the person they love: "Yes, indeed, they, on the contrary, dissuaded me, did not let me go, besetting the way".

Stasik, who discovered for himself at the time of the slaughter of the cow, that "it is so easy to kill", accepts Marysya's and Vitusya's self-sacrifice. He can be unfaithful to this role, only being no longer him. The metaphysical oblivion to which the character is doomed is also a sacrifice: "... The two most beautiful girls of the world loved him, and they did more than love him, they loved him devotedly and wholeheartedly, unfortunately he did not remember their self-sacrificing love". In the very character's opinion, expressed by him in "Music Café", "the sacrifice is more precious the longer it is kept in memory" than that which no one knows about.

White color dominates in the range of colors of the final scenes: "He was sitting in the chair, in the center of a white sterile ward. White as Bialystok in February. In front of him on a plastic table there were white sheets of paper with the numbers and letters". In different cultures different meanings are given to white color.

The novel "Kurban-Romance" actualizes the semantics of white universal for all traditions. It correlates with the psychic state of Stasik, whose entire previous experience of life is "erased". White color symbolizes the original "purity" of man who has become tabula rasa, who, thanks to the selfless and self-sacrificing love of the two women, is given another chance to start everything from scratch – literally, not metaphorically, as for all others (Abuzyarov, 2009).

The theme of self-sacrifice transforms the semantics of one of the key images of Islamic mythology - the Sirat bridge. From the symbol of the "end of the world", organically inscribed in the eschatological problematic and figurative system, it turns into "an internal bridge" and is identified with a sword of Damocles, symbolizing the readiness of one to fall on the sword at any moment for another person. According to Yusya, "in each of us there is a bridge called Sirat, which connects being and nonbeing, which is also a sword, left overhead". Recalling the conversation in "Music Café", the narrator repeats and concretizes this definition: "In each of us there is an internal bridge of the Sirat; it is at the same time an inner sword, allowing to pass from being into non-being. It is like a sword of Damocles over a throbbing neck. It is closer to us than the jugular vein. It cleaves and hurts into the very heart ...".

Fourthly, the theme of sacrifice is revealed at the level of musical allusions and reminiscences, as well as intertextual links with ancient myths. The hero-narrator enumerates the operas that end with a sacrifice in the name of love: "Traviata", "Rigoletto", "Nabuco", "Iolanta", "Fidelio", etc. Musical allusions perform primarily the identifying function: they reveal the role behavior of the characters and predict their tragic fate. This is the identification of Marysya with Giselle, whose party she danced before illness in the Bialystok Theater, and Vitusya with the Sylphide. "Giselle" and "Sylphide" are romantic works about the tragic meaning of love in human life. In the libretto for the ballet "Giselle", written by T. Gautier on the basis of the Slavic legend about the Wills, written by Heine, Giselle, shaked by Albert's deceit, goes mad and dies, but after death, by continuing to love him, rescues the Wills from revenge. In the libretto for the ballet "Sylphide", based on the fantasy story by Ch. Nodier "Trilby, or the Spirit of Angel", a young man James, charmed with Sylphide, neglects his bride and rushes for a beautiful maiden of air, but trying not to let her go, throws a magic shawl over her and kills her. In the ballet "Giselle" self-sacrificing love and forgiveness are poetized. On the one hand, the comparison of Vitusya with Sylphide emphasizes her alertness, on the other hand, comprehends the prophecy of her tragic death. Musical allusions emphasize the difference between the sacrificingness of Marysya and Vitusya - "free" sacrificingness (according to E. Kurganov's terminology), which is the result of free choice and deeply meaningful movement towards one's destiny, and, therefore. quiet, humble, and forced sacrifice, to which man is doomed by coincidence of circumstances.

Meaningful is the parallel between Stasik and N. Paganini. It does not only point to the musical talent of the poet and his performing skills but also reveals the unrevealed features of his character in the plot. This allusion becomes a kind of key to understanding the mysterious power of Stasik over women loving him. Krysya utters the words that become prophetic: "When Orpheus was carried away by the music of furies, Eurydice was forced to descend by herself to hell". The mention of Orpheus and Eurydice creates a tragic background of the narrative and anticipates the course of the story, actualizing the presence in the life of the characters of the elemental, irrational, fatal forces that are the expression of that universal law that rules over the happiness and misfortune of people.

# 4 Summary

Thus, a neo-mythological reality is created in the novel "Kurban-Romance", in which the concept of "sacrifice" is significant. The ritual of sacrifice, actualizing the spiritual and moral values, connected with the Muslim consciousness, is described in a natural way. The theme of sacrifice becomes the subject of self-

awareness of the characters and is contained in the religious-philosophical context. However, the rite of sacrifice, on the one hand, and offering another person in sacrifice, on the other hand, is opposed to self-sacrifice – self-denying for the sake of the well-being of others. Musical allusions and reminiscences, intertextual links with ancient myths perform an identifying function – expose the role behavior of the characters and predict their tragic fate.

#### 5 Conclusions

The traditional mythological story about Ibrahim and Ismail becomes the subject of deconstruction. The story reveals the action of a different logic of events, referring to the model of the oldest ritual and reviving it in all its cruelty - human sacrificial offering, which takes the form of self-sacrifice. The religious ritual of sacrifice is not abolished but not changed before this sacrifice being necessary for the continuation of life and the preservation of the inner basis of being. The deconstruction of the traditional mythological plot implies the transformation of the semantics of key images of Islamic mythology and the actualization of the anticyclical function of musical allusions and reminiscences, intertextual links with ancient myths.

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## GENRE SYNTHESIS IN ANDREI BELY'S REVIEWS

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Abstract: Article is devoted to a question of genre synthesis during Silver Age era; in its the factors which have influenced this process and explaining its emergence during this period are investigated. We carry the chaologic view approved in modernism and the change in genre structure (destruction of genre canons) connected with it to such factors; Lyrization of genres in literature and criticism that is also caused by a turning point of the verge of the 19-20th centuries. Changes in genre structure are shown also in literary criticism, in particular in heritage of Andrey Bely, the theorist of symbolism, the poet and writer of a Silver Age. In reviews which he wrote on works by the contemporaries not only assessment of the appeared books, but also creativity in general was reflected. In 1910 - 1911 there are books of the articles "Green meadow" and "Arabesques" in whom A. Bely has placed reviews, having connected them to other portraits about writers, thereby creating the literary portraits representing genre synthesis. However already in reviews it is possible to see genre synthesis. In some articles the critic creates the concept of the writer that is defined by splash in interest in riddles of the personality therefore the criticism pays attention not only to the work, but also the creator. So Andrey Bely's reviews are beyond an initial genre and at the same time become polemic article, a literary portrait, theoretical article.

Keywords: criticism, Silver Age, genre synthesis, Andrey Bely, review.

#### 1 Introduction

The interest of literary criticism in Silver Age era has arisen in the last decades when emergence of numerous scientific articles, master's and doctoral dissertations is noted. It is caused by the fact that during the Soviet period the turn of the 19-20th centuries in domestic literary criticism was practically not studied. In a Silver Age, as well as in the previous century, the important place in literary life the criticism which allowed expressing public opinion through assessment and interpretation of current trends of literature and art took. Thus, studying of criticism of a Silver Age allows learning more deeply the processes happening in literature during this period of time (Sayapova, 2014; Bushkanets, 2017; Nurhayati, 2018).

Feature of criticism of a turn of the XIX-XX centuries is increase in literary criticism: practically each author created both literary works, and literary critiques. It was, on the one hand continuation of rich traditions of literary criticism of the 19th century, with another, — in many respects it has been connected with emergence of the new literary directions (symbolism, acmeism, futurism, etc.) which demanded the edition of the manifestos, programs, constant self-determination in relation to other directions and currents of an era.

One of bright representatives of an era of Silver Age Andrey Bely by right is considered. His creative heritage is made by prosaic, dramaturgic and lyrical texts, works on criticism and the theory of symbolism that is rich material for researchers. In the last decades interest in this personality increases not only at literary critics, but also at philosophers, culturologists that is confirmed by emergence of cross-disciplinary scientific works about his creativity (Lavrov, 1994; Vafina, 2015; Villalobos Antúnez, 2016).

However, despite the frequent address and to A. Bely's identity, and to the literary critic of a Silver Age, the case of critical texts of the symbolist is analyzed not in full that has caused relevance of our research. Studying of early criticism of A. Bely of 1902 - 1905, to features of his poetics the Kharkiv researcher Tatyana Kapinus was engaged, we continue to work in this direction on other critical texts White. In this article an object of research is the problem of genre synthesis which a number of scientists addressed (N.L. Leyderman, I.G. Mineralova, etc.). In their works on wide material the theory of genre per se, sources of changes in the period of a turn of the 19-20th centuries is

investigated. The purpose of our research is systematization of theoretical and historico-literary views of a problem of genre synthesis and studying of this phenomenon in A. Bely's reviews.

## 2 Methodology

In researches, first, it is used, the historical and functional method allowing considering the theory of a genre, features of criticism during Silver Age era. Without having large reader's audience, developing as the elite (saloon) esthetic phenomenon, the symbolist criticism, nevertheless, has generated the unique gnoseological system allowing not only to master unreal texts, but also to comprehend the act of interpretation as most understanding and creativity at the same time. Secondly, we lean on the structural and system method allowing revealing features of poetics and specifics of genre forms of reviews of A. Bely. For us the general model of the symbolist review is initial. In symbolist criticism two multidirectional tendencies were combined: the aspiration to sustain "canon" of a genre and orientation to creative freedom from laws of a genre. The second tendency was expressed in creation of lyrical reviews. In lyrical short reviews assessment is expressed through the emotional beginning (intonation, grammatical constructions, citation, figurativeness, obvious detection author's "I"). The significant role is played by graphic and expressive turns of the author's speech; the critic seeks to create an image of the writer. The critical review becomes a certain analog of the poem in prose. In this case the metaphorical image develops throughout all text of the review, providing unity of all estimated text.

## 3 Results and Discussion

It is known that Silver Age era - the period of tragic attitude, crisis and chaos that is caused also by the situation of a turn of centuries which has incorporated moods of decadence and the increased reaction to life, and a difficult political situation in Russia. N.L. Leyderman notes that during such transitional eras there is a chaologic view, the genre canons which have settled before collapse, the main genres move from the center to the periphery, and "the category of a genre is discredited, appears a theoretical fiction" (Leyderman, 2010). Ideological changes are reflected also that eras of the novel the poetry succeeds, all genres experience her influence, under laws of lyrics also prosaic texts are built, emergence of several characteristic features in literature of a Silver Age is connected with it: subjectivity practically in all genres; the impressionism as the style reception showing state of peace, which has broken up to a set of fragment; cyclization and genre synthesis as ways of overcoming this Chaos.

The aspiration to overcome Chaos generates various ideas, one of which was a doctrine VI. Solovyov about Allunity, taken by younger symbolists as a basis of the esthetics. I.G. Mineralova, analyzing texts of the philosopher, says that he has foreseen moods of an era and has designated synthesis as the main objective of an era as the phenomenon covering all spheres of spiritual culture (Mineralova, 2003). The opinion that the symbol is capable to overcome this chaos was characteristic of poets of the beginning of the century and to help to transform this world therefore synthesis was necessary for them, "that the symbol has reached such fantastic force – both phenomena in consciousness of symbolists are rigidly interconnected". So, the idea of general synthesis became a basis of outlook of symbolists and dictated the forms of the embodiment of a thought.

It is well-known that for symbolists the closest art was music in which the spirit and intonation was reflected, and the symbol, according to them, is always musical. It is indicative that A. Bely in "Symphonies" tried to connect music and poetry to come to this general harmony. However, as marks out I.G. Mineralova if synthesis becomes only end in itself, then it "a decline syndrome", but some artists stated the point of view that it is possible to try to turn synthesis into tools and to use him for the solution of most important tasks of universal scale.

Art synthesis during Silver Age era as we noted above, was in also new way for the solution of tasks not only in the field of contents, but also a form. Lyrization of prose has expanded tools of writers, having allowed poetic receptions to adapt in other sort of literature. It is represented to us, as the impressionism phenomenon in criticism has appeared in connection with these factors. A. Bely from the collection "Green meadow" writes in the article "Symbolism and Russian Modern Art" that the esthetics of impressionism and symbolism is close to each other as "outlook on life through an experience prism, is already creative outlook on life", and, according to the critic, by means of experiences it is possible to plunge further into creativity which is "both creativity of experiences, and creativity of images" (Bely, 2012). It is necessary to consider what the critic A. Bely is literary therefore features of his author's style are characteristic also of his critical heritage: reviews, literary portraits, theoretical articles. However in some cases it is difficult to refer this or that work to a concrete genre or this name will be conditional as art synthesis gets also into the genre structure destroyed by a picture of the world of a Silver Age, creating new educations that are traced in literary portraits of the symbolist (Bely, 2012).

With understanding symbolists of criticism as creativity have connected strengthening of the semantic and structural importance of an art element (a special role of citation, synthetic genre and style structure of the critical text which is freely including elements of the diary, memoirs, the philosophical essay, etc.). In their articles the figurativeness, associative character of proofs, the admission of explanatory links amplifies, the distance between language of literature and meta language of her description, as a result – reticence and polysemy of critiques decreases.

Within article we will address some reviews of A. Bely and we will try to reveal their genre features. Reviews appeared in the Vesy magazine, and later have been collected definitely in the book of the articles "Arabesques", making a part of a cycle of literary portraits. We will address reviews of collections of stories of Z. Gippius, small on volume, "A scarlet sword" and "The literary diary (1899 - 1907) in which synthesis of several genre forms is noticeable. In the review "Scarlet sword" which has appeared in the Vesy magazine in 1906 to the analysis of the collection the critic starts practically the end of article, and at the beginning And. White argues that there are two types of writers: the first study riddles of life and by means of literature try to specify a way, proclaiming a tendency (however such decision cannot always be real), and the second – just reflect those secrets which they have experienced in works, but "only the deepest geniuses at the few moments of creativity managed to connect harmoniously both courses of literature". Such reflections and statement of a problem are characteristic of theoretical article, however such reception helps the critic to show more widely Z. Gippius's image as artist, to capture all her creativity in general. So, A. Bely marks out the basic principle of the writer: "the harmony in her creativity is the harmony constructed on regularity in change of dissonances". Only in the penultimate paragraph the critic addresses concrete images which are used by Gippius in the stories, but finishes article also general reflection about the Word and intimate

From the point of view of genre features A. Bely's review of the book by Z. Gippius "The literary diary (1899 - 1907)" is interesting. From the first lines in imagination of the reader there is an image of Anton Krayny who is dexterously active a critical rapier thanks to which he easily deals shortly with the opponents. The symbolist not without irony writes about it as if parodying style Z. Gippius, as it is well-known that the writer in the critical works didn't spare anybody and scattered jokes. Not without reason in memoirs A. Bely will write that she is similar to a wasp with her sting. In these article lines of a literary portrait as the critic shows an image of the creator are already traced.

The comic effect is also created by means of additional thinking on an image. In the research this line is revealed by T.L. Kapinus

which writes that the symbolist often as if finishes works for portrayed, recreates images, thinks out new possible turn of a plot, thereby the critic departs from the analysis and resorts to imitation of features of poetics of the writer or poet (Kapinus, 2013). So the critic builds the review as the imagined duel of fencers: Anton Krayny and his opponent. The symbolist thinks out answers of the rival to the pricking jokes of a rapier of the critic-poetess, accompanying them with designs of a conditional inclination: "the opponent would tell", "the opponent would come". Except irony which has penetrated the review such form of dialogue battle of two rivals reflects the critic's disagreement with position Z. Gippius that allows us to say that the review has signs of polemic article. A. Bely reproaches with misunderstanding of the term individualism, negligence to decadents and excessive Christian consciousness. Thus, in the article "Literary Diary" we find synthesis of the review, polemic article and a literary portrait.

A. Bely's review of "Lyrical dramas" of A. Blok which the critic called "Fragments of the worlds" (1908) is indicative. In this article the symbolist addresses again reception of "add-writing" of images about which we wrote above. A. Bely used Bryusov's statement and has conjectured Blok's answer to him, thereby setting a little ironic tone for article. ""Let the poet creates not the books, but the life", - V. Bryusov says. - On an altar of our deity we throw ourselves". "Let the poet creates the lines, but not the life, - A. Blok kind of objects him ... - On an altar of Nothing we throw our deity and ourselves". Further A. Bely calls the contemporary "an inventor of emptiness", and considers that all charm and force "dramas by Blok that in them there is nothing, they - about anything". This idea has penetrated all review, but it should be noted that it is constructed under laws as art text. We have already given an example of add-thinking of images, but it is worth emphasizing that A. Bely uses this way of creation of the concept of the personality throughout all review. From methods of poetics the critic often uses word-play, comparisons and metaphors, estimating Blok's verses. The symbolist compares early poems by the contemporary to a rose, but then the flower dumps petals and the caterpillar is born. This developed comparison White wanted to show that works by Blok are fine, but his images are vein: "the Great Lady was the most poisonous caterpillar; the appeal to life was an appeal by death". It should be noted that in the review the critic uses ring composition: the work began with the imagined dialogue with Bryusov, and also comes to the end with other remark of Blok on the same phrase Bryusov. Thus, And. White uses receptions of the organization of the art text for the review (Bely, 2012).

# 4 Summary

Genre synthesis in A. Bely's reviews is traced at the different levels. On the one hand, this process consists in connection of concrete genre forms: theoretical article and review, review, polemic article and literary portrait. With another – application of genre canons and methods of poetics of the art text on which article is built. Genre synthesis in criticism allows the symbolist not only to give the analysis, and assessment of the appeared book, but also to open in general an author's manner of the letter and to define the importance of this or that creator for development of literature and realization of the idea of general synthesis.

# **5** Conclusions

The research of reviews of A. Bely allows seeing how tendencies of an era were reflected not only in actually literary works, but also in literary criticism. It is important to note that the critical heritage White is still not systematized in full that defines further prospects of a research. It is necessary to consider in more detail process of genre synthesis in literary portraits and theoretical articles of the symbolist to reveal what opportunities for the critic are opened by genre synthesis and whether leads it to considerable change of forms of criticism. At further studying it is necessary to expand a circle of sources, attracting the materials of archives and critical works which were coming out in newspaper editions. Borders of genres in critical practice of A.

Bely were moved apart due to synthesis literary and critical (analytical), documentary and art has begun. The synthetic genre structure is found in his many articles. He freely uses diary elements, memoirs impregnations, fragments from newspaper articles, etc. All this can also become a subject of further studying.

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## HISTORY AS TEXT IN EUGENE VODOLAZKIN'S NOVEL «SOLOVYEV AND LARIONOV»

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Abstract: At the end of the 20th, especially at the beginning of the 21st century, there was a keen interest of Russian and foreign writers in the historical subject. At the same time, in the literature of postmodernism, history is conceived as a text, as a narrative, as a discourse. The article considers the peculiarities of the narrative of the historical past in contemporary Russian prose by way of the example of the novel by contemporary Russian writer Eugene Vodolazkin. To attain this goal, within the context of the work we use the system-structural method of research which assumes the perception of all components of the work as an integral literary system, and the hermeneutic method that allows to give a creative interpretation of the work on the basis of a deep understanding of its content and the features of its literary structure. The authors come to the conclusion that unlike many postmodern texts in which history is apprehended only as an object of the game, in the novel "Soloviev and Larionov", as well as in the works by E. Vodolazkin on the whole, postmodern methods have been put into the service of the author's humanistic conception that makes it possible to write the prose of this writer not only in the context of modern literature, but also in the context of the Russian literary tradition.

Key Words: history as a text, postmodern methods, literary discourse, scientific discourse, genre masks, humanistic tradition.

#### 1 Introduction

The French philosopher, historian, writer Guy Debord, in 1968, used the metaphor "performance" to characterize modern society. For half a century, the definition of "performance society" has not only lost its relevance but also acquired new arguments in its favor. It is in keeping with the famous metaphorical definition by J. Derrida "the world as a text", that expresses simulativeness of the reality in the postmodern era. In his time Guy Debord wrote: "Performance as a modern social organization of the paralysis of history and memory, the rejection of history, (...) is a false consciousness of time". The concept of "the world as a text" also implies "paralysis of history and memory". At the same time, the boundary between the truly former and the fictitious is blurred. History is takin as a text, as a narrative, as a discourse. A new understanding of the subject, purpose and methods of modern historical science gave rise to a discussion which, in the 1980s and 1990s, was reflected in the pages of journals «History and Theory», «American Historical Review», «Speculum», «Past and Present», «The Monist» (Ankersmit, 1989).

According to F. Jameson's concept, "history is inaccessible to us but in the form of text and our attitude to it and to the Reality itself necessarily passes through its preliminary textualization, its narrativization" (Ankersmit, 1995; Jameson, 1977; Pihlainen, 2002).

This attitude is reflected in the literature. At the end of the 20th, at the beginning of the 21st centuries, there was a great interest of both Russian and foreign writers in historical themes, which has been more than once the subject of study in modern literary studies. Researcher E.V. Kolodinskaya formulated the main reasons for contemporary writers' turning to the historical past: "this is due, first, to the crisis state of the modern ("postmodern") world outlook and the attempts of the writers to assess the place of man in the world and history, who is in the power of chaos and absurdity; second, with the desire of the authors to write the literature of the late 20th century into the reinterpreted historical and literary context; third, with the desire to determine their position in the humanitarian debate about the forms and methods of historical knowledge and the boundaries of scientific and fictious narratives about the past, and finally, with the need to express their attitude to the so-called "popular history" (historical and pseudo-historical research, being as a mass product, the criterion of quality of which is the fascination and sensationalism of the material presented in it)" (Khabibullina & Zinnatullina, 2016).

However, new texts enable to highlight new nuances in understanding the well-known thesis "history as a text", clarifying the causes and functions of the textualization of the reality.

The object of studying in this paper is the novel by popular Russian writer Eugene Vodolazkin "Soloviev and Larionov" (2009; Connor, 1996; Cooper, 1996; Farkhoutdinov & Isavnin, 2017).

The purpose of the work is to define the specifics of the narrative strategy and, in particular, the causes and peculiarities of the narrativization of history in this novel.

## 2 Methodology

In accordance with the stated goal and specifics of the object of the analysis, we use the system-structural method of research in the work, assuming the appreciation of all components of the work to be an integral literary system, and the hermeneutic method, which allows us to give a creative interpretation of the novel, to consider literary images as a part of the cultural context, which is needed when the subject under study is a text based on intertextual links, literary and linguistic play (Hutcheon, 1989; Shevchenko et al. 2017; Breeva, 2014).

# 3 Results and Discussion

Doctor of Philology, an employee of the Pushkin House, an expert on ancient Russian literature, Eugene Germanovich Vodolazkin, has recently acquired distinction as an active participant in the literary process. And although his books are awarded a number of literary prizes and are not deprived of criticism, on the whole the writer's works have been insufficiently studied so far. In particular, only one literary article concerns the novel "Soloviev and Larionov" – this is the paper by O.A. Grimova "Narrative Intrigue in a Modern Novel, which shows how "the enigmatic intrigue, intrigue of mystery" is realized in this work. The aspect of analysis that is of interest to us in this article has not been practically affected. (Mrathuzina & Nasrutdinova. 2015).

E. Vodolazkin used the names of the two main characters in the title of his novel "Soloviev and Larionov". The first of them is a young historian, a graduate of the St. Petersburg University, a graduate student of the Institute of Russian History, and the second - a General of the White Army - the object of Solovyov's dissertation work. The composition of the novel based on the constant drawing the fate of the young scientist and man together, whose life and destiny is the object of his scientific research, is built according to this. It is noteworthy that not only Solovyov, whose surname is represented as allusive, referring to the great Russian historian Sergei Mikhaylovich Solovyov, but also General Larionov is also attached to the "work of the historian": this is how his work on memoirs is defined in the novel. In this regard, it is natural that the originality of the narrative strategy of the novel determines the fiction interaction of scientific and literary discourses (Grimova, 2015; Villalobos Antúnez, 2015).

In one of his interviews E. Vodolazkin admitted that he likes "to work with genre literature. At least, to start in one of its genres, and then – to leave its boundaries". In the novel "Soloviev and Larionov" he uses not only genre models of fiction but also of a scientific article, a report, memoirs. The work presents the history of the formation of a scientist-historian and the story of his scientific research. The text is represented according to the laws of scientific research. It is full paginal footnotes and references scrupulously made up. And this scrupulousness is frankly a play technique designed to expose the simulativeness of the created textual reality. With rare exceptions, these are either fictitious or redundant footnotes, that is, completely

unnecessary footnotes, generating mainly a comic effect. For example, when mentioning that Yalta is "a sign place", a reference to "Proceedings on Sign Systems", when mentioning that Ursulyak's collection "Stone Foot" is collected poems, - the reference to the famous work by Zhirmunsky "The Theory of the Verse", etc. Often, bibliographic references in the novel are based on literary and linguistic play.

These footnotes as if intentionally demonstrate the principles of the organization of the postmodernist text: "the collision in one intertextual space of two or more fragments of meaningful and stylistically different textual worlds, which implies the emergence of a quasi-parodic effect". So, in the first example this effect is generated from the relationship of the name of the fictional French historian A. Dupont (one of the most common French surnames, taken as an ordinary philosopher) whose works, according the novel's plot, served as a stimulus for Soloviev to choose the topic of scientific research, and the title article "The Headless Horseman", referring to the famous novel by Mayne Raid. The title of the journal «Трезвость и культура» ("Sobriety and Culture"), where this article was allegedly published according to the law of the association, it makes one recall the pretext of Russian postmodernism - the poem of Venedikt Erofeyev "Moscow-Petushki", because it was in this edition that it was first published. In general, this footnote is conceived as a pastiche or a reduced form of parody. Almost all quasi-scientific apparatus, accompanying the novel "Soloviev and Larionov", is made in this spirit. The language game is more obvious in the second example: it is characteristic that the reference to the author of the article about scientific and charitable funds with the speaking initials of U.E. (the conventional units, that is, currency designation) and the surname Otkatov (from «откат», which actually means 'bribe' in Russian slang) arises after an ironic remark about "the scrupulousness of Russian funds".

The narrative strategy of the novel by Vodolazkin is subordinated to the principle of the pastiche. It is built as a successive shift and interaction of different genre and style masks: a novel of education, memoirs, love and adventure novels. In the play of various discourse strategies, the discourse of the historical novel occupies a special place. «Время противопоставлено вечности. Nevertheless, it should be noted that in spite of the fact that the work by E. Vodolazkin recreates the episodes of the civil war in the Crimea and even represents real historical figures (Zhloba, Zemlyachka, Bela Kun), nevertheless, this is not a novel about the past. In his interviews E. Vodolazkin has turned to the problem of time many times. Concerning his novel "Laurel", he said: "There is no time (...) literature - it's not about the era, even not about history. This is about man". Or: "Time is opposed to eternity. For simplicity of perception, the events in it are arranged in a certain order. We call it chronological. Events, I think, do not disappear anywhere with the transition of man to eternity - they simply lose their chronological attachment: they hang in eternity like the toys on a Christmas tree, and they no longer need time. Without fear of tautology, I will say that time is temporary" (Vodolazkin et al, 2015). In the novel "Soloviev and Larionov", history s represented not as a consistent development of the events in time, but as a revealing of the timeless, that which is typical of repeating. It is no coincidence that the principle of deja vu is so significant in the composition of the work. It is noteworthy that both Solovyov and Larionov will experience "a painful sense of déjà vu", connected with the repetition of some details, personal and historical events. General Larionov often could not determine when exactly those or other events occurred, "merging in his memory with others (...) That led him to the idea that most of the events of his long life had time to happen again - and not once".

The principle of deja vu lies at the heart of one of the culminating events of the novel that happened at the conference with the symbolic and simultaneously ironic title "Larionov as a Text". One of the speakers presented the materials comprehending a scientific puzzle. He found a strange coincidence of the facts contained in two completely different

documents - in the memoirs of General Larionov about his childhood and, in particular, about his trip with his parents to Yalta in 1888 and in the report of Red Commander D.P. Zhaloba about the entry of his troops into Yalta in November 1920. "From the point of view of the researcher, there was not even a hint of acquaintance of one author of the text with the text of the other one. (...) Both texts cannot be raised to a common source, because, despite their proximity, they tell (...) about different events". And, nevertheless, they coincided even to the small points. The secret of this coincidence was solved by Solovyov, thanks to the advice of his teacher Professor Nikolsky, who refused to assess the events of world history "according to the degree of their progressiveness. To assess them, he allowed a single criterion – a moral one". Having learnt that the General's notes concern most of all childhood, the professor suggested that for him "his childhood was then a measure of everything". This allowed for Solovyov to put forward a hypothesis, of the veracity of which he was convinced, when General Larionov's notes fell into his hands. It turned out that in 1920 he left the remnants of his army in Yalta a little earlier than the Reds entered the city, and ordered his subordinates, by having disguised in the costume he had won in the city theater, to stage his children's Yalta memories, because "that had already once held had the seal of veracity". This "textualization of the reality" saved the lives for hundreds of people. The Reds believed in the spectacle played for them, representing the natural course of a peaceful life. So "peace" had won "war".

In the final of the novel we get an answer to another question that determined the main scientific intrigue that guided Soloviev's search: why was General Larionov, who, unlike the others, did not hide from the Reds, not shot by them? E. Vodolazkin again uses the "text in text" technique, intensified with the "déjà vu" effect. The final episode with the unsuccessful execution of Larionov is a kind of illustration to Soloviev's reflections on "the which extent the story itself is a fiction". He asks himself this question after having read the text included in "The Complete Collection of Russian Folklore". Notes of 1982". The members of the folklore expedition received it from a resident of the village of Berezovaya Gat Timofey Zhzhenki and took in as a new interpretation of the biblical story from the Book of Judges. Meanwhile, Soloviev knew that Timofey Zhzhenka in 1920 was a batman of General Larionov, and therefore guessed that the story told to him was a reality. Timofey told how two armored trains stopped at one of the stations, which was "left by two generals. Each of them believed that the station was in the hands of his troops". One of them had orientated himself in what was happening earlier than the other one and could kill him, nevertheless, despite the fact that nothing prevented him from doing so, he did not fire. In response to the question why, he replied: "Because death cannot teach anything" . Soloviev immediately realized that these words were uttered by General Larionov. It was this humanistic gesture towards the enemy that served him as a kind of "amulet": the good turned into the good in return and saved the life of the White General not only in 1920 in Yalta, but also during all subsequent years of Soviet power.

Thus, the thought expressed by Mark Lipovetsky as long ago as 1997: what is happening today in our and world cultures is seen as an attempt to rebuild the building of humanism in the chaos space [...] because any alternative to humanism is fraught with blood" (Vizel, 2018; Lipovetskiy, 1997).

## 4 Summary

In the novel by Vodolazkin life is stronger than death, peace (more precisely, the power of childhood) is stronger than war, the eternal is stronger than the temporary. These values are the main criterion in the writer's work, which prevents the transformation of history into text, play, pure narrative. The play in the prose by E. Vodolazkin is possible only "in the light of conscience".

## 5 Conclusions

In the novel "Soloviev and Larionov", as in the works by E. Vodolazkin on the whole, postmodern methods have been put to serve the author's humanistic concept, which allows writing the prose of this writer not only in the context of modern literature, but also in the context of the Russian humanistic tradition.

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# INCIDENT AS A FORMATIVE PRINCIPLE OF PLOT, SITUATION AND COLLISION IN LEO TOLSTOY'S "ANNA KARENINA"

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Abstract: In the framework of this article, we consider how the *chance*, becoming an event in the life of the heroes of L.N. Tolstoy's novel "Anna Karenina" determines the content of the novel and as such forms the structure of the work, its plot, situation and collision. Through the concept of "*chance*" in the language of artistic philosophy, Tolstoy presents deductive reasoning about human life, showing and explaining all the phenomena in it. The *chance* of Tolstoy becomes not only an aesthetic category, but primarily a philosophical one, since the *chance* explains not only the hero of the novel, its behavior and actions in certain situations. It becomes a way for Tolstoy to explain the world. The artistic structure of the novel, with all its event series, is determined by the "family thought". The textual consideration of the concept of "*chance*" as the structuring of the beginning of the novel presents to us both the general philosophical thought of the novel with the "family thought" and its artistic expression. Situations of *chance* meetings of the novel's heroes in one storyline (Anna - Vronsky) represent the destruction of traditional concepts of love, family, and the other (Levin - Kitty) - primordial national notions of human values.

Keywords: L.N. Tolstoy, the novel "Anna Karenina", the concept of "chance", the structure of the work, the plot, the collision

#### 1 Introduction

It is known that the idea of fate, along with the notion of a case, is widely represented both in mythical and literary discourses. As of G.M. Temnenko, the idea of fate in most of the nations "not only guides the ways of explaining the world, but also plays a structuring role in the formation of behavioral models" (Temnenko, 2012; Villalobos Antunez et al, 2013).

Such archetypal consciousness as the basis of the philosophical thought of regularity and chance in the human world was studied in mathematics, which, like any science, rests on the regular phenomena of the real world. Mathematics has developed a theory of probability, which speaks of the laws of random phenomena.

The theory of probability in the language of mathematics presented two philosophical concepts that explain everything that happens in the human world: it is a "natural event", an "accidental event." Thus, B.A. Sevastyanov, in his course on lectures on probability theory, presents the philosophical basis of this theory as follows: "A natural event is an event that always takes place as soon as certain conditions are created. A natural phenomenon is a system of regular events <...> But along with the regular, we all the time encounter in practical activities with events that are irregular or, otherwise, accidental. These are events that sometimes happen under the same conditions, and sometimes they do not "(Sevastyanov, 1982). The theory of probability proved that random events are subject to certain regularities, which she called "probabilistic regularities".

It should be noted that in recent years there has been an increase in interest in such philosophical and aesthetic categories as "chance", "necessity", "fate", "will" on the part of Russian and foreign philologists and literary scholars see, for example (Melukova et al, 2015; Khaybullina et al, 2016; Smyslova & Khabibullina, 2016), in particular - the researchers of creativity L.N. Tolstoy see, for example (Zakirov et al, 2017; Bushkanets et al, 2016; Denner, 2003).

Let's start a direct review of the novel by L.N. Tolstoy's "Anna Karenina". The content of the work says that almost all the events in the life of his characters, if they want to explain and understand them, turn out to be *random* in the field of "probabilistic regularities". These *chances* in the life of Tolstoy's heroes represent models of human behavior in so-called random events.

Within the framework of this article we are interested in how the chance, becoming an event in the life of Tolstoy's heroes, determines the content of the novel and as such forms the structure of the work, its plot, situations and collisions, which will become the subject of our discourse.

## 2 Methodology

In our discussion of the chance as a structure-forming beginning in the novel, L.N. Tolstoy's "Anna Karenina" based on the results of intertextual and hermeneutic analysis, should be the subject of events, which are described in the work, because, according to the laws of the theory of literature, it is "eventful completeness" that determines the structure of a literary work. The chance in the events of the works of L. Tolstoy often becomes an end-to-end motive. As in "War and Peace", and in "Anna Karenina" the author is occupied with the problem of fate, connected with events that do not depend on a person. Moreover, it is the chance in the context of fate in Tolstoy that determines the events of the hero's life. It is precisely the chance in Tolstoy, forming the behavioral model of the hero in those or other events, the structure of the work as "eventful completeness."

Recall that "eventful completeness" according to N.D. Tamarchenko, consists of an event as an object of image, comprehension and empathy, and also from the narrative event (Tamarchenko, 2004; Karpanina et al, 2018).

The philosopher of the XX century, M. Heidegger, reasoning about the essence of artistic creativity, thought out the event in its final expression: "The creation of art not only reveals the truth before us, it is itself an event". According to Heidegger, a work of art, revealing the truth of being, is perceived by man as an event that gives him "not to err, but to gain a correct idea of what is really what it is". Thus, it can be confidently said that many of the works of Leo Tolstoy, "Anna Karenina", among others, become an event in the perceiving consciousness that gives a person an idea of life, what it is. Therefore, for this reason, it can be said that the chance in Tolstoy's events is perceived not only as an artistic unit, but also as a philosophical one.

# 3 Results And Discussion

In the example of several fragments of the text of the novel, let us consider how the case forms the "focus" plot points of the work. As a certain regularity is perceived that the event series associated with this or that hero of the novel, Tolstoy begins with the chance.

It is the chance, becoming a real, irreversible cause of the event, creates a situation with a collision that determines the act of the hero in the future event. Let's consider the situation of the first meeting (accidental!) of Anna and Vronsky. The motive for the meeting is traditional in artistic texts, when the author needs to lead a narrative about the love of two. The chance of Tolstoy becomes a non-random definition of the motive for the meeting. In it - the main starting thought of the author. In a situation, accidentally formed, a collision is created, which becomes the cause of all further actions of the heroes, which testify to the violation of the original order of life.

The conflict was formed due to the instantly flared up struggle between two mutually exclusive emotional impulses, between feeling and duty. Tolstoy writes: "In this short glance" of Anna, the Vronsky "managed to notice the restrained jauntiness that played in her face". The definition of "restrained jauntiness" expresses the state of Anna's soul, a woman who did not yet love. The desire for love is the need for the living nature of its nature. This "restrained jauntiness" speaks of feelings still vague, not specific to someone not yet in demand. And further, developing the content of this "restrained jauntiness", the author writes: "As if the surplus of something" was so full of her being

that she was expressed involuntarily by her glance or a smile"(here and further our italics are A. Z., A.S., V.K.). This phrase of Tolstoy also speaks about the aggravation of the situation of Anna's accidental meeting with Vronsky, which arose because of the struggle between what was overflowing her being and what was dictated by the will (Anna is a married woman).

It should be emphasized that from the first chance meeting of two heroes novel, Anna and Vronsky, a situation is created with which not only the story line "Anna - Vronsky" begins, but also the general collision of the novel about love. The collision of a chance encounter leads the heroes to actions, the cause of which is the conflict between duty and feeling, between the soul and the mind. This conflict determines the relationship between the heroes throughout the entire novel.

The sudden aggravation in the considered event of the first (accidental) meeting determines all the further actions of Anna in her relations, on the one hand - with Vronsky, on the other - with Karenin as a struggle between feeling and duty (soul and mind). Anna's actions in the events of the novel are explained by the state of a peculiar emotional swing between duty and feeling. The desire to defeat the voice of nature in each case of a love situation is defeated. About this Tolstoy said already in the scene of the first meeting between Anna and Vronsky: "light in the eyes" "glowed against her will". This phrase Tolstoy as one of the first in the characterization of the heroine becomes key in the author's interpretation of her life choice. At the same time, Tolstoy shows that in some strange situation the love affair of Anna is in some situations an involuntary victory, and in some cases the desire to be faithful to duty (thoughts and feelings in the borderline situation of childbirth). The state of the struggle between the "living" nature and the sense of duty and ultimately determines the relationship between Anna and Vronsky.

In the context of this thought, let us consider several episodes of the novel in which the author shows his heroine in the events in which the struggle between feeling and duty becomes a sudden exacerbation (collision) of the situation that emerged, determines the following actions-decisions of Anna.

First of all, in the second meeting between Anna and Vronsky (for Anna, it is again random), the situation is created not only by the fluctuation, but by the "strange" s feelings of Anna: a feeling explained by duty and a feeling explained in kind.

In Tolstoy, this struggle between duty and feeling is defined as a struggle between what should be and what is called bad. The word "bad" in describing the relationship "Anna - Vronsky" is the most frequent.

Even from chapter XXX of Part One, which describes Anna's another chance meeting with Vronsky in the car during the "terrible storm", Tolstoy, with the lips of the heroine herself, assesses the situation of love conflict as something bad that changed her whole life: "It's bad that you say, and I ask you, if you are a good man, forget, then you said, as I will".

But all the horror of Anna's position is that "he said the same thing that her soul desired, but her mind was afraid". That, the conflict of a love situation is created by a spiritual struggle ("on her face he saw a fight", in which the power of nature dominates (Heidegger, 1996).

Anna's dialogue with Vronsky in the drawing-room of Princess Betsy aggravates the situation of the meeting too, because of the struggle of two principles in her soul. Note that the meeting in the living room of Betsy is in a certain sense also random, "there she met Vronsky and experienced an exhilarating joy in these meetings". The word "bad" is present in the definition of their relationship itself Anna.

From the IV part of the novel, Tolstoy is narrating about the strange life of the "three", the husband and wife the Karenins, Vronsky, who "never visited Alexey Alexandrovich's house, but Anna saw him outside the house, and husband knew this".

Everyone posed the question "What to do?" and could not find an answer to it. From Chapter XIX of this part of the novel there appear at first glance mystical definitions strange for a realistic novel: "domineering power", "brute force power", "the power of that mysterious power", "a powerful brute force" and, finally, "the action of a higher power". All of them are pronounced by Alexei Alexandrovich, who, like anyone else, worried about the fate of his family, fate, of course, and Anna. He understood that what is happening within his family is "bad", but he could not understand the reasons for this "bad."

The borderline situation of Anna's childbirths contains a collision due to sudden shocks not only in Anna's soul, but in Alexei Alexandrovich's soul. Anna's childbirths situation, which awakened the heart of Alexei Alexandrovich, became for Alexei Vronsky a frontier in assessing not only his relationship with Anna, but all his life.

Chapter XIX of Part Four begins with the word "error", from which the author begins to comment on that borderline situation, which became a serious shock for all three, not only for Anna, but for Alexei Alexandrovich and Alexei Vronsky. The mistake was made by Alexey Alexandrovich. It is that he did not consider the "accident" that Anna's repentance would be sincere. Those, Karenin suddenly realized that Anna's repentance was accidental, it could not have been, if not for the borderline situation. The proof is the first meeting between Anna and Vronsky after the birth fever. This error was presented to Karenin "in all its power" "after returning from Moscow". At the same time, Tolstoy also speaks of the other side of this error: "But the mistake he made was not only because he had not considered this accident, but also because he had not known his heart until this day of meeting his dying wife".

Thus, the episode with the "mistake" made by Alexei Alexandrovich, says that the collision of the borderline situation did not lead Anna out of the state of hesitation between duty and feeling, she only complicated Anna's relationship with Vronsky. The collision of childbirth eventually aggravated Anna's feelings, in which feelings of discontent with herself and Vronsky became evident.

As mentioned above, there is another love storyline in the novel, of Levin and Kitty. It is given in the context of moral and ethical values of L.N. himself. Tolstoy, acting in the novel as a defender of traditional ideas of love, family ties. This line is built on the principle of mirror reflection of the story line "Anna - Vronsky". The relationship between Levin and Kitty can be divided into two periods: the first is characterized by Kitty's passion for Vronsky, and, refusal to Levin; the second one - by Kitty's choice of Levin with her heart. It makes sense to say a few words about the second period of the relationship between Levin and Kitty.

Like in the first storyline, a chance meeting of heroes on the road decides their fate. A chance encounter between Levin and Kitty seems to be the author in diametrically opposite light of Anna's meeting with Vronsky. Both here and here Tolstoy has "eyes." However, if there was something in Anna's eyes that she was afraid of, then in the eyes of Kitty, Levin saw the light and the meaning of his life. Fundamentally important in the motives of the two storylines are the chronotopes "railway" and "big travel road" are fundamentally important in the motives of the two storylines. The motif of the meeting in both cases in its timespace contains the image of the road: in the first case it is the railway as a time phenomenon of setting (Heidegger), the time of urbanization and civilization, which, according to Tolstoy's deep conviction leads mankind to complete degradation of the inner content of the human "Itself", in the second - "big travel road", the road of "pure life" (Veresaev). Chronotopes selected by the author contain key characteristics of chance encounters, creating situations with such decisions of love conflicts that lead heroes to acts, in the first case, destroying the traditional concept of love, family, but in the second - idealizing traditional aboriginal notions of human values (Heidegger, 2012).

## 4 Summary

Artistic judgments of Tolstoy about the so-called chance events in a person's life in the end have the character of total their assertions, and therefore we can say that through the concept of "chance" in the language of artistic philosophy Tolstoy represents deductive reasoning about human life, showing and explaining all the phenomena in it. These arguments also contain many of Tolstoy's predictions and warnings. Thus, it is important to emphasize that Tolstoy's chance becomes not only an aesthetic category, but above all a philosophical one.

Throughout the novel, Tolstoy, as it were, fixes chance events, they become "focus points" of plot lines, create situations, collisions that lead the characters to one way or another. And, what is very important to emphasize, this fixation of chance events with subsequent events in the life of the characters leads Tolstoy to the idea that the accidental fate affects the fate of a person in some fatal way. In some cases (the case of Anna's meeting with Vronsky), this is accidental as the reason for what it led to, is conceived as a violation of some primordial order of Russian life. This idea of the novel represents the historical grain of the plot narrative about the love of Anna and Vronsky, in it the primordial is destroyed, when time requires some new forms of existence.

The concept of the "chance" in the storyline "Anna - Vronsky", defining the individual, concrete in the life of Russian society of the last third of the XIX century, actualizing the individual in each, gave this particular, random, level of universality. This novel became for the reader of the time of the author himself a bearer of the truth of being. For this reason he frightened many.

Tolstoy as a follower of the original order of life, leads in the novel another love line, Levin and Kitty, in which the event of a chance encounter creates a situation with such a solution of a love conflict that leads the heroes to resolute actions that correspond to the traditional concepts of love and family.

## 5 Conclusions

As final position, we can say that the entire artistic structure of the novel, with all its event series, is determined by the "family thought". The textual consideration of the concept of "chance" as the structuring of the beginning of the novel presents to us both the general philosophical thought of the novel with the "family thought" and its artistic expression.

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# INNOVATIVE FORMS OF EXTRACURRICULAR ACTIVITIES IN BIOLOGY WITHIN THE FRAMES OF FEDERAL STATE EDUCATIONAL STANDARDS

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Abstract: The article considers the problems of the necessity of using the innovative forms of extracurricular activities in biology. Psychological and pedagogical techniques were used for determination of the efficiency of innovative technologies application. As a result of the research of the 10th grade students, it has been revealed that in the experimental group, where the innovative technologies were actively implemented, informative qualities of each pupil, interest in a subject of biology and evaluation of students' knowledge have increased, the interest in discussion of urgent problems of biology has appeared. In the control group, the changes in training were practically not detected, since in this group the method of teaching biology remained unchanged. The use of innovative technologies in extracurricular activity allowed to consider various interests of pupils, to deepen and expand them in the necessary direction, and also to prepare the students for further professional activity. The obtained data can become a basis for the development of curricula and methodical grants, can be used at advanced training courses of teachers, deputy directors, directors, and also in the system of higher education, when studying pedagogical disciplines.

Keywords: innovative activity, federal state educational standard (FSES), information and communicative technologies, extracurricular activities, pedagogical experiment, information and education environment (IEE).

## 1 Introduction

Application of modern pedagogical technologies and analysis of their effectiveness are among the most urgent tasks of the national education system today. Due to the introduction of the federal state educational standard, high requirements are imposed to the student, which can't be realized with the help of traditional methods and means of pedagogical technologies (Kamakhina & Lokhotskaya, 2015). The modern system of education undergoes changes, which lead to a reduction in the hours, designed for the subject. The demands for the knowledge, abilities and skills of students rise, and the volume of necessary information increases. In this regard, there is a need to apply new approaches in education, based on modern information and communication technologies. The main purpose of which is the proper use of various types of information and didactic possibilities during the educational process.

To date, applying innovative forms of education, there is a significant impact on the content, forms and methods of teaching. You can present the material visually and unconventionally, using the capabilities of special software, various video and multimedia presentations. This increases the effectiveness of training (Fadeeva, 2016). The use of innovative forms in the learning process creates the most favorable conditions and greatly contributes to motivation in the study of a particular subject (Jumanova & Tulegenova, 2015; Zaidullina & Demyanova, 2017). The importance of use of innovative forms in organizational learning processes was also noted by U. Brandi and R.L. Iannone. They considered various possibilities and application of teaching technologies from the perspective of organizational learning (Brandi & Iannone, 2015).

At present, many countries, including Russia, are not satisfied with the results of school education, and due to this, there is a need for its reformation. Another important problem of school education is the low level of natural sciences teaching, and hence the low quality of knowledge among a significant number of students. This trend is connected with a reduction in the number of hours, designed for the subject. Due to this, the study of a large amount of complex scientific information is carried out in a short time, and studied material is poorly related to the interest of students and everyday life.

With the introduction of the federal state educational standard of

the second generation, the structure and content of the new system of biological education is being developed. Due to this, the quality and results of biological education will be defined in a new way.

The importance of biology in the school course is undeniable. It is the basis of general biological concepts, theories and laws, needed in high school, and it is the basic link in the system of continuing education.

In the federal state educational standard particular importance is given to extracurricular activity, which plays an important role in the development and training of schoolchildren. After-school activities are the system, which is aimed at education of students, development of their moral, ethical and social principles.

Recently, the importance of extracurricular activities has significantly increased. It has become an integral component of the educational program of basic general education.

Due to the modern information and educational environment (IEE), the implementation of the information-methodological conditions of the FSES main curriculum of general education is carried out in extracurricular activities (Rean, 2004).

With the help of ICT technologies, such an organization of educational process takes place, the result of which is the interaction between the teacher and students. It stimulates and motivates them for experimental and creative activity (Dmitrieva, 2012).

Particular importance is given to the use of information and communication technologies in extracurricular activities, due to which the educational work in the new conditions is intensified, and the interest of students is increased.

More complete, in-depth and versatile study of wildlife is carried out in the process of extracurricular activity. It is developed taking into account the propensities and interest of students. As a result, the talents and abilities of schoolchildren are improved. All this ensures the use of innovative technologies in extracurricular activities (Serovayskaya, 2012).

# 2 Methodology

The following methods were used in the research: analysis of pedagogical and methodological literature, study of normative and methodological documentation, pedagogical experiment, questioning, testing. During the research, the following psychological and pedagogical techniques were used: "Student's orientation to the mark", "Student's orientation to acquiring knowledge", "Motivation for success and fear of failure", test "Interest in biology" (Ilyin, 2002; Kalinova, 2012; Villalobos Antúnez, 2018).

# 3 Results and Discussion

The study was carried out on the basis of the Municipal Budgetary General Education Institution "Secondary magnet school N171" of the Sovetsky District of Kazan (School – is the competence center in electronic education) among the students of the grades 10 "A" and 10 "B". The experiment involved 26 students of the grade 10 "A" (experimental class) and 28 students of the grade 10 "B" (control class). To find out the cognitive qualities of each student and change them during the indicated period, questionnaire methods and pedagogical experiment were used.

The purpose of the work was to define the features and effectiveness of use of innovative forms in extracurricular activities, as well as their influence on the formation of cognitive interests in the subject of biology. The research was carried out in three stages.

I. The ascertaining stage of the experiment was carried out at the beginning of the study. It was conducted with the help of monitoring the educational process, the analysis of students' marks in class journals, revealing the orientation to the mark, to the acquiring of knowledge, interest in biology. All this give the grounds for judging the interests of schoolchildren in the process of extracurricular activities. In the course of initial study, two groups were identified. So, the 10th "A" graders were included in the experimental group, the 10th "B" graders formed the control group.

II. At the formative stage of the experiment, it was necessary to develop theoretical bases and specific methodological measures to resolve the problem under study. So, taking into account the purpose of this work, such extra-curricular activities (using ICT) were conducted on the following topics:

- 1. Additional educational program "Molecular genetics".
- 2. Detailed plan-compendium of the lesson at the biology

- circle in the 10th grade on the theme "Ontogenesis: Embryogenesis."
- 3. Development of out-of-school activity for senior classes on the topic: "Trip for a "recipe for happiness" (Braverman & Prosveschenie 2012).
- 4. Virtual excursion "Biocenosis of mixed forest".

As a result, a new situation is created, in order to determine whether extracurricular activities with innovative forms really affect the schoolchildren's learning process for the better (Yakovenko et al, 2016).

III. At the control stage of the experiment, the second questionnaire was carried out and the second analysis of students' progress was made, in order to determine the effectiveness of the work done.

Fig 1 shows the results of the technique "Orientation to the mark".

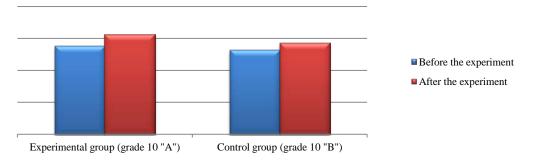


Fig 1. Pupils' orientation to the mark, before and after the experiment

As a result of the analysis of the obtained data, it was revealed that the level of orientation on the mark before the experiment was high enough, the mean value of which was 6.53 (10 "A") and 6.28 (10 "B"). After the second analysis, the mean value increased to 7.26 in the experimental group, and to 6.71 in the

control group.

In the course of the technique "Orientation to acquiring knowledge", the purpose of which was to reveal the degree of students' commitment to the acquisition of knowledge, the following results were obtained (Fig 2).

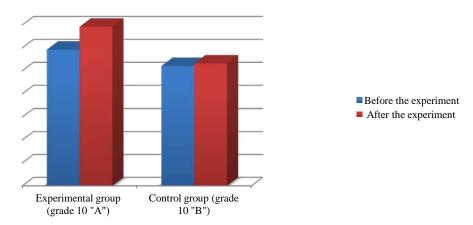


Fig 2.Studying the results of pupils' orientation to acquiring knowledge before and after the experiment

In the experimental grade (10 "A"), it was found that the mean value of the results of considered technique before the experiment was 6.92, after the experiment it increased and amounted to 7.92. In the control group, the analysis of the results showed that the mean value changed insignificantly, so after the

first analysis it was 6.21, and after the second analysis, the average value was 6.32.

According to the methodology "Motivation for success and fear of failure", students had to agree or disagree with the statements. The results are shown in Fig 3.

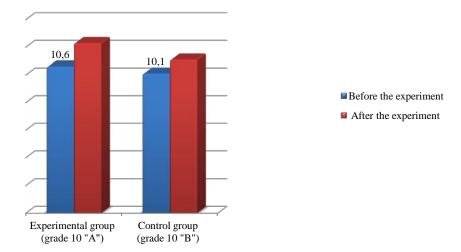


Fig 3. Progress of pupils of the grades 10 "A" and 10 "B" in biology

The analysis of the data, obtained in the experimental group, showed that before the experiment the average value of the results was 10.6, and after repeated research this value increased

and amounted to 12.3. In the control group, the primary analysis showed that the mean value was 10.1, and after the second analysis it was 11.1.

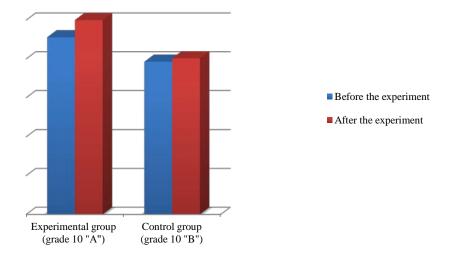


Fig 4. Results of the test "Interest in biology"

According to the conducted test "Interest in Biology", it was revealed that in the experimental group (10 "A") the obtained mean value was 9.11, and after the experiment it was 10.0. As a result of the analysis of the control group data, the mean value after the first research was 7.85, and after the control testing it was 8.03 (Fig 4).

It was found in our study, that the degree of students' orientation to the mark is quite high. This is due to the fact, that senior pupils are interested in getting good marks in connection with the completion of the second quarter. After the repeated investigation, a slight increase in this indicator was detected. So in the experimental grade (10 "A") it increased by 0.73, that was evidenced by the heightened interest in learning and evaluation of their knowledge. When conducting a second research in the control grade (10 "B"), this indicator changed insignificantly - by 0.4

According to the data of the second technique, the analysis of the results of students from experimental group showed, that the orientation to acquiring knowledge increased by 1.0. This indicates heightened interest of students in biology. In the control grade ("10" B), the average value of the orientation to

acquiring knowledge after the experiment was slightly changed, and increased only by  $0.11.\,$ 

According to the results of testing "Motivation for success and fear of failure", conducted in the experimental class, the average level of motivation for success among students after the experiment increased by 1.7 points. This indicates that due to the work in extracurricular time, the students have an interest in biology, they want to discuss current problems, and there is no fear of expressing one's own opinion (Fig 3). In the control grade, the average level of motivation for success after the experiment increased insignificantly, only by 1 point. This was due to the fact that the methodology of teaching biology in the control class remained unchanged.

The obtained data of testing "Interest in Biology", conducted in the experimental grade, indicate that the average level of interest in biology after the experiment among students increased by 0.89. This means heightened interest of students in biology during the course of extracurricular work. In the control grade, the analysis of the conducted testing showed that the average level of interest in biology after the experiment was slightly changed, and increased by only 0.18 (Didenko & Grinchenko, 2015).

The importance of extracurricular activities in biology is noted by many pedagogical researchers and methodologists. Didenko N. and Grinchenko B. investigated the innovative approaches in the learning process of extracurricular activities. The results of the research show that extracurricular activities are important for social and academic achievements (Marsh & Kleitman, 2002; Balyer et al, 2012). Education with the help of innovative forms makes a great contribution to the educational process. After all, education is responsible for providing the current generation with the necessary skills and values, which will help them to cope with the difficulties of the modern world (. Vlasova et al, 2016).

Thus, due to the extracurricular activities, it is possible to expand and deepen the knowledge of students on the subject. During the school hours, this is not always possible, because of the catastrophic reduction in hours, designed for the subject.

Taking active part in extracurricular work, carrying out observations and experiments, students acquire concrete ideas about phenomena and objects of the surrounding reality, on the basis of direct perception; they pay attention to environmental problems, etc.

The use of different tasks in extracurricular work, which are connected with the experimental activities and observation, contributes to the development of students' research abilities. This process greatly influences the development of thinking, observation, and attention of schoolchildren. There are the individualization of learning process and the implementation of differentiated approach in the process of extracurricular work.

## 4 Summary

As a result of the research, we found that the use of innovative technologies in extracurricular activities positively affects the learning process. This is evidenced by the data, obtained by us as a result of the analysis of applied techniques. Thus, in the experimental grade, the interest in the subject of biology, and the evaluation of students' knowledge have increased; the interest in discussing the actual problems of biology has appeared.

The use of innovative technologies in extracurricular work has allowed to take into account the diverse interests of schoolchildren, to deepen and expand them in the proper direction, and also to prepare the students for further professional activities.

# 5 Conclusions

Extracurricular activities play an important role in the study of biology, since it allows to combine the theory and practice in the most productive way. Biological education in general, and extracurricular activities in particular, involve the student in various feasible work, teach the responsibility and the ability to bring the matter to the end. Based on the conducted research, we can conclude that extracurricular activities with the use of information and communication technologies can take into account the diverse interests of schoolchildren, deepen and expand them in the right direction, and can also prepare the students for further professional activities.

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# INTEGRATION OF TEACHING METHODS AND PRINCIPLES OF SELECTION OF LANGUAGE MATERIAL IN CLASSES OF RUSSIAN AS A FOREIGN LANGUAGE

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Abstract: Within the context of the everyday world, Russian language is increasingly becoming a means of getting an education. So, at present, in connection with the specific educational paradigm and the pragmatics of studying a foreign language, it is especially important and appropriate to consider particular aspects related both to the methodology and the practical implementation of teaching Russian as a foreign language, it he main methods used in the work are the method of comparative analysis, descriptive-analytical method, the method of contextual analysis, on the basis of which the works of leading scientists in the field of pedagogy, linguodidactics, linguocultural studies were analyzed. The article deals with the process of integration of methods and principles of selection of linguistic material in teaching Russian as a foreign language. The following groups of methods are described in detail: conscious-comparative, conscious-practical, communicative and intensive. The origins of the formation of these methods, their dignity and the most optimal situations of their implementation in the practical activities of the teacher of Russian as a foreign language are determined. The choice of the method and content of the teaching material, the ability to operate them as a single linguistic system serve a purpose in the process of forming communicative competence among foreign students with a portrait of the modern language personality.

Keywords: teaching method, linguodidactics, communicative methods, linguocultural studies, methods of teaching Russian as a foreign language, intercultural communication

## 1 Introduction

Ideas of interaction of language and culture are expounded in the works of such well-known scientists as IA. Baudouin de Courtenay, N.V. Krushevsky, V. von Humboldt, E. Sapir, M.V. Lomonosov, F.I. Buslaev, I.I. Sreznevsky, etc. The appeal to the problems of intercultural communication does not lose its relevance at the present time and specifically in the framework of teaching Russian as a foreign language (Aalto & Reuter, 2007; Hidasi, 2005).

The methodology of Russian as a foreign language refers to various aspects of teaching (for example, (Varlamova et al, 2016), and many others), however, it is undeniably important to implement the principles of selection of teaching and learning aids. However this process can not be imagined without considering the main methods of teaching (Norbert, 2009; Villalobos Antúnez, 2003).

In the scientific literature the method is understood as a complex and highly ambiguous category. Thus in their attempts to explain the essence of the method, scientists focus their attention on certain aspects of the given linguo-didactic concept, thereby creating the ground for further interpretation. For example, IF. Kharlamov is interested primarily in the teaching component of this concept: "Teaching methods should be understood as the teacher's ways of teaching and organizing the learning and cognitive activity of students in solving various didactic tasks focused on mastering the material" (Dumetz & Trompenaars, 2012)

A.N. Shchukin writes that "in a broad sense, the teaching method is a direction in education that determines the strategy of the language teaching chosen by the teacher, in the narrow sense it is the method of teaching any side of the language (for example, phonetics, vocabulary, grammatical structure, type of speech activity), with the help of which the practical side of the teacher's work is determined in the specific conditions of teaching the language ". Nevertheless in spite of the plural understanding of the method, in the most general sense the method is a set of techniques with the help of which the teacher solves the problems in order to realize the effective learning and cognitive activity of the students (Shchukin, 2013).

Currently there are more than one dozen methods of teaching a foreign language. All of them are essentially different from each other. Let's analyze the most optimal in our opinion and successful in modern methodological theory and practice of teaching Russian as a foreign language (Wittenkamp, 2014).

## 2 Methodology

The theoretical works of leading scientists in the field of intercultural communication, pedagogy, linguodidactics, linguocultural studies served as a material for this study.

The given topic determines the choice of methods of linguistic analysis. The main methods used in the work are: the method of comparative analysis, descriptive-analytical method, and the method of contextual analysis.

## 3 Results and Discussion

It is generally accepted that the Russian language has a very complex lexical and grammatical nature and is perhaps the most difficult to study among the most common European languages. The content of the RFL includes linguistic aspects: phonetics, vocabulary, word formation, morphology, syntax and translation, as well as text and types of speech activity. Russian as a foreign language reveals a close relationship between aspects of the language. The more lexical units are mastered by the student, the more seriously he should take the study of grammar.

In order to make actual his speech activity, the student is first of all invited to understand the presented topic and try to associate it with the native language (the principle of counter-associations). In other words, along with the mechanical memorization of theoretical rules, grammatical constructions, speech patterns, reliance on conscious perception and comparison should help to reconstruct productively from memory in the future and use the knowledge gained in a given foreign-language communicative environment. This methodological group includes consciously comparative and consciously practical methods with a target setting for written communication and activities in the field of verbal communication (Erofeeva & Galeev, 2015; Tuan, 2017).

Consciously-comparative method is based on the ideas of a famous linguist, academician L.V. Shcherba, according to which "all the uniqueness of a foreign language should not be absorbed unconsciously, in practice, but should be on the contrary, deliberately opposed to the phenomena of the native language". Interference of skills in the case study helps to identify those linguistic holes that are formed in the absence of an analogue in the native language, which, of course, allows you to prevent and overcome possible errors of an interferential nature when teaching the Russian language. Being an adherent of this approach, in practice the teacher tries, first of all, to focus on partially or completely coinciding linguistic phenomena of contacting languages (Shcherba, 1974).

The discrepancy in language systems can be overcome using discussion, role-playing games, and the design method; various sets of tasks: reproductive, related to the reproduction of the heard or read (retelling, oral story, discussion exercises, dramatization, etc.), reproductive and productive, which combine knowledge, creativity, improvisation, the student's thinking (brainstorming, role-playing game, linguistic quiz, etc.), productive-creative with a creative component (for example, wits & humor competition); through the use of visualization tools: comparative-competitive tables, drawings, schemes; the use of authentic texts of various genres (Starostina et al, 2016).

Integration of all types of educational and speech activity, in particular, the prevalence of the receptive type - reading, as the main one, focuses the attention of the students, first of all, on memorizing the lexical-semantic and morphological-syntactic valence links of the text and thematic coherence.

The universally recognized and leading in the system of higher education is the conscious-practical method (or psychological methodical) associated with the names of well-known researchers of the 20th century in the field of psychology and methods of teaching foreign languages. The advantage of this method is the combination of the conscious (awareness of the linguistic forms necessary for communication) and practical training (activation of speech practice in a foreign language). We can talk about the vector target component of the method teaching the speech behavior in a given communicative situation (Milrud, 2004).

On that basis, an accentuation on teaching the recipient to the perception and understanding of oral speech and consequently correct actualization of dialogical discourse is supposed. The transition from oral speech to writing is carried out. On the basis and principles of this method, such as overcoming the negative influence of interference, teaching on a syntactic basis, updating active vocabulary, concentrating and functionality in the presentation of educational material, the Russian system of testing foreign citizens in Russian as a foreign language is being built.

Conscious methods offer students not only to memorize the theory, but to understand the basic phonetic, spelling, lexical-grammatical, semantic and stylistic facts of the language being studied, to work intensively on practical assignments with the help of speech samples and without. So, for example, if the students have already studied the model of the past tense of the verb to read, then the formation of past tense forms of such verbs as to write, to play, to know, to do, to hear is not difficult, because they are of the same paradigmatic series. It can be confirmed that reliance on consciously acquired knowledge facilitates the process of interpreting the subsequent topic.

In modern practice of teaching Russian as a foreign language, communicative and intensive methods are actively being integrated.

Fundamentals of communicative methods were laid by E.I. Passov, a Russian linguist, an expert in the field of methods of foreign-language teaching. According to the scientist, "communicativeness presupposes the speech orientation of the educational process, which is not so much involves the pursuit of speech practical goal... but rather the practical use of the language is the way to this goal. Practical speech orientation is not only a goal, but also a means, where both are dialectically interdependent " (Passov, 1985).

Specific features of this approach are the penchant for semantics and the implementation of communicative competence. We define competence as a generalization of accumulated knowledge, skills and practical application in the process of speech activity. So, we can talk about several types of competencies that must be formed by the student in the process of studying the material:

- Linguistic competence involves knowledge of the foundations of language as a system, knowledge of the lexico-grammatical structure of a foreign language or Russian as a foreign language - phonetics, vocabulary, morphology, syntax, word formation;
- Speech competence the ability to build your speech correctly, using grammatical patterns;
- Communicative competence assumes expedient, logical and competent inclusion in a given speech situation;
- Culture-oriented linguistics competence appeals to the cultural features of the country, its traditions and customs.

All competencies are interrelated and actualized in the process of formation of types of speech activity.

To solve specific professional problems in the modern methodological system, a competency building approach is

strongly expressed. In a broad sense the word "competence" means compliance with the requirements, established criteria and standards in certain areas of activity and in solving a certain type of problems, possessing the necessary active knowledge, the ability to confidently achieve results and own the situation.

The competency building approach in education is understood as a method of teaching focused on developing the ability of students to solve a certain types of professional problems in accordance with the requirements for personal professional qualities: the ability to search, analyze, select and process information received, transmit the necessary information; possession of skills of interaction with surrounding people, ability to work in a group; possession of mechanisms for planning, analyzing, self-assessment of one's own activities in non-standard situations or in conditions of non-certainty; possession of methods and techniques for solving problems encountered.

Competency building approach regulates the selection of special educational literature and a peculiar presentation of linguistic material in Russian as a foreign language classes. This is an active individual, dialogical or group work, the result of which is the assimilation of scientific knowledge, the development of skills and the acquisition of skills for the future application in professional practice, such as the ability to work with business correspondence, the correct drafting of documents, and the ability to conduct professional dialogue in the studied language.

The gradual work with authentic texts is supposed in the educational process, as well as the ability to work with various kinds of reference literature, the ability to conduct a discussion, correctly and concisely expound your thoughts, the ability to back up your point of view with strong arguments.

A group of intensive methods of communicative orientation deserves special attention: a suggestopedia, or suggestology, a method suggested by G. Lozanov; method of activating the capabilities of a person and a group suggested by G.A. Kitaygorodskaya; emotional and semantic method by I.Yu. Shekhter; intelligent technique ("25th frame effect"); relaxopedia by I.E. Schwartz, providing for the minimum period of training the use of the maximum amount of material, the maximum concentration on the part of both the teacher and the student, involving in the game communicatory situation, removing emotional barriers between the participants in the educational process through audio-visual means (music, light, the situation). Intensive methods presuppose a group form of work with a maximum demonstration of the cognitive potential of each communicant.

# 4 Summary

In recent decades, the predominant position in teaching Russian language as a foreign language has been taken by the linguoculturological approach, focused on the study of language within the context of culture of its speakers. Learning a foreign language as part of this approach is seen as a process of intercultural communication, which encourages the students to become familiar with the basic elements of a foreign language. Attention to language as a reflection of sociocultural reality generates the need to study the language conceptualization and categorization of the world for linguistic purposes (Shtyrlina, 2017).

Linguoculturology is a new independent discipline of the European linguistics of the 21st century that arose at the junction of linguistics (psycholinguistics, sociolinguistics, ethnolinguistics, culture-oriented linguistics, pragmalinguistics and cognitive linguistics) and culturology, which focused on the interaction of language as a translator of cultural information, culture with its attitudes and preferences and the person who creates this culture, using the language (Maslova, 2001; Alefirenko, 2001).

In this regard, the issue of the contents of the educational material that should help the student to understand and perceive the culture-specific units of the Russian language as a unique means of actualization the Russian way of thinking acquires particular urgency. Today linguocultural competence is included in the mastering of the bachelor's and master's program as a component of general cultural and professional competences.

## **5 Conclusions**

Each teaching method is aimed at achieving a specific goal, it is independent of the learning environment, based on linguistic, psychological, didactic conceptions that form the theoretical basis of the method and are implemented as a model of learning as an individual interpretation of the method in specific language teaching conditions. Nowadays teaching is the process of integrating methods and ways of conceptualizing educational material, because interest in combined methods is justified in connection with steadily increasing social needs and virtually unlimited possibilities.

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# IT IS NOT ACCEPTED AS A MARKER FOR BEHAVIOR ASSESSING IN CONTEMPORARY RUSSIAN CONSCIOUSNESS

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Abstract: The article conceptualizes the application of a negative impersonal construction *me npunsmo* ("it is not accepted") as a marker of a textual semantics, which is connected with the conveyance of the idea about a negative evaluation of an action/condition/behavior as the one that doesn't correspond to a certain socially important norm. The topicality of addressing to the problem in question is conditioned by the need in the specification of the factors that influence the self-control of the Russian society and the consideration of particular actions as the ones that are disapproved in the society in whole or in some of its segments. In the course of the research, the methods of parametric classification, lexical-semantical and contextual analysis were used, as well as the methods of quantitative data processing, the materials for which were published in 2001–2016 and which were extracted by means of continuous sampling from the Main corpus of the "Russian National Corpus" (NRC). The objective of the research is to answer the following questions: which matters and why are conceptualized in the modern Russian society as not acceptable ones, can it be said that inappropriateness is acknowledged by the whole society or the contextual environment of the word combination "it is not acceptable ones, can it be havioral self-restrictions in the lists of parameters of criterion behavior or deviations from it; whether there are textual markers of preserving or changing of behavioral norms of native speakers of the modern Russian language. In terms of behavioral self-restrictions, Russians are mostly focused on the details of their private lives. Self-restrictions in particular segments of the society are labor activity and the life of a family. Globalization processes allow Russian speakers to conceive themselves as a part of the humanity and reflect regarding the lack of the identity in the spheres of self-control in people from various countries. For Russians, the moral aspect plays a crucial role in posing res

Keywords: it is not accepted, behavior, society, social group, linguistic culture, Russian-speakers, modern Russian speech.

## 1 Introduction

Modern linguistic studies are aimed at solving general humanitarian tasks. One of such tasks is the conceptualization of the processes of self-identification of the society that exists within the borders of unified linguistic culture. The research is based on the following postulates: the language system is adaptive (Arnold, 1991, 7); native speakers face constant, although gradual, changes in it; those linguistic items that are recorded in dictionaries and adopted by grammarians are not necessarily realized intactly in the speech production (Fleischer, 1978); the general nature of the humankind conditions the existence of a range of unified values, which, however, do not necessarily have the same positions in hierarchical axiological systems of various nations, and more often, they do not represent an exhaustive list of various ethnic-lingual societies (Wierzbicka, 1992; Privalova, 2006).

Agreeing with the point of N.V. Ufimtseva stating that "...the duty of every ethnic group is self-cognition" (Ufimtseva, 1998), we will note that first, self-cognition is a basis for a certain self-control, a reason for looking at oneself from the outside and seeing one's merits and demerits; second, it is the possibility of detecting both constant and variable social and cultural characteristics of a collective subject; third, it can be a mediator that regulates the contacts with the other world (it allows to define the points of convergence and divergence of one's ethnical culture with other ones within the unified civilization) (Yapparova, 2017; Mobbalegh Naseri et al, 2018). For a specialist who acts as a mediator in intercultural communication (a translator or a teacher of foreign language), the results of such self-cognition include a direct practical usefulness, being in demand in lingual-semiotic, lingual-stylistic and lingual-didactic

objectives (Akhmetzyanova & Gilazetdinova, 2018; Antonova et al, 2016; Villalobos Antúnez & Ganga, 2016).

The majority of the works dedicated to the issues of Russian linguistic culture refers to its constant characteristics and precedence. Linguistic manifestations of modern Russians' self-identification receive less attention. This research fills in this lexical gap at the account of paying attention to the contexts that include a negative word combination it is not accepted. We are aimed at answering the following four questions: 1) which social associations (with the consideration of qualitative and quantitative parameters) accept these or those self-restrictions in behaviors or other socially important actions; 2) what is the nature of such actions and what do they relate to; 3) what are the reasons for posing self-restrictions on the selection of behavior patterns or performing actions; 4) which of these restrictions are recognized as a feature of a certain epoch, and which of them represent the means of preserving historical values.

# 2 Methodology

In order to understand the attitudes of a certain society or some of its segments towards the object of a social interest, it is reasonable to detect the mentions of this object and the nature of its evaluation in the utterances of the members of such a society. In order to provide the relevance of the utterances' sampling, the Main corpus of the "Russian National Corpus" (hereinafter referred to as NRC) was selected as a source of the materials, and the formal condition for selecting the contexts was the presence of impersonal negative construction it is not accepted (meaning "it is not approved by the society or a part of the latter and is not an acceptable standard of conduct or a regular situational reaction") in them. The focus on the views of modern bearers of Russian linguistic culture led to a tensed limitation of a speech material by the opuses of the 21st century. Four hundred and sixty-five examples of the usage of the mentioned construction have been found in 37821 texts.

The main data processing method was the one that we conventionally called the method of parametrical classification. Essentially, it is about a parallel reliance on a range of logically significant parameters that are required for meeting the objectives of the research. Progressively as the context was being detected, it was classified according to four reasons: 1) for whom it is not accepted; 2) what is not accepted; 3) why is it not accepted; and 4) in which time limits it is not accepted. For each reason, the specific implementations were formulated (for whom - for the members of one family, for friends, for the people united by some occupation etc.; what – to discuss a certain topic, to express one's opinion, to perform a specific action etc.; why because it is shameful, improper; irrational etc.; when - then, usually, now etc.), which conditioned a detailed characteristics an estimated object. The statements of specific implementations were formulated inductively based on the material itself. The information was extracted from the utterances by means of contextual and lexical-semantical analysis. In case there was not enough context from NRC to make a qualification regarding the meaning, the reconstruction of a contextual semantics was performed based on the full web version of a certain opus. At the next stage of materials' analysis with the consideration of the mentioned parameters and their implementations, it was possible to examine every aspect of the studied phenomenon with the application of quantitative methods of data processing.

## 3 Results

The distribution of the sample material can be illustrated by several categories of the examples:

## 3.1 For whom "it is not accepted"?

- In Russia (on in the state that is considered to be a preceding one – in the Soviet Union or in Kiev Rus) without specifying ethnical characteristics of the subjects of the behavior (or specifying them as Russians) – 315 examples.
- In Russia (on in the state that is considered to be a preceding one – in the Soviet Union or in Kiev Rus) with the mentioning of ethnical or geographical (that implies an ethnical one) belonging of the subjects of the behavior (the Ossetians, the Chechens, the Caucasians, Highlanders, West-Ural-Volga peoples) – 13 examples.
- For anyone (i.e., in various ethnic and cultural societies, including Russians, it is considered unaccepted) – 13 examples.
- In the international communication practice (i.e., in the dialogues that are conducted at the country level, including Russia) – 3 examples.
- For the representatives of any foreign linguistic culture or a number of cultures – 95 examples.
- For the members of any confessional association that is not recognized by the Russians as a commonly accepted one (Wahhabis, Isma'ilites, Jews) – 4 examples
- 7. For fictional characters (in imaginary worlds) 4 examples.

## 3.2 What "is not accepted"?

- To exercise certain behavior patterns or to behave in a specific manner – 187 examples.
- To perform certain actions (which cannot be classified as behaviors) – 87 examples.
- 3. To draw somebody's attention to the facts, circumstances etc., to display something, to ask a question about something that can cause discomfort to other person/persons 83 examples.
- While communicating, to touch upon the delicate topics or to mention something that was agreed not to be mentioned – 32 examples.
- To express an opinion or position in certain circumstances (for example, in the presence of an authority figure) – 27 examples.
- 6. To allow oneself showing a demonstrative emotional reaction (a verbal one, a psychophysiological one or a motorial one) 20 examples.
- 7. To evaluate an object in a certain way -13 examples.
- 8. Not to perform a certain expected action 6 examples.
- To be perceived by other people as a person who doesn't have a good command of a language – 4 examples.
- To think over the topic, which, according to the opinions of other persons respected by the subject, should be disregarded – 1 example.

# 3.3 Why "it is not accepted"?

- A society or its part considers it something reprehensible, undeserving, unprofessional etc. – 101 examples.
- 2. It is irrational 46 examples.
- 3. It is tactless -39 examples.
- 4. It affects the interests of other people 33 examples.
- 5. It is considered something that is not worthy of people's attention in their everyday lives 32 examples.
- It is prohibited according to established and publically stated rules – 30 examples.
- 7. It affects a person's reputation 28 examples.
- It is not considered as a value in a society or a social group 25 examples.
- 9. It is shameful 21 examples.
- It is considered unessential for knowing or using an object 18 examples.
- 11. It is dangerous for one's life or affects one's health and well-being 17 examples.
- 12. It doesn't meet the requirements of etiquette 17 examples.
- 13. It belongs to the sphere of superstitions -2 examples.
- 14. It is not feasible or not possible for a person because of the biological reasons 2 examples.

# 3.4 When "it is not accepted"?

- 1. Usually 314 examples.
- 2. Previously, mentioned before 79 examples.
- 3. Now, at the moment 63 examples.
- 4. Before (as contrasted to the present time) 8 examples.

#### 4 Discussion

The analysis of the contexts that include the construction it is not accepted in each of the aspects stated above allows defining the following tendencies.

1. The most evident opposition is represented by two groups of subjects: 1) Russians and 2) non-Russians who live outside the territory of Russia. The quantitative domination of the context related to the first group can be explained by the importance for the ethnical and cultural community to cognize the behavior of its members in details and in various aspects. However, the very fact that more than 20% of all the examples relate to the attempt to see what exactly is not accepted in other nations or countries demonstrates people's willingness to understand their "planet neighbors". Various types of references to foreign cultures are possible, like, it is not accepted in Japan; the Japanese do not accept that; in Europe and in France, in particular, ... is not accepted; in the Western world it is not accepted etc. It appears that the mentioning of the place name instead of the ethnonym reflects the gradual substitution of ethnic and cultural world perception with the civilizational one (to know more about the specifics of ethnicity in the conditions of globalization refer to (Zakirova, 2016): the behavers are perceived as citizens of a specific state rather than the members of ethnical and lingual community; on the other hand, a tendency to metonymization can be observed (abroad, any Russian speaker is identified as Russian, and in Russia any person who comes from China is identified as Chinese).

Overall 28% of the examined contexts reflect the Russian speakers' thoughts about behavioral self-restrictions extended to Russian (or some of the precedent ones) society as a whole. This is often marked by such lexemes as Russia, Russian, Russian-speaker, Rus, we, our. However, while reflecting about the recent (Soviet) past, they do not extensively use the construction it is not accepted in the context of the place names like the USSR, the Soviet Union or the definition of the world soviet, but only use the link-verb in the past tense (it was not accepted), in particular cases adding some lexical temporal markers (then, in those years, in my day).

In general, the self-restrictions that are posed on the behavioral peculiarities in social unions of various types, starting from minimal informal groups that are created on the base of interpersonal interaction (relations between a man and a woman, between friends or mates, between remote friends), continuing with such formalized small social group as a family, specific social and professional unifications (various work places like firms, organizations, educational institutions etc.) and finishing with various social strata that are characterized qualitatively rather than quantitatively (people of the same occupation or profession, similar hobbies, same ideology, one level occupied in the state hierarchy, unified age or gender attributes) etc. Often, there can be found references to self-restrictions in the behavior of certain people within one type of professional activity (it is not accepted in the scientific community, ... among the artists, ... in the army, ... in business etc. - overall, 71 contexts was found). Thirty contexts relate to this, pointing at the limitations that are accepted in a certain work environment. The next highest unification, in which the peculiar number of behavioral limitations is developed, is a family (33 contexts), e.g.: in this house, it was not accepted to...; in this family, it was not accepted to...; etc. Let us emphasize: if in the historical and cultural tradition or in the process of the family ties' evaluation, the attention was paid to the relations between the spouses in the first instance (Saiwuleshi et al, 2017), in the examined material the roles of both adults and children appear to be equally important.

- 2. The parameter "what" of the construction "not accepted" shows that self-restrictions posed by the Russian-speaking bearers of the modern linguistic culture onto their own behavior to a great extent refer to the behavioral style (e.g., it is not accepted that a young family lives at the account of their parents; it is not acceptable to interfere with the sphere of other people's interests etc.); or the performance of certain actions (e.g., to call an ambulance because one feels a headache or not to go to work because of that; it is not acceptable for a man to kiss a lady's hand in an official setting; it is not acceptable that a guest teaches a wife how to deal with her husband etc.). However, in this group, even a selection of certain speech tactics or reference may be considered as an action (to apologize, to accept an apology, to be rude, to intrigue etc.) Besides, more than 160 examples (points 3-9 in Table 2) are associated with the speech; at this, it is often mentioned that it is not accepted to touch upon the topics that can cause a negative reaction in an interlocutor or a third party.
- 3. Among the reasons of non-admission of these or those actions or behavioral styles, the moral ones prevail over the pragmatic ones; other people's opinion and the unwillingness to be perceived by other people as an immoral, unprofessional etc. person, appear to be very important. See the examples: In the department, it is not accepted that the workers boast about their achievements or dramatize about the situation; ... it is not accepted that you are interested in whether you are leaving a joint or personal property to somebody while you are drawing up the will
- 4. About 68% of the examples represent the self-restriction as a constant one; lexical temporal markers are absent or demonstrate the constant nature of the self-restriction: Up to now, it was not accepted that powerful persons expressed such kind of thoughts in such an eventful context etc. Predominant is the tendency of subjects of the statements to perceive themselves as the members of lingual and cultural society that preserves its traditions. The other tendency is the willingness of the subjects of the statements to operate only verified data while observing the changes in their self-restrictions, emphasizing their belonging to the present (at the account of application of such words as now, at the moment, today, these days, yet, already, lately) or pointing at the personal experience of the subject of the reflection or people who relate to the nearest precedent generations: ... he has never brought her presents like this. He hardly even brought her anything - it was not accepted.

# 5 Summary

The method of parametrical classification of a specific speech material, which is not limited either topically or personally, but which represents the reflection of the large amount of the Russian-speaking part of the Russian society, presented in the expressions of the first fifteen years of the 21st century and marked by means of a negative construction it is not accepted (which earlier had not been an independent object of a linguistic-cultural or linguistic-cognitive study), may serve as an instrument of reconstruction of particular fragments of contextual exemplification of modern Russian speakers' consciousness.

## **6 Conclusions**

The conducted study marks out the perspectives of the cognition of the peculiarities of behavioral self-regulation by the society or some parts of it be means of contextual analysis of the key semantical grammar structure. The specific materials and results of the works may be used both for the aims of teaching the course "Linguistic and cultural studies" as a part of foreigners' learning Russian and for the aims of practical acculturation of the students, the effectiveness of which to a great extent depends on the level of awareness of Russian language learners about the habits, psychology, cultural and social attitudes of the bearers of this language.

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# JEWELRY LEXIS AS THE ETHNIC AND CULTURAL SOURCE (ON THE TATAR LANGUAGE MATERIAL)

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Abstract: The lexical system of each language contain the elements in which traditions, the people's occupation, way of life, psyche are reflected. Many lexical units store centuries-old history and culture of the people. The present paper deals with description of some lexical units of material culture, the names of ornamentals of the Tatar people. For the purpose of studying these lexemes, descriptive method and continuous sampling method of were used to collect and systematize the materials; lexico-semantic method was introduced when analyzing factual material; methods of linguoculturological, component and semantic analysis were used to highlight the cognitive features of the functioning of linguistic units; comparative and contrastive methods were used when considering the translations in bilingual dictionaries. Review and analysis of factual material confirm that the vocabulary reflects the features of the material economy and the attitude of the people to their ethno-cultural values. In the course of the study, the etymology of the selected units, their relation to the common Turkic heritage, and at the same time, the uniqueness of these items were singled out. The material will further serve as a model and source for studying other layers of the Tatar language vocabulary and for creating an integral image of the material culture of the Turkic peoples.

Keywords: the Tatar language, vocabulary, material culture, the names of jewelry, traditions

#### 1 Introduction

The formation of any national culture has always been influenced by such factors as climate, geographical location, economic structure, the main occupation of the people, neighbors, etc. The cultural traditions having been created during long centuries and with such difficulty are on the verge of extinction at the modern stage of development of society. Today, to study and preserve historically conditioned national uniqueness, national dignity, ethnic identity, which are undoubtedly reflected in everyday objects, elements of different folk traditions, customs is of current importance. Language, as a way of reflecting culture, is also its keeper. By studying vocabulary, one can deeply penetrate into the history and culture of the people, find the origins of the formation of these words, determine the significance of individual objects and phenomena in people's lives.

The vocabulary of different languages is the subject of studying by many linguistists (Denisova et al, 2017; Ivantsova & Ekaterina, 2017; Tyuntesheva, 2017; Villalobos Antunez, 2001). Certain strata of vocabulary of the Tatar language are studied by such prominent Tatar scholars as G.Kh. Akhatov, G.Kh. Akhunzyanov, F.A. Ganiev, F.G. Garipova, D.B. Ramazanova, G.F. Sattarov, F.S. Safiullina, F.S. Faseev, etc. The vocabulary of clothes and ornaments of the Tatar language were investigated by D.B. Ramazanova, S.V. Suslova, LF Tukhbiyeva and others (Ethnic and Cultural Dictionary of the Tatar Language, 2016).

In recent years, wider coverage has been given to the study of the Tatar vocabulary, the peculiarities of the language of the Tatar diasporas, the lexises of material and spiritual culture, the ethno-cultural vocabulary of the Tatar language, and the like (Mikhailovna & Rizvanovna, 2017; Gabdrakhmanova et al, 2017; Vildanova et al, 2017; Nabiullina et al, 2014; Khusnullin et al, 2017).

From this point of view, the lexises of jewelry is an integral part of folk culture. Ornamentals appeared long before people began to make tools and household items. Having learned to forge metal, they, first of all, made ornaments for different parts of the body from them. Therefore, the study of the names of jewelry is extremely important in the context of the growing complications of human society, the interpenetration of cultures and styles of

life, when the distinctive features of peoples are being erased.

This paper studies individual lexical units of the thematic group "jewelry" of the Tatar literary language. Bilingual dictionaries of the 19th-21st centuries were used as a source. The study sets the following goals and objectives: to give a description of the names of ornaments that exist in modern Tatar language; to reveal the features of their functioning in the language; to determine the etymology of the selected units; to define the role and place of these ornaments in the language image of the world of the Tatars, etc (Nurmukhametova, 2016; Nurhayati, 2018).

## 2 Methodology

Based on the goals and objectives, the study used the following methods and techniques of the analysis: the descriptive method and the method of continuous sampling were used to collect and systematize materials on the research topic; with the help of the lexical-semantic method, a systematic analysis of the lexical material was carried out; the methods of linguoculturological, component and semantic analysis were used to highlight the cognitive features of the functioning of linguistic units; the comparative and comparative methods were used to study the translation of selected units. From the point of view of the theory of scientific research, the chosen methods are the best.

## 3 Results and Discussion

The kinds of ornaments of the Tatars are distinguished by variety and uniqueness. Like most nations, jewelry is divided into three categories: head pieces, pectoral and wrist pieces. The first group of ornaments comprise the pieces such as earrings, nakosniks, etc. The second group –beads, passementerie, pectoral ornament, etc. The third group includes ring, bracelet, ring with a stone, etc. This article aims to study certain names of traditional jewels of the Tatar people, places emphasis on female toiletware.

Earrings are the ornaments worn by women of all nations, nationalities, ages. Tatar women are no exception. In the modern Tatar literary language, the word after is used to denote this toilet article, it goes back to the Arabic word to plane, to scrape (the primary meaning of a ball of planed slivers). The variant cuppra is actively used today in the Kasimovian, Zakazansk, Laishevsk dialects of the Tatar language. The dictionary by L. Budagov fixes the word after an ont only in the meaning of earring, but also as "ring" and "finger ring with a stone".

The bilingual dictionaries of different periods represent this lexeme as follows: earrings -earrings; earrings; earrings, an earring. The material of the study proves the antiquity of this ornament.

Earrings from the earliest times were the most common ornamentals of Tatar women of all ages and social groups since they were intended to accentuate natural beauty and served as an indicator of the material wealth and status of women in society.

The Tatars had a variety of earrings. The most famous earring in the history of Tatar culture is an ornament in the form of a hoopring, which tells about the origin of the world as viewed by the Turkic people. A duck with a patch of ground in its beak is imaged in the interior of this hoop. Ancient Bulgarian legends say that a duck, diving to the bottom of the boundless ocean, swam to the surface with a patch of land. This land gave rise to land.

One of the most beautiful and unique Tatar national ornaments is chulpas, which differ in exceptional variety. Chulpas were fixed to plaited hair, and when stirring, they produced a subtle melodic sound. The representatives of other nations recognized the Tatar women by the sound of chulpas. The jewelry, making noisy or tinkling, when walking, should protect their wearers from evil forces, being a unique amulet from the evil eye, which kept the beauty of the woman.

Bilingual dictionaries of the Tatar language describes this jewelry as a special kind of pendants, mostly silver, rarely golden, attached by girls (and by women) to the plait. The dictionary by L. Budagov fixes the word chulpas in two meanings: 1) silver decorations, rattles on the end of the braid; 2) braided bucket, strainer. Indeed, in the Turkmen language, chulpas means "woven bucket, colander" and is written as and in the Mongolian language the word is used as in the meaning of "a sieve made with ornaments from bent willow branches". In the dialects of the Tatar language one can encounter the variants. In many are preserved in the meaning "wattled ladle". In the Uzbek language is used in the meaning of "a round metal female adornment for hair and clothing". In the Uigur language the lexeme is homogeneous with the lexeme "an ornament for horses in the form of a star". These data point to the ancient origin of this ornament (Budagov, 1871; Yunusov, 1900).

The other lexicographic works of the 20th and 21st centuries represent this word as follows an ornament of silver or gold coins, which Tatar women used to hang up to the braids; nakosnik (a feminine piece of jewelry attached to the upper end of the braid); monasta, nakosnik (national piece of jewelry of the Tatars used to adorn hair).

Among the pectoral jewels, the most popular and actual to this day are necklace. This is an ornament consisting of beads of different shapes, colors and sizes. In this lexeme the word-forming basis is the word neck. It goes back to the ancient Türkic word neck, and —ca is a word-building affix. In other Turkic languages there are phonetic variants moyun, bojun, bojyn, bujyn.

In the studied dictionaries, this lexeme is represented as follows: necklace: beads, necklace, carcanet.

The lexeme muta, in combination with the words grub and in tune, forms a synonymous row. amber, which has served to this day as one of the main materials for making such decorations. Teme is a bead that is a part of the jewel. But in some cases, one can note the use of this lexeme as the name of the whole jewel. Amber, colored glass, semiprecious stones and minerals were used to make necklace.

Uka is one of the unique ornaments of the Tatar people.  $V\kappa a$  "braid, golden thread" is formed from an ancient Turkic word denoting the measure of weight oka "a silver coin", okka "400 dirhams and a measure of weight in such quantity (1,282 kg)". In Arabic, a crown with coins, hence, in Tatar baby's hair. In the Chuvash language this lexeme has the variant such as Uka, in the Mari language — okka.

In lexicographical works this word is rendered into Russian as follows: a braid, a galloon, a lace, a twister, a silver(gold) thread; made of a braid (Rakhmankoly, 1913).

This kind of adornment was used as a pattern in headdresses and clothes (mainly in the pectoral regions). The braid was an integral part of female clothing (calfak, vests, dresses), adding the image perfection and sophistication.

Xəcutə (hasita) is an original decoration of Tatar women, which was worn over the dress and consisted of various gold and silver coins, threads and stones. The older variant of this lexeme is cassidy, designating "laudatory letter, ode". Bulgarian girls kept love and laudatory letters in leather pouches or metal boxes that were attached to the hasitas, closer to the heart. As hasita was worn over the shoulder, the covers for these letters were on the side, near the heart.

This lexeme is represented in the dictionaries as follows: a necklace worn over the shoulder and adorned with coins and tinsel; hosit – female pectoral ornament with coins, pearls, corals and tinsel, worn over the shoulder; an amulet in the form of a pocket, in which the manuscript of the laudatory poem addressed to a girl.

Hasita was worn by all ethnic groups of the Tatars. The Menselin Tatars used to call this adornment as hsilo. The Bashkir Tatars use the word hosit in the meaning of amulet, and the Udmurt Tatars – pectoral ornament (Great Dialectological Dictionary, 2009).

Of great interest are the Tatar jewels for hands. Among the wrist ornaments, ring is one of the important and significant. In the ancient Chigatai language, shackles, fetters; a hoop that is worn on the wrist or on the leg. In the language of the Siberian Tatars, палтак is used in the meaning of "crutch, stick". The origin of this word is connected with the word shin; fetters.

This decoration is fixed in dictionaries as follows: (baldak – band); (ring); (ring); (ring, circle).

Baldak is an important element of the wedding ritual of the Tatars, symbolizing the fidelity and purity of feelings between two people. The peculiarity of this ritual object is that the Tatar men should not wear a gold ring, they are allowed to wear jewels from silver only. This lexeme is used to call not only wedding bands, but any rings without stones – smooth and with relief design.

Bracelets— belzek are also common decorations for the hands of the Tatar women, which were an essential part of the costume of a woman. They were constantly worn by women of all ages and social groups. This explains the huge variety of forms and techniques of decorating bracelets. They were worn, as a rule, in pairs: one on each hand, which was considered a means of maintaining a good relationship between husband and wife. The bracelets were of two types - bangles and chain bracelets. They were decorated with different stones and colored glass.

The lexical unit белезек is of Turkic origin. It is found in ancient Turkic written monuments in the form of bilezuk, bi lezuklen. In the language of the Siberian Tatars, this lexeme functions in the form of pebble-stone; in the Kyrgyz language – bileric. The basis of this word is the ancient word biller "anatomical bracelet, wrist". In dialects, the variant such as kulbau is used, kul bavy—"a thread for the wrist".

This word is represented in dictionaries as follows: (bracelet); (bracelet, handcuff); (The Tatar-Russian Dictionary, 1927).

The considered units reflecting the interests, feelings and values of the people store the rich history of the Tatars. It is very important for any person to know his origin, roots; a feeling of belonging to age-old traditions will give him a sensation of security and significance.

## 4 Summary

The study found that jewelry female ornaments of the Tatars are an indicator of material wealth and social status of the family. As a rule, Tatar folk ornaments were made of silver, gilded and inlaid with stones, so they were justified investment of funds.

Ornaments were hereditary, gradually supplemented with new things. In this regard, they reflected not only the history of this family but of the whole people as well.

As a part of the material culture, jewelry reflect identity, philosophy, cultural and social development, spiritual life, as well as cultural and social ties with other peoples and cultures.

The prospects for further studying the names of ornaments of the Tatar language can be seen in a more detailed investigation of the whole system of vocabulary of the material culture in interrelation. This work can be used as an example for further research on other lexical-thematic groups reflecting the peculiarities of life, culture and thinking of the Tatar people.

## 5 Conclusions

Thus, the national jewels reflect the culture of the people, the customs, traditions; they convey the culture from generation to

generation. A careful study of the retained lexical elements makes it possible to reconstruct an integral national culture in the language.

In view of the fact that the culture of each people has been constantly developing, it is considered unacceptable to neglect cultural values and forget their roots, so the retention of traditions will be supported by studying and reviving ethnocultural elements as the evidence of strengthening the cultural identity of the people. The analysis of ethnocultural vocabulary will create a unique, vivid model of the national language image of the world.

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# LINGUISTIC AND PRAGMATIC ASPECTS OF OCHINESE IDIOMS TRANSLATION WITH ZOONYM FROM CHINES TO RUSSIAN AND THAI LANGUAGES

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Abstract: The article deals with linguistic and pragmatic aspects of the translation of Chinese idioms with zoonym components into Russian and Thai languages. All languages are representatives of cultural aspects of nationality. Animals and attitude to them one of the bright agent of culture in language. They come from ancient times and live with human beings together so that people compose fairy tales, epics about them. Therefore, that phraseology with zoonym component could show the differences in culture and nation features. We found out differences in the conceptual meanings of animals in Chinese, Russian and Thai idioms with the zoonym component. To compare the phraseological units with the zoonym component in three languages, we used the comparison method. Analyzed the features of translation from a comparative point of view and the results structured in classification. Based on the research was made a classification of conceptual and cultural values of idioms with zoonym component.

Keywords: Chinese, Russian, Thai, idiom, zoonym, translation, classification, comparison.

#### 1 Introduction

In the Komleva N.G.'s dictionary "idiom" is a linguistic stable turn of speech, the meaning of which is not determined by the meaning of the words included in it, or, in other words, it is an indecomposable word combination (Komlev, 2000). The meaning of «zoonym» in its turn means a common name, denoting an animal. It is often when idioms with a zoonym component are also called "animalistic". An integral part of Russian, Chinese and Thai idioms are idioms with an animalistic component of meaning.

In modern Russian, Chinese and Thai languages stable speech turnover remains relevant and is often used by native speakers, as with their help the language acquires a special imaginative, vivid and lively expressiveness

Comparative analysis of the idioms of all three languages allows us to identify not only those or other matches, coincidences, but also to find the specific, national, that is available in the idioms of each of the languages.

# 2 Methodology

During the research, we used the methods of linguistic analysis. Quantitative method in order to analyze the number of idioms with the zoonym component and separately according to the species of the animal. Component analysis was needed to determine the zoonim component in the idiom structure, to determine the features of the translation of the idiom in its entirety and the component of the zoonym. Firstly, we identified the range of phraseological phrases studied, and then identified those that would be treated with the zoonym component in Russian, Thai and Chinese. Also, a deep analysis of the research on this topic was made and the authors who viewed the zoonym were identified as part of the phraseological unit. To compare the phraseological turnovers with the zoonym component in three languages, we used the comparison method. We also have analyzed the features of translation from a comparative point of view and the results structured.

## 3 Results and Discussion

During the research it was found that if there is a lot of Russian literature on this topic, then Thai literature, even in Thai, is extremely little. Busarova, considered the phraseology in the Russian language Vetrov, Wojciechowic, Jia Xue, the phraseology of the Chinese language (Busarova, 2013; Vetrov, 2006; Voitsekhovich, 2007; Xue, 2014; Villalobos Antúnez, 2001).

In the process of research, we were faced with the problem of the lack of fundamental research on phraseology in the Thai language in comparison. Since China, Russia and Thailand have different cultures, traditions and mythologies, some animals are endowed with those meanings and symbols that are absent in another language and do not have this portable meaning. After considered the selected examples, we obtained the following results (Ibragimov et al, 2017; Zaidullina & Demyanova, 2017).

Bull: in Chinese culture, the bull symbolizes wealth, and also means a strong person. In modern Chinese, the usual expressions with Cattle niu "bull, cow" tend to have a negative coloring, for example: 牛 脖子 niúbózi literally "bull's neck", meaning "stubbornness; stubborn ". In Russian there also exists the expression "strong as an ox". However, in the Thai culture the bull has a negative connotation - a naive, stupid and stubborn person. For example, the expression "สีชอให้ควายฟัง" means "playing the violin for a bull", meaning "explaining something to a stupid person and this will not be of any use".

Crow: this bird is a symbol of unhappiness in China (importunity and lack of beauty): 乌鸦 嘴 wūyāzuǐ literally "crow's mouth", meaning "annoying person". In Russia, "crow" often refers to a person who constantly loses things or there is such an expression as "croaks like a raven" (usually predict a misfortune). In Thailand, the image of a bird is almost always negative, for example, "นกสองหัว" meaning literally "a bird with two heads", which usually symbolizes a two-faced man. Therefore, we can conclude that the image of a crow in all three cultures has a negative connotation.

Hare: figurative value of the animal completely coincides in Chinese, Russian and Thai - cowardice: "กระต่ายตื่นตูม" - a frightened bunny; 兔子 胆 tùzidăn is literally a "bunny gall bladder", meaning "cowardly as a hare"; rus: "cowardly coward", "hare's soul", "cowardly as a hare".

Rat, mouse: despite the fact that in the culture of China in Thailand and Russia this animal has a negative image, but the significance is different. So in Chinese, a rat is called a mean man, while in Thai and Russian the rat is associated with poverty: "poor as a church mouse"; "หนูตกถึงข้าวสาร" is a mouse that fell into a bag of rice (when a poor man get married with a woman richer than himself).

Chicken: also have an additional negative connotation in the meaning of 鸡皮疙瘩 jīpí gēda literally "goose bumps on chiken's skin ", meaning "goosebumps" (from cold or fright); 野鸡 yějī literally "wild chicken", meaning "public woman" (also contains an additional shade of belonging to the lower category). In Russian phraseology, the image of a hen also has a negative coloring, for example: "chicken brains", "cackle like a chicken".

Fox: has a negative character in both Chinese and Russian culture. In China, the fox is often compared to a cantankerous and cunning woman - 老狐狸 lǎohúlì literally "old fox", in the meaning of "very cunning person"; 小 狐狸 xiǎohúlì literally "a small fox", in the meaning of "rogue, cunning"; In Russia, the fox also means cunning and deceit.

Monkey: the image of the monkey is similar in all three cultures. In Chinese: 皮猴子 píhóu hóuzi literally "playful monkey" - is more often used in relation to a mischievous child. The Thai language also uses the expression "ซน เหมือน ลิง" literally meaning "playful as a monkey" in relation to non-obedient children. In Russian there is such an expression as "to curl like a monkey".

Dog: in China and Thailand, the image of this animal has a negative coloring - "minion" or greedy and indecisive person ("หมาหวงก้าง" literally "a dog that does not let go of its bones"

in the meaning of "a man who does not want to give something belonging to him "; 钻 狗洞 zuāngŏudòng literally" get into the doghouse ", meaning" to help the influential person. "However, in Russian culture the image of the dog always had a positive connotation - loyalty, devotion (" dog is the man's best friend "," dog fidelity ").

Tiger: the image of a tiger is associated with something dangerous and risky: 入 虎穴 rùhǔxué literally "enter the lair of a tiger", meaning "expose yourself to danger"; "อยากได้ลูกเลือ ต้องเข้าถ้ำเลือ" literally "if you want to get a tiger, you must enter the lair of a tiger" in the meaning "if you do not expose yourself to danger, you can not get something valuable." Also, the tiger represents a predator and a villain: 坐 地 虎 zuòdihǔ literally "a tiger sitting on the ground", meaning "local despot, tyranny, self-rule."

To sum up the research's results, we can conclude that in most cases the cultural values of animals in all three languages rarely coincide.

### 4 Summary

To classify the conceptual and cultural values of idioms with the zoonym component, we investigated 100 Chinese, Russian and Thai idioms. It is worth noting that, due to the limited amount of work, it is impossible to compare all Russian, Thai and Chinese vocabulary about animals that are part of idioms. Therefore, a total of 100 idioms were selected, which were divided into groups according to the similarity of such criteria as meaning and image.

After the researching, the idioms were divided into 2 large groups.

The first group of this classification is Russian, Thai and Chinese idioms, in which the literal translation coincides.

- 1) 狐假虎威 hújiǎhǔwēi สุนัขจิ้งจอกแอบอ้างบารมีเสือ. In Thai, this idiom translates as "the fox use the power of the tiger," which figurative meaning coincides completely with the Russian and that means intimidating someone, relying on the power of higher-up people.
- 2) 指鹿为马 zhǐlùwéimă ชี้กวางเป็นม้า (กลับดำเป็นขาว). The figurative meaning of an idiom is to pervert the truth or to give out black for white. A literal translation into both languages "pointing at a deer, call it a horse".
- 3) 条鸡吓猴 shājīxiàhóu เชือดไกให้ลิงดู . The idiom is translated into both languages, like "killing a hen, intimidating a monkey." Imaginary meaning: punishing one to intimidate others.
- 4) 鷸 蚌 相 争 yùbàngxiāngzhēng นกกระยางสู้กับหอยกาบ (สองฝ่ายที่ต่อสู้กันต่างไม่ได้รับผลประโยชน์ แต่กลับให้ฝ่ายที่สามกอบโกยผลประโยชน์ไป.) Figurative value idiom completely coincides means "in the conflict between two parties benefit gets to third ".
- 5) 牛头不对马嘴 niútóu bùduì mă zuǐ หัววัวไม่ตรงกับปากม้า (ตอบไม่ตรงคำถามหรือเรื่องราวไม่สอดคล้องกัน) The literal translation "cow's head does not match the horse's mouth," which means "to speak out of place" or when something "do not correspond to each other"

The second group of this classification includes Chinese, Russian and Thai idioms containing the same or a similar image, but the translation is different.

1) 龙马精神 lóngmájīngshén ขอให้มีพลังกายพลังใจดุจม้า/มังกร , ขอให้มีสุขภาพแข็งแรง. This idiom has a different translation in both languages. In Russian, the idiom means "combat character" (in a positive sense), however, in Thai it is a kind of a wish that means "to have a strong health". 2) 鸡犬不宁 jīquǎnbùning แม้แต่สุนัขและไก่ก็อยู่ไม่เป็นสุข (รบกวนก่อความเดือดร้อนกันไปทั่ว). The imaginary meaning of the idiom also differs. If in Russian it means "to live in eternal anxiety", then in Thai it means "to sow anxiety everywhere".

It should be noted that if we consider separately the classification of Chinese-Russian idioms and Chinese-Thai, then the classification will be more extensive.

With a separate consideration of Chinese idioms with the zoonym component in Russian translation, the following classifications can additionally be singled out (Hao & Kosheleva, 2015):

- 1. Conceptual meaning, corresponding to a similar cultural significance: 像猪一样脏 xiàngzhūyīyàngzāng грязный, как свинья; 如鱼得水 rúyúdéshuǐ как рыба в воде.
- 2. The conceptual meaning corresponds, but the cultural value is omitted: 2.1. Images of animals possessing connotations of meaning associated with human traits, characteristic only for the Russian language: gus-this word is used in colloquial speech with a disapproving shade. So they say about the dodger, the swindler, for example, "goose goose". The seal is an awkward or lazy person. Capercaillie is a person who does not hear well or "overlooks everything"
- 2.2. Images of animals that have meaningful meanings, transferred to people, characteristic only of Chinese culture: Cilin (unicorn) a symbol of peace and long life. 凤 麟 姿 fènglínzī literally "movements of the phoenix and ciline", meaning "exquisite manners" Phoenix in Chinese culture, the phoenix is often associated with a happy omen 凤阳门 fèngyángmén literally "phoenix gates", meaning "the front gate of the palace".
- 3. Different or an opposite cultural significance.

In Thai, other classifications can be distinguished, based on a study which results are written in one of the theses devoted to this topic. The study was conducted on a group of phraseological units, where only 4 species of animals are found, which are the most common in Chinese phraseological units. It's a horse, a tiger, a dragon and a fish (Juzeev, 1972). Therefore, with separate consideration of Chinese idioms with zoonym component translated into Thai, the following classifications can be distinguished:

- 1. When the same animal species are used in translation:
- 1) 驽马 十 驾 númǎshíjià = ม้า ตืน ปลาย in both terms the animal is a "horse", the translation of which means a person who does not have outstanding talents, but at the same time purposeful and ultimately succeeds.
- 2) 两虎相斗 liǎnghǔxiāngdòu = สิงห์ พบ เสือ "two tigers are fighting", figurative meaning "about the struggle of two powerful opponents".
- 2. When in translation certain animals are replaced by others species:

The Chinese version of this phraseology is translated as "the head of the raven will turn white, and the horse will grow horns," while the Thai version - "the tortoise will have a mustache, and the hare grow horns". Despite a different translations, the cultural significance of phraseology coincides - "something impossible".

- 2) 攀龙附凤pānlóngfùfèng =ແมาพึ่งพระ- the figurative meaning in both languages is the same "use connections", but translation is not. In Chinese, "rely on the dragon and the phoenix," in Thai, "a cat relies on a monk.".
- 3. When there is no zoonym component in the translation at all:

- 1) 东风吹马耳 dōngfēngchuīmǎer = เอาหูไปนาเอาตาไปไร่ "indifferent attitude". In the Thai version of the translation, the zoonym component ("the ears on the field, and the eyes on the farm") is completely absent, in contrast to the Chinese version ("like the east wind blew into the horse's ear").
- 2) 漏网之鱼 lòuwǎngzhīyú = ลอยนวล used to refer to the person who committed the crime, but was able to escape the punishment. In the Thai language, the zoonym is not used and the phraseology itself can be translated as "to be free", while in Chinese phraseology means "fish that has escaped from the net".

#### 5 Conclusions

To sum up the research's results, we can conclude that in most cases the cultural values of animals in all three languages rarely coincide. Classification according to our research on the basis of the investigated phraseological units was presented above.

For example, in the work of Yang E Lin, there is a list of animals the connotative values of which do not coincide in Russian and Chinese: the hare, the cat, the mouse, the fish, the turtle, the cow, the horse, the bear, the crow, the swan, the dragon, the phoenix (Yang, 2003).

The geographical position of countries also plays a huge role. For example, the "tiger" practically does not occur in the idioms of the Russian language, while in Chinese and Thai languages it is one of the most common zoonyms.

The data obtained during our research can be used in the process of teaching Chinese in class at school and at the university. Culture, mentality of the people, characterize features of the Chinese language (Yurievna, 2017). In the process of teaching the language, it is also important to study the culture of the nation.

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# LITERATURE OF THE EARLY TWENTIETH CENTURY: REALISTIC PROFILE OF KASIM BIKKULOV

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Abstract: Creative work of Kasim Bikkulov, a writer o the beginning of XX century, in context of Tatar realistic prose is reviewed in this article. Literary heritage of clergyman, teacher-educator includes approximately ten realistic short-novels, as well as works related to small genre of prose and poetry included in "reading books" composed for pupils of Tatar schools and madrassehs, belonging to educating course. In Soviet period his works are not printed anymore; in 1930s he was arrested as a clergyman and due to this reason his creative works was relegated to oblivion for many years, Only in last decades the studying of his literary heredity kept in archives and rare books library departments became possible. In line with realistic prose, realistic short novels of K. Bikkulov, "Turkestan", "Uncle Altynbay", "Horse-thieves", "Hadji" and others are analyzed in this work. Novelty and actuality of the work are explained by underivestigation of writer's literary heredity that was overlooked in years of totalitarian regime because of author's origin from religious family. Study of works related to realistic prose of studied author and their introduction to scientific turnover are goals of this work. Analytic, comparative, cultural and historical methods of study were used in this work. This study gives an opportunity to make conclusions about the fact that analyzed works of Kasim Bikkulov compose the basis of writer's creative word and are his defined contribution in the development of Tatar realistiv prose of the beginning of XX century.

Key words: Tatar literature; K. Bikkulov; literary process; literary heritage; realistic prose

## 1 Introduction

The name of Kasim Bikkulov (1868-1937) who published approximately twenty books that included poems and small prose and small novels became known to wide audience only at the end of XX century and the beginning of XXI. Clergyman, educator, author of prose and poetry, he is a successor of Bikkulov teologians dynasty, which is confirmed by works of Tatar historians (Mardjani, 1989; Fahruddinov, 2010). Kasim Bikkulov, same as many writers and public persons of the beginning of XX century, left a reach literary heritage that unfortunately was overlooked in Soviet period.

Only in recent decades, due to changes in society and new views of literature history, his works and materials dedicated to studies of some aspects of K. Bikkulov's activity came out (Gusmanov, 1994; Bikkulov, 1909; Tuan, 2017). Scientists and literary historian F. Bashirov was one of the first to make an attempt of studying some aspects of studied author's creative work in context of historical works of Tatar literature of the beginning of XX century (Bashirov, 2002; Bikkulov, 1912; Villalobos Antúnez, 2016)

## 2 Methods

In course of writing of this article a complex of methods was applied; among them the main method is a system method of research defining system as "unified complex of interconnected components that as a whole has a certain stability, independence in relation to other systems and environment. In course of work, method of hermeneutic analysis of artistic text was used, because the hermeneutic method allows to consider literary text in context of literary-cultural traditions, comparison of images created in the own aesthetic experience and, finally, extension of spiritual horizons. In this work, poetics of separate pieces is considered in context of literary process in general. Moreover, comparative and culture-historical methods of artistic text study are used in this work.

### 3 Results and Discussion

A serious step in studies of life and activity of Kasim and Ibragim (well-known journalist and public person) Bikkulov is a literary-biographic book "Bikkulov Brothers" printed in frames of "Personalities" series (Bikkulov, 2016), including major part of literary heritage of Bikkulov brothers.

But until the present time, realistic prose of K. Bikkulov stays insufficiently studied, while being a part of rich national literature heritage of turn of the century; this underlines actuality and novelty of this study.

Tatar literature has thousand-year-log history of development, where the beginning of XX century holds a specifically significant place. Namely this period is considered to be a "golden age" in the development on national literature. As scientists noted, "The beginning of 20th century is being defined as a period of emerging Tartar scientific thought, theory of literature, serious discourse about the literary terminology and concepts, as well as the time of achievements in this area") (Gilazov et al, 2015).

After revolution of 1905 emerged some opportunities for discussion of important issues of social-national, spiritual and ciltiral renovation, for development of arts, including literature. On this wave, on literal scene enter writers, in chose creative work the major place is held by realiistic prose, in course of which analysis in this work we used analytical, comparative, cultural-historical methods of study.

Many literature scholares addressed to studies of Tatar prose of the beginning of XX century: in some works, the issue of book printing of this period was considered (Gilazev, 2003); in others, children or religious literature became an object of study (Mingazova et al, 2014; Latypova et al, 2016; Ibragimov et al., 2016); in third works Tatar literature of this pediod was studies from position of its reflection in Russian language press (Gimranova & Gilazov, 2016).

The first one to speak about realistic prose of the beginning of XX century in his monograph was Farit Bashirov. In "Historical theme in prose" section, the scientist remarks that "One of the first to test his pen in this field was the writer Kasim Bikkulov. His novel "Turkistan" was published in 1908. This work attracts attention, first of all, as a result of strive to write historical novel; on the other hand, it is interesting, because is familiarizes Tatar reader with life and mode of life in Central Asia; it also attracted attention by use of multiple historical facts" (Bashirov, 2002; Bikkulov, 1912).

First version of "Turkestan" work was published under the title "Story About Imprisonment" that came out in 1904 (Bikkulov, 1908). Major part of work is held by depiction of life and mode of life on Central Asia nations. (It is known that in given period under the name "Turkestan" were understood three regions: Samarkand, Ferghana and Syr-Darya regions). At the begining of his work, author writes about cultural-economic condition or Turkestan in the middle of XIX century, thus, at the very beginning d the plot the writer prepares his reader to perception of realistic historical events, represented by author in critical perspective. In the novel are mentioned such cities as Petropavel. Tashkent, Bukhara, Astrakhan, where events related to fates of book characters take places. Author writes that in those old times there happened lots of cruelty in relation of common folk: murders and selling of people into slavery were also present in realias of this country. Also are interesting facts from the history of Nogais nation, about their origin and geographic position. (It should be noted that author himself, after graduating madrasseh in Kazan, was directed to Astrakhan province in order to work as a teacher in local madrasseh, where he taught for twenty years (1885-1905) and studies life and life more of local population, Nogais, closely).

Peculiar composition, artistry in material statement, rich language of analyzed work, as well as historical substantiation of events depicted in the work, draws reader's attention. Literalism of material statement, detailed description of nature, historical references positively differ this novel from content of small prose of author, written in key of educational realism, and allow to relate his novel of the author to works written in style of critical realism.

Depiction of fine weather and beautiful nature in the beginning of events allows the author to further create a contrast picture of life conditions of novel characters - fishermen who fall among hoods in Central Asia territory. According to canons of classic prose, acquaintance with characters is provided at the very beginning of the work. Here author off the novel also pays attention to enrichment of his work by historical excursus and routine realias that, on one hand, allows to speak about traditions of critical realism style.

Writer skillfully describes a drastic change in nature behavior, gives a detailed description of storming sea and also accurately reflects changes in spirits of novel characters. Changes of characters condition from spiritual calmness and sureness in themselves to inexpressible deadly fear in eyes and sould of these charcters allow the author to disclose himself as a master of psychological scenes.

Pathos of material statement changes drastically when author acquaints the reader with horrible events further accompanying the novel characters. At description of condition of these pitiful people, spurred by lashes though desert, at intolerable heat, knee-deep in hot sand, with hands tied and stocks on feet, a naturalistic statement of material is present. Cruelty of hoods, slave salesmen who treated people as cattle, recreates in front of reader's view a terrible picture of Central Asia realias in the middle in XIX century. Author-educator calls them savages, uneducated people who have no mercy for anyone. Condition of girls-women, who are also brought to the market for selling into slavery happens to be especially intolerable.

Thus, in a short time, eveents of the novel transit to depiction of war between Russian and Turkestan. As F. Bashirov notes, "K. Bikkuloc widely and knowingly uses historical facts; dates of taking of Tashkent, Samarkand and other cities by Russian army are stated in documentary true manner. The stand of Russian troops and emir's army, nature of war is depicted by author objectively" (Bashirov, 2002).

In his small novel "Badalche" (1909; Badalche is a man who, for a certain payment, conducts a hadj insead of another man who is not able to do it himself for some reasons), in the center of narration a fate of the son of village mullah is presented; father, hoping that his son will obtain a good education, sends him to nearby madrasseh (Muslim educational institution). This work, on one hand, continues traditions of educational literature, started in Tatar prose in the last quarter of XIX century; this is confirmed by comparative depiction of life conditions and methods of education in old and new-method madrassehs, where author shows advantages of new educational system in madrasseh of a new type, On the other hand, realistic and historical depiction of life and life mode of Tatar nation at the beginning of XX century, approach this small novel to works of critical realism. In depiction of psychological condition of a child who left his father's home for the first time and occurred in hard life conditions in old-method madrasseh, his inner experiences, the talent of realistic writer is disclosed. In the center of author's attention, the image of student-shakird is showm; from his person the narration of the work is made. Disclosure of events via perception of a boy and later - of teenager, helps the author to present his reader with lively, emotionally tinged picture of realias of Tatar life at the beginning of XX century.

The major plot line of the work is connected with studying of protagonist, where particular attention of the author is paid to disclosure of educational consitions in various madrassehs at the beginning of XX century. The second plot line comprises events connected to the character named Iskander, represented by author as a man who lives on money received fraudulently from people for hadj conduction, but spends these money for his needs. Here author widely uses psychological portrait of the character, which is also a peculiarity of realistic depiction. In this character author creates a type of cheater and liar, a double-face capable to ingratiate himself with people and spend their money shamelessly

Description of shakird preparations for journey to Istanbul in order to continue his education after graduating madrasseh is also realistic. His acquaintance with Iskander returns the reader to events that happened to narrator at the beginning of a small novel on his way to madrasseh. Thus, a complicated composition structure of the work gathers plot lines into one whole plot and enriches the work with surprise effect: the reader learns that Iskander, no notorious for his seemingly charitable deeds, turns out to be a well-known horse-thief named Gali, whom the protagonist had already met at the beginning of the book.

In the final the announcing of continuation of this story is present: he author is determined to publish it in the nearest time. As prose-writer notes, in the next work, "Hadji" (1912, Hadji is a man who conducted a pilgrimage to sacred sites, the hadj) (Bikkulov, 1909), events started in a small novel "Badalche" will be further revealed. Presence of protagonists who performs the narration and one of characters, horse-thief Gali who presented himself as pious man called Iskander in both small novels give the basis to consider that these works may be an example of dilogy creation.

Events of the second small novel take place in one of the main cities of Turkey, where shakird, the protagonist and narrator of a small novel analyzed above, arrives in order to continue his education. Statement of material, resembling the genre of sayakhat namah from time to time, is primarily directed on recording of historical events occurring in Russia and beyond its border, acquaintance of the reader with new lands, countries, their nature, life conditions etc. Detailed description of this event, ethnographic details help to create a picture of Turkish reality at th beginning o XX century. Critical thoughts of the writer about gilded tombstones, expensive structures at cemeteries erected in times of sultan Gabdulkhamit reign are also present in the small novel. In author's opinion, for money spent for these purposes, educational institutions of Sorbonne university type could be built, or even a fleet can be created, similar to Japanese one.

Main place in the work is help by a story about events related to the character of previous small novel, "Badalche", Iskander who leisurely spends time here by cost of money collected from trusting people. Critical pathos of the work increases by statements of the narrator in address of this characters. A small novel ends when adventures of horse-thief Gali finally end, he is murdered in drunk fight, and shakird, due to diseases, returns to homeland.

## 4 Summary

Works of K. Bikkulov analyzed in this work, "Hadji" and "Badalche", allow to make conclusions about the fact that by author's intention they form dilogy. Because here intertextual connections are manifested. At the end of a small novel "Hadji", author also announces that he plans further creation of the next work called "Nadan" (heathen, uneducated man). Pity, up to present time there are no data on publishing of this small novel.

In works are widely presented routine details and realias of Tatar nation life at the beginning of XX century, absence of idealized character, which also is a sign of realistic prose.

Small novel "Hadji" is also interesting due to the fact that author acquaints his reader with new cities and countries. Depiction of people life in Turkey, Istanbul, is especially interesting. On his way to Turkey, shakird also says in Odessa; due to this, in the work appears a description of places of interest of this chief town

of a district; this approaches the work to traditions of Tatar literature of sayakhat namah (notes on a journey).

Presence of landscape pictures depiction - description of Turney nature washed by the sea - is also a novelty fo Tatar realistic literature of this period.

In his work "Turkestan", author skillfully uses the framing composition of plot structuring: he gathers historical events into one whole, in which center is represented the fate of Nogais characters captured by sea hoods. Analyzed work of Tatar writer of the beginning of XX century, Kasim Bikkulov is one of artistic views of events that took place in Central Asia in the middle of XIX century. "Turkestan" is one of the frst voluminous realistic works of historical nature in Tatar literature where realistic and critical vies of the author at the surrounding world are reflected.

### 5 Conclusions

Study allows to make conclusions that in creative works of K. Bikkulov, works written in the unified line of Tatar realistic prose of the beginning of XX century development are present. Books analyzed in this work enrich national literature by realistic plots, images, routine details; they also acquaint the reader with life realias of other cities and countries. In the same realistic key his novel "Turkestan" is written; F. Bashirov relates it to one of the first examples of historical works in Tatar literature that enriches Tatar literature of the beginning of XX century by historical realias from life of Turkic nations.

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## MAIN CHARACTERISTICS OF MODERN RUSSIAN FEMALE POETRY

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Abstract: Poetry at the turn of the XX-XXI centuries is a heterogeneous and largely unexplored phenomenon. The fundamental importance is gained by the works in which the issues of the development of modern Russian poetry are considered systematically. One of the important trends of 1990-2010 is the flourishing of women's poetry. Despite the obvious cultural phenomenon as a whole, it has not yet been studied. This article offers an initial analytical review of this phenomenon. As a result, the following conclusions have been made. 1. A certain stage in the evolution of modern Russian women's poetry is part of the general process – the heyday of Russian poetry of the 1990-2010-ies. 2. Modern female poetry occupies an increasingly prominent place in Russian literature, but it is not a monolithic cultural phenomenon. The artistic worlds of female poets are heterogeneous, have different genesis and require different interpretations. 3. A number of female poets show a tendency to be isolated within the general literary process, they somehow emphasize the gender of their work and are addressed mainly to the female audience. 4. There is a trend towards increasing thematic radicalization and formal diversity among female poets who have entered the literature in the last 15-20 years. The conducted primary analytical review gives grounds to assert that the current socio-cultural situation is favorable for the development of Russian women's poetry. However, there is no reason to talk about women's poetry as a phenomenon that has clear and constant characteristics. This is not a trend in literature or ideological unity, but the activity of individual authors, between whom only the most common speculative typological connections can be drawn.

Key words: modern Russian poetry, female poetry, gender, trends, themes, verse form, lyrical hero

## 1 Introduction

Russian poetry is going through a period of intensive development between 1990 and 2010, readers and critics note its exceptional stylistic and genre diversity. Extensive and contradictory poetic material needs to be evaluated, analyzed and generalized in historical and cultural conclusions. Currently, there are few studies devoted to the general state of Russian poetry of the last thirty years. Not every one of them sets the task of describing or, especially, presenting the concept of the development of the current poetic culture as fully as possible. Even the consideration of one or another part of modern Russian poetry through the prism of certain problems is rare (Chuprinin, 2000; Zubova, 2000; Zubova, 2010; Skvortsov, 2005). This is understandable: modern Russian poetry is wide and heterogeneous, there is no clearly represented main phenomenon, in relation to which the currents and directions, groups and individual figures are determined. The poets themselves are not in a hurry to help analysts: the authors with similar poetics rarely unite in groups and do not perform with noticeable manifestos (Skvortsov, 2015; Villalobos Antunez et al, 2013). In addition, being in an ever-changing process, it is difficult to find an angle of view that would allow you to see if not the whole picture, then at least a significant part of it.

There are about 250-300 authors who deserve a serious professional evaluation of contemporary Russian poetry (Skvortsov, 2015; Zaidullina & Demyanova, 2017). Philologists face the problem of material classification, at least in the first approximation.

One of the important trends of 1990-2010 is the flourishing of women's poetry. This is manifested, firstly, in a noticeable increase in the number of women poets in this period, and, secondly, in the fact that many of them are beginning to attract the attention of both readers and professional literary community (critics and philologists).

## 2 Methodology

The research is based on historical-functional, typological, comparative-typological, hermeneutic and structural-semantic

approaches to the identification of artistic features of modern Russian women's poetry.

In consideration of the poetic perspective, we mainly focused on the works of BORN I. Yarcho, M. L. Gasparov, O. I. Fedotov, Y. BORN Orlitsky, manifestations of genetic and typological connections with the tradition studied under the influence of Y. M. Lotman, V. E. Vatsuro, N. L. Leiderman and M. N. Lipovetsky, also the studies of the modern literature (Y. V. Domansky, A. S. Afanasiev, T. N. Bryeva, M. Rytkonen, M. I. Ibragimov, E. V. Nikolsky, V. N. Krylov, etc.) and literary-critical publications (Afanasev et al, 2007; Afanasev & Breeva, 2016; Afanasev, 2015; Leiderman & Lipovetsky, 2001; Orlitsky, 2002; Rytkonen, 2000; Krylov, 2014).

### 3 Results and Discussion

The existence of female authors in a national literature is one of the true signs of the maturity of this cultural tradition. From this point of view, Russian literature has reached a state of maturity 200 years ago: A.P. Bunina, whose talent was noted and supported by G. R. Derzhavin, I.A. Krylov and a number of other major writers of the era was already creating her works. Later, in the XIX century there appeared single prominent women poets (K. P. Pavlova), but particularly fruitful was the beginning of the twentieth century, the era of modernism (A. A. Akhmatova, M. I. Tsvetaeva, S. Ya. Parnok, etc.). However, it would not be an exaggeration to say that it was in the post-Soviet period that there was a qualitative leap in growth in relation to women poets.

The causes of this phenomenon have not been studied. It can be assumed that "women's poetry" develops in parallel with "women's prose", a serious stage in the evolution of which was observed in Russian literature a little earlier – since the late 1970s. But, most likely, this is due to both general cultural and intra-poetical reasons.

General cultural reasons are the following: in Russia women are increasingly creatively manifested in various fields of art, and literature is no exception. Intra-poetical reasons are probably due to the fact that modern female poets have many options for implementing their creative strategy, and, in addition, they have a relatively large readership, and in general the problem of obtaining a sympathetic response is solved relatively easier than in the pre-Soviet period (this is largely facilitated by the Internet).

Classification of contemporary Russian women's poetry is problematic. There are several standard ways of classification: by generations, by socio-cultural affiliation of authors, by their declarations and manifests, by their aesthetic attitudes. We have to admit that in this case none of them is adequate and does not give any significant educational results.

First of all, this is due to the fact that the majority of modern female poets exist in literature without a clear and strong connection with any literary groups and phenomena. This is a collection of "literary loners", and if there are certain situational association (e.g., participation in joint educational events or the production of magazines, anthologies and books), they are unstable and do not lead to long-term serious artistic consequences.

It is possible to distinguish several generations of female poets (leaving aside the question of whether they belonged in the Soviet period to the censored or uncensored literature):

• the generation that came to literature in the 1950-60's (Inna Lisnyanskaya (1928-2014), Novella Matveeva (1934-2016), Natalia Gorbanevskaya (born 1936-2013), Bella Akhmadulina (1937-2010), Yunna Moritz (born 1937), Larisa Miller (born 1940));

- in the 1970s and '80s (Elena Shvarts (1948-2010), Olga Sedakova (born 1949), Irina Vasilkova (born 1949), Nina Iskrenko (1951-1995), Olesya Nikolaeva (born 1955), Marina Boroditskaya (born 1954));
- in 1980-90-e (Irina Yermakova (born 1951), Svetlana Kekova (born 1951), Faina Grimberg, (born 1951), Irene Evsa (born 1956), Maria Galina (born 1958), Inna Kabysh (born 1963));
- in 1990-2000 (Irina Mashinskaya (born 1958), Tatiana Voltskaya (born 1960), Anna Gedymin (born 1961), Elena Fanaylova (born 1962), Anna Arkatova (born 1962), Vera Pavlova (born 1963), Olga Sulchinskaya (born 1966), Maria Vatutina (born 1968), Maria Stepanova (born 1972), Polina Barskova (born 1976));
- in 2000-2010-e (Inga Kuznetsova (born 1974), Ganna Shevchenko (born 1975), Linor Goralik (born 1975), Yana Tokareva (born 1976), Nata Suchkova (born 1976), Fred Gerber (born 1977), Anna Zolotareva (born 1978), Anna Logvinova (born 1979), Marianne. (born 1980), Anna Russ (born 1981), Maria Markova (born 1982)).

It is important to note that regardless of belonging to a particular generation, the majority of female poets have gained the opportunity to address the widest readership in the post-Soviet period. In addition, the flourishing creativity of some authors, long-established in the literature, also falls during this period. The case of I. Lisnyanskaya is especially significant, according to some critics, who created her most significant poems in the 1990s-2000s.

In general, women's poetry appeals to the widest possible readership, without dividing it by gender. However, the authors have deliberately dwell attention to gender issues, and they are found among virtually all generations: I. Lisnyanskaya, I. Kabysh, V. Pavlova, M. Vatutina, I. Kuznetsova, L. Goralik, A. Logvinova and others Among this small contingent of the group there are authors who make their central theme the specific physiological characteristics and experiences that are unique to women. Here it is necessary to name V. Pavlova, M. Vatutina, I. Kuznetsova, L. Goralik and A. Logvinova. At the same time, none of them can be defined as apologists of feminism, their ideas about gender relations do not come into direct conflict with quite traditional paternalistic views characteristic of Russian society.

From the point of view of poetry, the work of female poets in General tends to the already established poetic practices. Formal experiments are much less common in them than in male poets. However, the increasing interest in metric diversity, expansion of stylistic palette, language and literary game of the authors who came to the literature in the last 15-20 years is noticeable. There are examples of poetics that can be conditionally attributed to the avant-garde or postmodern practices of writing (E. Schwartz, N. Iskrenko, E. Fanaylova, M. Stepanova, L. Goralik, P. Barskova, A. Zolotareva, M. Geide).

The question of whether there are some thematic constants of women's poetry, has no definite answer. On the one hand, there are no "male" themes that could not be touched in the works of women. On the other hand, most of them still act on behalf of the lyrical heroine, not the hero.

Naturally women-poets, turn to the picture of the emotional sphere to such topics as sex, love, relationships of parents and children (especially mothers and daughters), motherhood, etc., more often than men. The women-poets are often much more radical and bolder than the male authors, and develop the theme of corporeality, physiology and unstable psychophysiological states (V. Pavlova, M. Vatutina and I. Kuznetsova especially succeeded in it).

The women-poets are less prone to philosophical and religious topics than male authors, but in the part of the women's poetry there is an inclination to metaphysics – it is most clearly manifested in the works of I. Lisnyanskaya, O. Sedakova, Shvarts, I. Ermakova, S. Checkoway, O. Nikolayeva, I.

Mashinskii, E. Fanailova, M. Stepanova, A. Zolotareva and M. Geide

Finally, there are individual artistic practices of female poets who find it difficult to find analogues in their synchronic section. Thus, M. Boroditskaya builds her poetics taking into account the expressive possibilities of children's poetry (addressing an adult audience), V. Pavlova builds her creativity around the "extremist" image of the lyrical heroine as a "sexual counterrevolutionary", and O. Nikolaeva consciously and sometimes provocatively takes the position of a religious preacher. Special mention should be made of the work of I. Ermakova, organically combining the features characteristic of women's poetry (archetypal image of the lyrical heroine as a Great Mother, wise, merciful and forgiving), with metaphysical plasticity of style and almost unlimited possibilities of evolution of the form of verse.

## 4 Summary

The results of this study were the following conclusions.

- A certain stage in the evolution of modern Russian women's poetry is part of the general process – the heyday of Russian poetry of the 1990-2010-ies.
- Modern female poetry occupies an increasingly prominent place in Russian literature, but it is not a monolithic cultural phenomenon. The artistic worlds of female poets are heterogeneous, have different genesis and require different interpretations.
- 3. A number of female poets show a tendency to be isolated within the general literary process, they somehow emphasize the gender of their work and address mainly to the female audience.
- 4. There is a trend towards increasing thematic radicalization and formal diversity among female poets who have entered the literature in the last 15-20 years.

## 5 Conclusions

Contributing to the richness of modern Russian poetry, women's poetry of the 1990s-2010s characterizes a certain cultural period, allows to recognize its important trends and systematize philological knowledge about the subject.

The conducted primary analytical review gives grounds to assert that the current socio-cultural situation is favorable for the development of Russian women's poetry. However, there is no reason to talk about women's poetry as a phenomenon that has clear and constant characteristics. This is not a trend in literature or ideological unity, but the activity of individual authors, between whom only the most common speculative typological connections can be drawn.

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## MAN IN THE MIRROR FREE ASSOCIATION EXPERIMENT

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Abstract: Modern linguistics uses an anthropocentric approach to language, referring to the study of cultural values of the representatives of different ethnic groups, to the concepts of material and inner world of man. The emphasis is shifted from the study of the objects of knowledge to the subject, man in language and language in man are analyzed. Of keen interest is one of the basic concepts "man". In the course of the investigation, associative experiments were carried out with the participation of 500 students from the city of Kazan – the native speakers of the Tatar language. The results were compared with the materials of the Russian Regional Associative Thesaurus EVRAS, posted on the website of the Institute of Linguistics of the Russian Academy of Sciences. Thus, the association experiment makes it possible to find the systematicity of the content of the image of consciousness that stands for word in different languages, and also confirms a uniqueness, singularity of the image of the world of each culture. This investigation has practical significance, since the results obtained are a valuable material for the study of certain fragments of linguistic consciousness, national-specific phenomena, behavioral stereotypes, value orientations, etc.

Keywords: linguistic consciousness, free association experiment, stimulus, association, reaction, associative field, associative dictionary.

#### 1 Introduction

A characteristic feature of modern linguistics is anthropocentrism. Man has become a reference point, center of coordinates determining the subject, tasks, methods of modern linguistics. The focus of attention is the problem of human understanding of oneself.

Wilhelm von Humboldt wrote about language as a special worldview, as "a world lying between the world of external phenomena and the inner world of man" (Humboldt 1985). Leo Weisgerber believed that each language presents a special point of view of the world of the native speaker, and the term "language image of the world" was proposed. Modern linguistics considers this term as the concepts of the world, society and man that are historically formed in the mundane consciousness of the people and embodied in the language.

In recent decades, in the studies on psycholinguistics and cognitive linguistics by Yu. N. Karaulov, A.A. Zalewskaya, E.F. Tarasov, N.V. Ufimtseva, I.A. Sternin et al., the term "linguistic consciousness", which Wilhelm von Humboldt introduced into science, is widely used. The subject being analyzed in a number of works is the ethno-cultural specificity of the linguistic consciousness of the bearers of Russian and other cultures (Ufimtseva 1998; Murzina et al, 2016; Villalobos Antúnez & Ganga, 2016).

Tatar linguistics began to be concerned with the problem of linguistic consciousness relatively recently (Gabdrakhmanova et al, 2017; Rakhimova et al, 2017).

The task of our research is to reveal and interpret similar features and differences in the use and perception of the lexemes «кеше» and «человек» (man) among Tatar-speaking and Russian-speaking students by means of association experiment. The experiment consists of interviewing informants, united by age, profession, language, etc. with the aim of identifying their associations to the proposed stimulus words.

# 2 Methodology

The following methods of linguistic analysis were used in the work: generalization and systematization, analytical method, descriptive, comparative methods, etc.

The method of generalization and systematization was used to study language materials and the viewpoints of different researchers. When analyzing scientific and scientific-methodological literature on the topic of research, scientific concepts in modern domestic and foreign studies, the analytical method was used. The descriptive method is a system of research techniques used to characterize the phenomena of language at a given stage of its development; the comparative method determines general and specific features of the Russian and Tatar languages.

The statistical method was useful in full understanding the analyzed phenomena, revealing the most frequent associates that fill a certain place in linguistic consciousness of the Russians and the Tatars

An effective method of studying linguistic consciousness is experimental methods, in particular, the methodology of free association experiment, since we can study consciousness only through the products of its activity (Gabdrakhmanova et al, 2016). In the association experiment, a stimulus word induces a number of associations for the native speaker, among which there are individual ones, connected with personal experience, and inherent in a group of people who are united by common conditions of existence (Gabdrakhmanova et al, 2017b). The reactions of native speakers to the stimulus word form associative fields, on the basis of which it is possible to model certain fragments of linguistic consciousness. The materials of association experiments become the basis for compiling associative dictionaries, which help to gain an insight into the mind of native speakers (Xue, 2014; Nurhayati, 2018).

The material for our study was the results of free association experiments, conducted in 2015-2017 with participation of 500 students of Kazan Federal University and other universities of Kazan, aged 17-25 years, being the native speakers of the Tatar language. The students of different specialties (future philologists, veterinarians, power engineers, builders, teachers) took part in the experiments, the gender factor is equally represented. As stimuli words, 116 lexemes were selected.

As a result of the analysis of the obtained materials, a number of lexemes forming the so-called kernel of linguistic consciousness has been identified. One of the first places in terms of the number of links with other lexical units is the lexeme «человек» (man), the studies of a number of other languages have shown a similar result. According to V.A. Maslova, "language as a universal modeling system gives insight into ourselves, our consciousness and our subconscious in its entirety" (Maslova 2007). "Man" is one of the basic concepts of culture and language, and this could not but influence the answers of our subjects - young, active, energetic representatives of their people. This also encouraged our interest in studying the associative field of the lexeme «кеше» in Tatar linguistic consciousness and in comparison with the Russian language.

## 3 Results and Discussion

The results of association experiments indicated that the stimulus word «кеше» induced a wide range of associations for the interviewers: of 488 reactions to this stimulus, the number of different reactions was 231 (47,3 %), but there were many single reactions – 157 (32,2 %). The most frequent reactions are synonymous concepts Adam man (27 reactions), man (10), man (bookish)" (2). Man is, first of all, a biological being, a component part of nature, that is why correlates to animal, living creatures: animal (17), living creature (6), a child of nature (2), beast (1), monkey (1), organism (1). At that, man – is, above all man (4), male, and then there follow the other associations concerning gender: mother (2), girl, young lady (2), mother (1), sister (1), эти father (1), grandfather (1), man (1).

Man is rational and endowed with the ability to think: clever (6), wit (2), wise man (2), thought (2), his (her) thoughts (1), thinking (1).

Man is a social creature, everything biological and psychical is inherent in him. Man of present young generation is a representative of his people, a member of society (the people (8), society (5), nation (1)); he plays different social roles, interacts with other people: friend (10), neighbor (3), guest (2).

And, certainly, a distinctive feature of man is his soul, feelings: soul (8), animated, with feelings (2), love (2). Man –personality (14).

The language speakers, on the one hand, are very concrete in their associations (I (7), he, she, it (2), we (1), they (1), you (1)), on the other hand, the cosmic generalizations are not alien to them (world, universal (4)). Young people reflect on, find a place for themselves in this world, try to gain independence.

It is worth noting that man is conceived by all the subjects as being rather good than bad. According to the scale "bad-good" among the evaluations the positive ones undoubtedly prevail: good (24), good (10), big (8), beautiful (8), clever (6), close, dear (4), happy (3), honest (3), Bgreat (2), humane (2), strong (2), patient (2), friendly, peaceful (2) and so on. The negative characteristics were ranked in the associative field, beginning with the low frequent ones 3: bad (3), ycaπ evil (3), bad, stupid (2), evil (2), bad, evil (2) and so on. Such shift of evaluations to positive indication in the core of linguistic consciousness of the Russians was noted by N. V. Ufimtseva (Ufimtseva, 1998)

The materials of our association experiments were compared with the data of the Russian Regional Associative Dictionary-Thesaurus EVRAS, posted on the website of the Institute of Linguistics of the Russian Academy of Sciences. Highfrequency responses of the speakers of the Russian language living in the European part of Russia to the stimulus lexeme "man" are the following: "reasonable 41; spider 31; creature 26; personality 25; animal 22; people 17; good 14; kind, monkey 13; I 12; clever 11; amphibian 10; homosapiens, life 9; beautiful 7; friend, law, individual 6; male 5; alive, molecule, invisible 4; stupid, proud, mystery, law, society, different, mind, native, words, tolerant, homo sapiens 3; anatomy, wolf, year, proud, citizen, business, child, day, rain, animals, earth, evil, individual, person, beloved, young, wise, ant, bad, nature, upright, development, child, strong, funny, dog, creatures, dumb, confident, one man is a wolf for another man 2", etc. (Ufimtseva 2018).

In many respects, the reactions of Tatar and Russian speakers coincide, the most frequent ones are: the person is a biological being (intelligent 41, creature 26, animal 22, monkey 13, amphibian 10, homo sapiens 9, mind 3, homo sapiens 3, anatomy 2, upright 2, the apex of evolution 1, Darwin 1, beast 1, macaque 1, mammal 1, primacy 1); man is a social being (law 3, society 3, citizen 2); a personality 25; in terms of gender it is rather a man (male 5), etc. The young speakers of Russian and Tatar live in one cultural and educational space, and they have much more in common than differences.

However, Russian speakers often give associations connected with the influence of mass culture, cinema, television, for example: spider 31 (compsare: Spiderman), and law 6 (telecast "The Man and the Law"); invisible being 4 (Invisible Man), etc. The most interesting reactions related to literary works were noted: sheltered (the story by A. P. Chekhov "The Man Who Lives in a Shell"); proudly 4; sounds proudly! 1 (M. Gorky's play "The Lower Depth"); and steamer 1; steamer 1 (poem by V. Mayakovsky "To Comrade Nette, Steamer and Man"). One of the principles of "The Moral Code of the Builder of Communism" claimed that a person to a person is a friend, a comrade and brother; among the responses of the respondents there are different variants: wolf to man 2; an enemy to man 1; a friend to dog 1.

## 4 Summary

As a result of the mass association experiment, the concepts that are most important for the worldimage of the bearers of different

cultures, as well as the knowledge, determined by ethnic stereotypes of the bearers of one or another culture, are revealed.

The study finds that in many respects the associative fields of the lexemes in the Tatar language and (man) in the Russian language coincide. The reactions of the respondents reveal the complex contradictory essence of the concept of man as a biological, social, and psychological phenomenon.

The differences are manifested in the following points. The Tatar speakers have more associations connected with the moral and ethical components of the meaning of "being a human being", as well as a more pronounced shift in estimates towards positive evaluation characteristics than the native speakers of the Russian language. The reactions of the Russian speakers are more often associated with the influence of mass culture, contain a negative connotation, a deflated stylistic characteristic.

### 5 Conclusion

Thus, the association experiment as one of the methods for studying linguistic consciousness makes it possible to look into the structure of a person's lexicon, his language preferences, ideological priorities, value orientations.

The national language image of the world consists of individual world images of individual linguistic personalities. The world around them determines their consciousness and world perception, all this is reflected in the semantics and grammatical forms of the national language.

When comparing the worldviews of different peoples speaking different languages, the originality and uniqueness of the national linguistic image of the world is exposed.

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## MARIS NAZIROV'S SONGS CREATIVITY

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Abstract: The article deals with the importance of song creativity of the Tatar poet Maris Nazirov in the Tatar and Bashkir literary process of the second half of the twentieth century. Songs creativity of the poet is identified as an integral, self-supporting structure. Analyzing the texts of the songs of Maris Nazirov we use analytical, cultural-historical, contextual and comparative methods. The originality of the research is that M. Nazirov's song creativity becomes the subject of a separate study for the first time. One of the interesting features of his poetry is its musicality, melodiousness of the poetic syllable, which is proved by more than a hundred songs which were written for M. Nazirov's poems. Researchers paid attention to the topic of the songs, where we highlight the love to friend, to native land and to the parents. The article is also devoted to the compositional constructions of the studied song's texts, linguistic means of expressing a poetic syllable, peculiarities of the song as a syncretic genre. The article also contains some observations on the genre nature of the poet's songs. The low study of the Maris Nazirov's work, in particular his song heritage, defines the novelty of the research and emphasizes its relevance. The study of the features of the talented poet of our time Maris Nazirov in the context of the modern Tatar literary process is one of the urgent problems of national literature.

Key words: Tatar literature, song creativity, poetry, song, M. Nazirov.

### 1 Introduction

Maris Nazirov (1949-2013) is a talented poet and journalist, author of eleven books. His books were published in the Tatar and Bashkir languages, his works were translated into Russian, Chuvash, German, English and Turkish languages, that gives opportunity to study his work in the broad context of literature.

It should be noted that the modern literary process is the object of careful study of literary critics. In recent decades, some of its genres have been studied by Tatar scientists (Zakirzyanov, 2011), (Ibragimov et al, 2016); study of innovative research, and experiments in the work of national writers of the turn of the century. There are some articles of the Tatar literary critics which are devoted to the questions of interaction of literatures. (Ibragimov et al, 2017b; Gimadieva et al, 2017; Ibragimov et al, 2017b)

M. Nazirov's work is also the object of our study, and his work is considered in the context of the problem of national identity (Khabutdinova et al, 2017). The study of song creativity of Tatar poets, including the creativity of Maris Nazirov, turns up one of the topical issues of the modern literary process.

M. Karimov compares the poet M. Nazirov with Antaeus (Antej), taking strength of his native land (Amirov, 2014). We can see the role and place of his motherland in the soul by the series of poems "Five poems as a gift to Bashkortostan" (1960-2000). In the poem "The soul felt" (1962), the poet includes in the semantic field of the native land the images of parents and Bashkortostan (Nazirov, 2009). The poet tries to write in his individual fate and the history of his family into the history of the Motherland. He is proud that his poetic gift was revealed in Bashkortostan ("The native land is forever") (1972) (Nazirov, 2009).

# 2 Methodology

The object of study in this article is the song creativity of the Tatar poet Maris Nazirov, the subject is the song lyrics from the collection "Wings of the soul". M. Nazirov's song creativity is considered as an integral structure with a number of interdependent functions.

Analyzing the poet's work we use the following methods: analytical, cultural-historical, contextual and comparative.

These methods focus on the studying the poetic musical genre of the second half of the twentieth century in its socio-historical development and help to reveal the sense and peculiarities of M. Nazirov's song creativity within the framework of the Tatar literary process.

## 3 Results and Discussion

"Song is one of the most popular and rapidly developing genres of poetic art. It is not only a reflection of the national mentality, but also a mark of the general state of culture and the mental state of the nation" believes the literary critic Minnullin. Integrated and focused research of Tatar folk and professional songs began in the second half of the 20th century and associated with the names of folklorists (Urmancheev, 1968; Nadirov, 1965; Bakirov, 1999); literary critics ((Juzeev, 1972; Galiullin, 1968; Magdeev, 1968; Villalobos Antúnez & Bozo, 2010); musicologists (Ishakova-Vamba, 2000; Sajdasheva, 1971)) etc.

According to K. Minnullin, " in the field of professional song one of the first Tatar authors – creators of lyrics and melodies is considered to be an active figure of song art Akram Dautov. The songs "I wish to live forever" and "Chistopol waltz" are also widespread among the people. The lyrics and the music were written by F. Akhmadiev. Some of the famous artists compose music for songs. For example, singer M. Imashev wrote music for his songs. The authors of the most beautiful melodies are singers I. Shakirov and G. Ilyasov. L. Aituganov became famous in the 1950s and 1960s: some people pointed out that he wrote music for songs (songs of A. Erikei). Such authors like R. Abdullin, 3.Hakim, Z. Hairullina, F. Murtazin, G. Avzalov combine in their works two or even three creative elements."

V. Romanov pointed out that the first series of poems by Maris Nazirov were published in Ufa and Kazan in the 1970s in the collections "Young forces", "Songs", "Let's sing, friends", "Black and white". In the 80-ies there were also independent poetry collections "Flint", "Eternal flight", "Star feast", "I go to fire again", "Snow of times". The poems included in these collections are full of philosophical reflections of modern life, the fate of the native people. The poems are sincere, melodic and easily put to the music." (Romanov, 2014; Sulkarnaeva, 2018)

A large group in the song lyrics of M. Nazirov is composed of love songs: "Long, my heart", "The springs repeat", "The song of white cranes"," Don't say you forget", "The flower of my love," When you meet", "How are you, my worries"," You are like the flower in my soul", "Look into my eyes"," Love doesn't go away", "Wave of tenderness", "My Gulnaz"," I've been looking for you all my life", "Soul in love"," I have already forgotten you", "Hey, beautiful, delicate flower" and others. These songs by M. Nazirov reflect a person's need of thinking on wonderful feeling.

The story of the love songs is based on the romantic occasions. In the song "Burn, my heart" love is a manifestation of real life (Nazirov, 2009). The ability to love in the poem "It means you live..." and it is the evidence of vitality and strength (Nazirov, 2009). In the poem "The spring repeat", the poet reflects on the nature of the love feeling, which overtakes a person in spite of the age. The author associates love with spring, the flow of feelings and emotions: "when lonely people find a couple, / Dreams get the wings" (Nazirov, 2009).

The story of separation from the beloved is a key in some songs. They are united by the motive of the vow of eternal love. So, in the poem "Don't say you forget" the lyrical hero meets his beloved in dreams: the love does not know the obstacles, time can't control it (Nazirov, 2009). The hero gets through separation from his beloved which is presented in the poem "You are my soul mate" (Nazirov, 2009) Sometimes the nostalgia about his beloved shows the rumble of the hero in the to his fate "Broken Heart". (Nazirov, 2009).

In the love poems the beloved appears as a freckled young girl who rinses the linen in the lake ("Beautiful girl") (Nazirov, 2009), then she takes the name "Gulnaz". Her name represents the eternal spring and connected with the song ("My Gulnaz") (Nazirov, 2009).

The lyrical hero worries about fast moving life ("You're my soul mate") (Nazirov, 2009), "Love does not go away." (Nazirov, 2009), "I've been looking for you all my life" (Nazirov, 2009), so he rushes to make a declaration of love.

Love songs belong to the category of pop songs. Sometimes we can distinct folk tradition in them. For example, in the poem "The soul in love" the lover associates himself with a nightingale, with a winged horse-Tulpar and a guiding star, and his beloved – with a flower. Images of a burning spring and wind help the readers to form the idea of the power of love. The lyrical hero is sure that his love is able to light the faded stars. The main structure is the two-staged metaphor: the "Nightingale – rose", Nightingale – Willow") (Nazirov, 2009).

The beauty, spirituality and high musical taste are present in the song lyrics of M. Nazirov. The poet demonstrates cheerful colours and mood of his song with the help of feelings. The melody of these songs is based on the folk music, which is combined with elements of modern pop style.

A specific group is arranged by the songs devoted to parents. The poem "The face of the mother" is based on a tragic story: the unfortunate death of a young mother during childbirth. The picture of a terrible thunderstorm that broke out above the earth, on the day of birth of the lyrical hero, turns into a significant metaphorical image: childbirth is a border between life and death in the life of woman (Nazirov, 2009). In the songs about parents we can observe the filial affection. Images of parents are associated with parental affection, care and protection. In the poem "Mother's letters" the hero feels remorse, as he rarely replies to the mother's letters. These letters are beneficial for the hero: illuminate his soul, warm with love, rise the nostalgic memories of home and native land. Looking at the lines of letters, the hero realizes the degree of excitement that his mother feels about his fate (Nazirov, 2009). Songs about parents are not characterized by great image originality, most often they are built on the stamps: parental gaze, hands, etc. These songs have strong didactic side. The author strives to remind his listeners about the duty of children to their parents.

The author highlights the poem "The mother is before your eyes." The structure is based on the antithesis:" white-white dress "-"black shawl". The details of the portrait characteristics according to the author's plans is a philosophical understanding of the fate of the mother and her vitality. (Nazirov, 2009)

A number of songs of M. Nazirov are devoted to the Motherland. M. Nazirov emphasizes with some challenge his personal belonging to Bashkortostan. This concept entered into the historical, geographical, moral and philosophical, poetic vocabulary. Homeland for him is the Earth in the Universe, and Bashkortostan, and long – suffering Tatarstan, each time rising from the ashes, and its Baikonur, Chekmagush and Minishta with its native language spring" (Amirov, 2014). Several songs are full of nostalgia for small motherland. For example "My childhood", "I always miss you, my native land", "Native land is precious for me", "My native village, my land", "I never leave you, my native land." (Nazirov, 2009)

The songs about small native land are simple and humble. The image of the parental house occupies a huge place in them: "Blue shutters of the birthplace, / house in the clothes of the rays"; "My native village, my native land". In this the parental home is associated with an entire stream of children's impressions: "honey meadow", "floral edge", "the mountain stream", etc. It is obvious that the image of small native land has sacral sense. The motherland is associated with the primeval nature: first love, first vow, first song... The drama in this song is achieved due to the antithesis "friend-or-foe" (Nazirov, 2009).

In the songs the author uses appellative vocabulary, denoting water, ground and celestial bodies. In some folk tradition provides the image of the homeland. Thus, in a number of poems the motherland and the home are associated with the nest, and the hero presents himself as a bird, etc.

Analyzing the work of M. Nazirov we can find some popular songs. The song "Try not to fly" presents a lyrical reflection about man's duty and man's soul. The main idea is focused in the last verse: "Try not to fly if you have wings." In this song flight is associated with space and freedom. The inability to fly is regarded by the author as a betrayal of his destination. In the text the antithesis becomes structure-forming: "wild geese" – "domestic geese", the sky-ground. Creating the image of geese, the author uses to onomatopoeia: "Kyigak...Kyigak..." which turns into a refrain. The image of domestic geese is being made psychological: the gaggling represents sadness, suffering and pain because of inability to fly. (Nazirov, 2009)

M. Nazarov notes that he is happy to write songs in his native language (Nazirov, 2009). So, in the poem "Where are you, the descendants of Tatars", which become the anthem of the world Congress of Tatars, the poet makes an attempt to look at the Tatars through times. M. Nazirov reflects the fate of the Tatars in different parts of the world. The poem discovers an intertextual connection with the famous poem of Derdemend "Ship of the country". M. Nazirov realizes the meaning in the lost of nationhood and independence. The problem of identity is realized through the native language, the image of the mother. The poet says about the problem of responsibility of generations for the Motherland. The refrain in the poem serves as a semantic and emotional bond. (Nazirov, 2009)

# 4 Summary

The study of M. Nazirov's poetic works, set to the music gives the opportunity to realize that his songs have the form of a monologue and have the same atmosphere.

In the dramatic monologues of M. Nazirov, we find secret and tragic feelings Many of them are denoted to beloved and they are also intimate.

The analysis of the song composition shows that they usually consist of two or more verses or even several mixed verses. K. Minnullin points out that the conditions of their creation and functioning are related to the songs shortness ad capacity. The volume of the text is reduced within the stage performances. The most common in the work of M. Nazirov is a four-line chorus following a four-line verse. This compositional element, in addition to the musical-melodic rhythm change performs another important function: it carries the main semantic and emotional strength of the song verse and expresses the main mood of the song.

Song creativity of M. Nazirov characterized by the contrast of the image. This compositional technique is borrowed from the folk creativity. The contrast focuses the attention on this idea, making it more clear.

## 5 Conclusions

As the result, songs creativity of M. Nazirov takes a special place in the history of Tatar and Bashkir song poetry of the second half of the twentieth century, They differ in the specificity of syncretic genre: the ongoing interrelation of text and music. M. Nazirov with his song creativity returnes to the origins of the poetry – the reunification of the poetic word with the music. The poet introduces into the song culture of the second half of the twentieth century a special form of verse and his thoughts, emotional experiences and feelings. Developing the inherited traditions of folk creativity in the use of language, the poet creates bright and unique images. In his songs, the worldview Of the author was originally revealed.

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# MYTHOLOGICALISM IN THE TATAR LITERATURE OF THE 1960-80S (ON THE EXAMPLE OF THE WORKS BY I. YUZEEV AND M. YUNYS)

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Abstract :This article studies mythology in the Tatar literature of the 1960s and 1980s based on the examples of the works by Ildar Yuzeyev (1933-2004) and Mirgaziyan Yunys (1927 - 2014). It reveals the transformation of mythological images and plots in epic and lyric-epic works from the point of view of their functions, role and literary significance. In the course of studying, attention is focused on their use as a symbol as a structure-forming component or a means for narrative structuring. The relevance of the paper is determined by the insufficient coverage on the study of mythology in the Tatar literature of the 1960-1980s. In the course of the research, it is asserted that through the prism of mythological images and plots the works by I. Yuzeyev and M.Yunys form an idea of national problems, evolve a new social and philosophical concept that unites the national idea, social and human philosophy. Fundamental to our study is the hermeneutic approach directing the receptive activity of the reader to the analysis of principles and ways of representation, the definition of typological similarities and the specificity of literary searches coinciding and having differences in different periods of verbal art and in different literary genres. In this way the mythology and its poetic originality are revealed in the Tatar literature of the 1960s-1980s.

Keywords: Tatar literature, mythology, mythological images, mythological plots, structure.

### 1 Introduction

Tatar literature of the second half of the twentieth century is characterized as a transitional phase associated with the denial of the former ideological and cultural benchmarks and distinguished by innovations in social and philosophical thought, changes in literary and aesthetic thought. At this stage of verbal art, on the one hand, the processes of revealing national identity are activated. Thereafter, the problems of national selfidentification, national self-awareness come to the fore in the Tatar works. Tatar literature of the second half of the twentieth century is marked by an era of return to national sources in general. On the other hand, innovations are structured by an active search for new devices and means of figurative expressiveness, enriching the content and form of literary work, and improving symbolic thinking. This tendency contributes to the activation of mythological images and plots, the intensification of mythology in verbal art. According to E. M. Meletinsky, mythology is a characteristic phenomenon of the literature of the twentieth century, both as a literary device and a world attitude behind it (Metelinsky, 1976). In the Tatar literature of this period uses mythological images and plots in the status of a symbol, like in Russian literature, myth stands for "universal model for constructing symbols" (Shelogurova, 1986).

Certain studies of this issue based on the material of the folklore of the Barabinsk Tatars have already been undertaken by V. V. Radlov (Sayfulina & Karabulatova, 2014). The main mechanisms of using and transforming mythological subjects, folklore images in the Tatar literature, the language of works of literature, the dialogue of cultural traditions by Tatar scholars have been studied in respect of one or another aspect (Motigullina et al, 2016; Kajumova et al, 2017; Zakirzyanov & Ghilazov, 2016). However, no special studies covering the theme of mythology on the material of the Tatar literature of the 1960s-1980s have been conducted so far. This paper analyzes this problem in a broader literary context. The object of our study is the Tatar literature of the 1960-1980s, in particular the works by I. Yuzeyev and M. Yunys. The subject of the study is mythology in the Tatar literature of the 1960-1980s.

## 2 Methods

The basis for our study is the hermeneutic approach (Robert, 1999; Abrams & Harpham, 2009), which assumes that the

reader, while getting a feel for the diverse cultural values fixed in the literature, finds his place on their borders. It directs the receptive activity of the reader to comprehend the principles and means of representation, the literary forms of mastering reality, highlighting and thorough understanding the typological similarities and peculiarities of literary schools and trends that coincide and differ in different literatures. Thus, using the hermeneutical approach, we suppose to gain insight into the essence of mythology in the Tatar literature of the 1960s-1980s, to detect the specificity of adaptation or transformation of mythological images and plots in the works by I. Yuzeyev and M. Yunys

## 3 Results and Discussion

Each national literature has its own "mythological tradition": images and stories of "early" mythology, most frequently used in national literature (Ibragimov, 2003; Mobbalegh Naseri et al, 2018). Tatar literature is inextricably linked with mythology, the totality of myths belonging to Turkic-Tatar, Islamic and world mythology. The activation of mythology in Tatar literature is vividly apparent already at the beginning of the twentieth century. Especially in Tatar modernist poems, the subject of the narrative is mythological images and plots that belong to different sources and times. Firstly, it was the revival of the folklore paradigm in secular literature, and secondly, the continuation of the traditions of medieval Eastern literature, preserved despite the activation of the dialogue with Russian and European literature. The pronounced mythology of literature continues in the 1920-50s, however, gradually, in the opinion of Kh. Gyunter, "it becomes an official reservoir of state myths" (Gunter, 2000; Villalobos Antúnez & Bozo, 2010). The beginning of socio-political reforms is accompanied by a subconscious approximation of literature to ideological mythology, mythopoeic universals and archetypes.

Qualitative changes have begun in the national literature since the 1960s. Innovations in philosophical and social thought, in literary activity are explained by the weakening of rigid ideological attitudes, which leads to the humanization of literature. Tatar literature returns to national sources, traditions of Tatar literature of the early twentieth century. This tendency is clearly manifested in the activation of mythological images and subjects belonging to the Tatar folk art. Mythologizm especially manifests itself in the works that are oriented to and aimed at universal human values. However, in the Tatar poetry of the 1960s-1980s, the themes and images of world mythology are already prevailing, or the Turkic-Tatar myths are being "transformed". This tendency is most pronounced in the works by I. Yuzeyev.

Make an analysis of the poem by I.Yuzeyev "Meeting with Eternity" (1982) by way of illustration of the possibilities of using world mythology in national literature. In terms of composition, the poem is represented as a synthesis of the realistic, mythological and philosophical strata. These layers have ties to a time line, which dialogically causes to collide two understandings of "cosmic": metahistorical and concretehistorical, social. In the course of studying mythology in modern Tatar literature, M.Ibragimov comes to the conclusion that "the combination of realistic and fantastic-mythological layers ... reflects the essence of transitional processes in Tatar literature: on the one hand, this is a desire to preserve realism, on the other - the search for literary novelty" (Ibragimov, 2003). A similar idea can be applied to the material of this poem. The realistic layer collects together the events of the excavation conducted by archaeologist Atlant in the battlefields. In the structure of the poem the prologue of the work forms it compositionally.

The mythological plot laid down in the basis of the work is a myth passed by Plato, a legend of the once-vanished Atlantis. In the mythological story of a happy land – Atlantis, literary convention is transformed into effective means of a generalized

manifestation of the world view and a profound revelation of the author's position. The island, as the main component of the chronotope, is sacrificed and likened to the "sacred island" and forms the opposition of the Sacred / Secular: "We – the Atlanteans, were a proud people, / We lived on the island of Atlantis, / Having abandoned disputes and wars, / Conquered Freedom, sowed Joy, reaped Happiness. / The leader was – hero Atlant, his mind is the Earth, / the Force is the ocean, the feelings are the great sea ... / "And the kings are we, and we are the god, and we are the titan, / All the atlantes are equal on this island" (Yuzeyev, 1985). Vitalizing the image of Atlantis, the poet builds an ideal model of life. Two worlds are connected by the Rainbow, which is perceived in a symbolic perspective as a reunion of real and irreal worlds.

The main characters of the work are Atlant and his son Icarus, the other mythologemes – mythical Greek gods – are perceived as the symbols, and present the philosophical idea of the work. As in the lyrics of the poet, "each of the images is semantically equivalent to the other one and introduces its own semantic shades into the cumulative chain" (Yuzeyev, 1985). Atlant comes into focus as a proud, purposeful, strong person, and serves as a unifier of earth and sky, real and ideal worlds.

Ikar in the poem acts as an astronaut, dreams to conquer the vast expanses of the universe. Icarus is known in mythology as the son of Daedalus, who flies up to the sun with the wings made by his father, burns his wings and heroically dies. I.Yuzeyev, using demythologization, describes Icara as "an unflinching Icarus of the modern era", portrays him to be with a strong spirit - a representative of the future generation.

Besides, the poem presents the Greek gods to be the owners of the Mount Olympus – the main god Zeus and his children: Athena – born from the head of Zeus, the goddess of the Blue Heavens, Hades – the god of the Underworld, Aray – the god of war, Ananka – the goddess of Fate – all they recreate the author's position and are structured as archetypal symbols. In the work concerning "the dark sides" of the nature of Zeus, there is an archetype of the shadow, which is the representation of anger and revenge in the character.

Aray symbolizes a strong militancy, savagery and cruelheartedness. The symbol of eternal fire frequently repeated in the poem also originates from mythology. The sacred fire, the fire of torch Atlanta, the fire of Herostratus – all are united around the Eternal Flame. In the structure of the text, it symbolizes, first of all, the force capable of burning all life, the whole world to ashes, secondly, the wars, and thirdly, the memories of the victims of these wars. The image of Athena symbolizes the sublime and acts as a symbol of the romantically exalted Beauty, reflecting the perfect stage of divine beauty and great mind. Thus, in the poem the main conflict boils down to the collision of the Man with the Gods, from subjective perspective it is perceived as a confrontation between Good and Evil. The eternity of the gods turns into the means of revealing eternity and the power of evil.

In the prose works by Mirgaziyan Yunys "mythology" acts as a literary means, representing the metaphorical interpretation of the author's imagination, becomes a tool of narrative structuring. He freely turns to the images and motifs of traditional mythologies, uses them as the material for independent literary organization of the text, which helps him to build up an internal metaphorical content, providing polysemy.

For example, in the story "Candles Burn only in Candlesticks" (1979), the author, by directly referring to the Tatar folk song "Guljamal", connects the doomed fate of Tatar women with social history. For this purpose, the author applies the allusion to the myth of the Arachnes from Greek mythology, the interpretation of which reveals the deep meaning of the historical phenomenon. Mythological parallels lay stress on the repetition of the same insoluble social collisions.

M. Junys often turns to archetypal images, which are a model of social life. Female images in the person of the beloved of

protagonist Sayrin Salakhov, Raziya Islamnurova, and his mother Minzifa apa symbolize and share the principle of femininity: Razia – as the goddess of love and beauty, as well as fertility, along with self-sacrificingness, Minzifa apa – a motherland and a holy woman. Mother's holiness takes its archetypal rise partly from Islamic traditions, partly from the Turkic image of Umai-ana's mother, who is exalted as a deity and patroness of children.

Also in the story, the repeatedly the images of willow and weeping willow used more than once carry a subjective metaphorical load of the mythology of the Tree of Life, which signifies the close connection between the relatives of the family. The roots symbolize the past, the history and the beginning of the family. The image of a weeping willow, as a symbol of the Tree of life and well-being, is mentioned in the stream of thoughts of the protagonist in relation to the head of the family, where the family in peacetime gathered together for an evening tea party under an immense tree. The same image of a weeping willow is developed by M. Yunys in the story "Our House Was Under Willows", which indicates the narrative integrity of the author's style. The image of the willow in the story plays a structure-forming role, conveyed not only by the plot, but also by the genre. Here the mythology of the Tree of Life indicates the identity of the problematic, representing the philosophical background of life and death. From the mouth of an elderly emigrant, whom the narrator encountered at the cemetery of an absolutely foreign land, the repeated sentence "Our house was under willows" sounds like an affirmation of the possibility of a happy, harmonious life only in our native land.

### 4 Summary

- The Tatar literature of the 1960s-1980s is inseparably linked with mythology, the totality of myths belonging to Turkic-Tatar and world mythology. The use of mythological images and plots in the status of a symbol or a means of narrative structuring is observed in the works.
- 2. Mythology in the works by I. Yuzeyev lies in the fact that he uses mythological images and plots in the text structure as a symbol to be a structure-forming component. Through the prism of mythological images and plots Y. Yuzeyev's works give a representation of general human problems, develop a new social and philosophical concept that unites the social, universal philosophy.
- 3. In prose works by Mirgaziyan Yunys, mythology acts as a literary means, representing a metaphorical interpretation of the author's imagination. Mythopoetic peculiarity of M. Yunys's prose lies in the fact that he uses them as the material for independent literary organization of the text, which helps him to build up an internal metaphorical content. Mythological motifs of M. Yunys are not a conscious game, the writer does not demonstrate a symbolic model of the world, his mythology is spontaneous, creative and subjective.

## 5 Conclusions

Thus, typologically similar to analogous phenomena in the Tatar literature of the first half of the twentieth century, mythology in the Tatar literature of the 1960s-1980s has its own distinctive features due to the impact of socio-philosophical and literary-aesthetic innovations.

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# PRACTICE OF APPLYING THE SIMPLIFIED TAXATION SYSTEM AND ITS DEVELOPMENT IN THE RUSSIAN FEDERATION

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Abstract: The paper discusses the practice of applying the simplified taxation system and its development in the Russian Federation. The simplified taxation system is a special type of tax regime that operates in the Russian Federation in accordance with Chapter 26.2 of the Tax Code of the Russian Federation and is applied by small business entities in accordance with the legislation of the Russian Federation, along with other taxation regimes, in which, in accordance with established procedure and under certain conditions, a single tax is paid, and which is focused on reducing the tax burden for small business organizations and facilitating the conduct of tax accounting and book-keeping. The article presented and analyzed data on the number of organizations and individual entrepreneurs applying the simplified taxation system, presents the dynamics of the calculated and paid single tax with the simplified taxation system in the Russian Federation for 2013-2015, as well as the dynamics of the collection of this tax. The volume of accrued and received payments in connection with the application of the simplified taxation system in the Russian Federation for 2014-2016 is considered. On the basis of the complex analysis, the problems arising in the application of the simplified taxation system are highlighted, and ways of their solution are considered.

Keywords: tax, taxation, simplified taxation system, special tax regime, tax control.

### 1 Introduction

The simplified system of taxation is a special tax regime that operates throughout the Russian Federation on the basis of Chapter 26.2 of the Tax Code of the Russian Federation. The main goal of creating and introducing this regime is to help certain categories of taxpayers, mostly small entrepreneurs, because they contribute to a significant extent to the growth of the gross domestic product, to raising the living standards of the population and to equalize the economic situation in the country. Therefore, the development of small business in the Russian Federation is one of the most important tasks the country's economy is faced with. In recent years, the attention of state structures and the public to its numerous problems has increased. At present, the state provides active support to small businesses, including through such tax policy tools as special tax regimes that reduce the tax burden on business (Tufetulov et al, 2014; Villalobos Antúnez, 2015).

## 2 Methodology

Since the main taxpayers of the simplified taxation system are small and medium-sized businesses, as well as individual entrepreneurs, we consider it necessary to analyze their dynamics and composition. The dynamics of individual entrepreneurs using the simplified taxation system in the Russian Federation, in the main subjects of the Volga Federal District (the Republic of Tatarstan, Nizhny Novgorod and Samara Regions), and the cities of Moscow and St. Petersburg with federal status in 2013-2015, is shown in Table 1.

Table 1. Dynamics of the individual enterprises number applying the simplified taxation system in 2013-2015 Units

Name	2013	2014	2015	Change Rate	Growth / Decrease, %
Russian Federation	1 194 213	1 196 837	1 387 732	193 519	16.20
Republic of Tatarstan	29 500	30,429	33,07 2	3 572	12,11
Nizhny Novgorod	23 802	22 897	26 381	2,579	10.83
Samara	15,982	16,869	19 461	3 479	21.77

Moscow	125 653	125,25 4	143,5 75	17 922	14.26
Saint- Petersburg	41 613	43 557	51 940	10 327	24.82

Based on the statistical data of the tax authorities, Table 1 indicates an increase in the number of individual entrepreneurs registered by the tax authorities in 2013-2015 in Russia as a whole, as well as in the federal subjects selected by us for analysis, including those using a simplified taxation system. As of 2015, this indicator in the Russian Federation has changed compared to 2013 by 193 519 units, which is 16.20%.

Next, we will consider the dynamics of the number of organizations using the simplified taxation system in the Russian Federation, the main subjects of the Volga Federal District (the Republic of Tatarstan, Nizhny Novgorod and Samara Regions), and cities of federal significance in Moscow and St. Petersburg in 2013-2015.

Table 2. Dynamics of organization number using a simplified taxation system in 2013-2015 Units.

taxation system in 2015-2015 Onts.							
Name	2013	2014	2015	Change Rate	Growth / Decrease,%		
Russian Federation	1 283 665	1 314 471	1 430 331	146 666	11.43		
Republic of Tatarstan	32,589	33 833	36 015	3,426	10.51		
Nizhny Novgorod	27 451	27 213	29,719	2 268	8.26		
Samara	29 175	30,071	32,478	3 303	11.32		
Moscow	173 682	174 669	188 769	15,087	8.68		
Saint- Petersburg	79,037	124 194	87 591	8,554	10.82		

Based on the statistical data of the tax authorities, Table 2 indicates an increase in the number of organizations registered by the tax authorities in 2013-2015 in Russia as a whole, as well as in the federal subjects selected by us for analysis, including those using a simplified taxation system. As of 2015, this indicator in the Russian Federation has changed compared to 2013 by 146 666 units, which is 11.43%.

Let us consider the dynamics of the number of taxpayers who submitted tax returns on the tax paid in connection with the application of the object of taxation "incomes reduced by the amount of expenses" and the object of taxation "income". Table 3 presents statistical data for the Russian Federation as of 2013-2015.

Table 3. The number of taxpayers who submitted tax returns for the tax paid in connection with the simplified taxation system in the Russian Federation as of 2013-2015

Name	2013	2014	2015	Change Rate	Growth / Decrease,%
Total taxpayers	2 477 878	2 511 308	2 818 063	340 185	13.73
on the object of taxation -	1 623 354	1 633 636	1 852 221	228 867	14.10

income					
on the object of taxation - income reduced by the amount	854,524	877 672	965 842	111 318	13.03

The data presented in Table 3 indicate a noticeable increase in the number of taxpayers who submitted tax returns during the period under study. The number of organizations and individual entrepreneurs who submitted tax returns under the simplified taxation system in 2013-2015 increased by 340 185 units or by 13.73%. Analyzing the number of tax returns submitted, it should be noted that taxpayers prefer to choose "income" as the object of taxation. Thus, in 2013 tax returns on the object of taxation "income" in comparison with "income reduced by the amount of expenses" was by 768 830 units more, in 2014 - by 755 964 units, in 2015 - 886 379 units.

### 3 Results and Discussion

Analyzing the dynamics of the calculated and paid single tax with the simplified taxation system in Russia for 2013-2015 shown in Table 4, it should be noted that in 2015 there was an increase in the amount of the accrued single tax by 45.6 billion rubles (or by 19.04%), including for the object "income" by 38.2 billion rubles and for the object "revenues minus expenses" - by 7.4 billion rubles.

Table 4. Dynamics of the calculated and paid single tax with the simplified taxation system in 2013-2015

implified taxation system in 2013-2015								
Name	2013	2014	2015 Change Rate		Growth / Decrease,%			
The amount of tax calculated for the tax period is total, including:	239.4	9.4 262.6 285.0 45.6		45.6	19.04			
on the object of taxation - income, billion rubles.	192.1	212.2	230,3	38.2	19.89			
on the object of taxation - income, reduced by the amount of expenditure, billion rubles.	47.3	50.4	54.7	7.4	15.60			
The amount of tax paid for the tax period total, including:	175.3	189.0	207.6	32.3	18.42			
on the object of taxation - income, billion rubles.	134.8	145.0	159.7	24.8	18.42			
on the object of taxation - income, reduced by the amount of expenditure, billion rubles.	40.5	44.0	47.9	7.4	18.41			

In 2015, there was observed a similar situation with the amount of the single tax paid to the budgetary system of Russia, which in 2015 increased by 32.3 billion rubles, and amounted to 207.6 billion rubles, and increased by 18.42% compared to 2013. Dynamics of the collection of a single tax with a simplified system of taxation in Russia for 2013-2015 years is given in table 5.

Table 5. Dynamics of the single tax collection with a simplified taxation system in 2013-2015

Name	2013	2014	2015	Change Rate
Implementation of the single tax collection rate, including:	73.22	71.96	72.84	-0.38
on the object of taxation - income, billion rubles	70.18	68.33	69.32	-0.86
on the object of taxation - income, reduced by the amount of expenditure, billion rubles.	85.56	87.25	87.64	2.08

The increase in the single tax paid under the simplified taxation system in the analyzed period, according to Table 5, did not lead to an increase in the tax collection rate. The relative indicator characterizing the collection of this tax (the ratio of the paid and accrued tax) tended to decrease. An exception is the object "revenues minus expenses", where the growth rate was 2.08% to 87.64%. In general, for all objects, the collection of a single tax with the simplified taxation system in 2015 decreased by 0.38% compared with 2013.

## 4 Summary

For a deeper and more detailed study of tax collection when applying the simplified taxation system in the context of a taxable object, as well as in the context of various subjects of the Russian Federation, it is necessary to study the specifics of calculating, accrual and paying this tax. Volumes of accrued and received payments in connection with the application of the simplified taxation system in the Russian Federation are illustrated in Table 6.

Table 6. Volumes of accrued and received payments in connection with the application of the simplified taxation system in the Russian Federation million rubles.

	Charged payments			Received payments		
	2014	2015	2016	2014	2015	2016
The amount of tax levied in connection with the application of the STS	220990	243090	264417	229316	254164	287068
on the object of taxation - income	154971	170004	182821	162474	177685	200007
on the object of taxation - income, reduced by the amount of expenditure	47565	58429	65154	48680	61885	71174
The minimum tax that is credited to the budgets of state extra-budgetary funds	56	48	thirty	1	19	9
The tax collected in the form of the cost of a patent in connection with the application of the STS	0	2	3	0	1	3
The minimum tax credited	18398	14608	16411	18161	14575	15878

to the budgets of the constituent entities of the Russian			
entities of the Russian			
Federation			

According to Table 6, the amount of both accrued and paid tax levied in connection with the application of the simplified taxation system in the Russian Federation has grown. If as of 2014 the amount of accrued payments equaled more than 220 billion rubles, then as of 2016 this indicator was equal to over 264 billion rubles, the rate of growth was 20%. The volume of tax payments received in connection with the application of the simplified taxation system in the Russian Federation grew by 25.32% in 2016 as compared to 2014 and amounted to more than 287 billion rubles.

In all countries considered within the framework of this study, small business is defined as a priority direction of state regulation (Okulev & Golubev, 2015; Awadallah & Gamal Saad, 2018). Currently, the main trend in the development of small business taxation in world practice can be considered as the desire to maximize its rationalization, simplification, breakaway from tax schemes which are complex and time-consuming to develop and implement, and also to optimize and improve tax administrating, unify taxation elements and systems (Tufetulov et al, 2015). In this regard, it is important to consider the possibilities of using foreign experience in applying the simplified taxation system in the Russian Federation (Choudhury, 2018; Evertsson, 2017)

Support and development of small business in Russia is connected, first of all, with the need to form a middle class since it is known that this particular category of the population is a largest part of taxpayers and, accordingly, is one of the main sources of tax revenues of a state (Lukpanova et al, 2017). In the developed countries, the middle class is mainly represented by entrepreneurs and accounts for the majority of the country's population (for example, in the USA 80%) (Isatayeva et al, 2017). In Russia, this indicator is much lower and is 10-15%. That is why solving small business problems in the field of taxation, providing it with the most favorable conditions for development and improvement, is one of the main goals with which the state is faced.

Also, the need for tax support for small businesses in the Russian Federation is associated with an unstable level of inflation. And, as we know, the most effective way to deal with it is to develop competition. After all, the higher the competition, the more effective the business should be, the lower the costs and prices, the more the amount to which we can replenish the budget. The practice of developed countries shows that the creation of favorable conditions for small businesses contributes to a lower level of inflation compared with Russia. To create competition in our country, it is necessary that the number of private entrepreneurs to grow. To do this, it is necessary to create an effective system of supporting these entities in the taxation sphere. Just in this direction, the existing simplified taxation system operates (Shakirova et al, 2016).

# 5 Conclusions

As a result of this study, gaps and contradictions within the framework of the simplified taxation system were identified. It was also proved that this special tax regime occupies an important place in the tax system of the Russian Federation. Its special role is due to the fact that an effective simplified taxation system will promote the development of small business in Russia, which will favorably affect the revenue side of the budget due to the fact that it is entrepreneurs who are the main taxpayers.

There are various classifications of the directions of the simplified taxation system development in the territory of the

Russian Federation. We divide the classification of the directions of simplified taxation system improvement in the Russian Federation into two groups: basic and auxiliary (Andreeva et al, 2016). The basic and auxiliary directions of the simplified taxation system development in the Russian Federation should be considered together, since the relationship between them is inseparable:

Based on the study, the following prospects for the development of the simplified taxation system in the Russian Federation at the current stage are recommended:

- 1. It is recommended to legislatively define the concepts "special tax regime", "simplified taxation system".
- It is advisable to consider the possibility of establishing the basic margin K2 when applying a simplified taxation system for certain types of activity with the aim of taking into account the conduct of activities in a certain territory. Activities that fall under the K 2 factor will be the most attractive for start-ups.
- Set tax holidays not only for individual entrepreneurs, but also for newly created organizations, in addition, to oblige all subjects of the Russian Federation to introduce tax holidays for a two-year period.
- 4. Based on the experience of foreign countries, it is necessary to divide all small businesses for tax purposes into different categories based on the number of employees in an organization, and depending on this criterion to establish differentiated rates for a simplified taxation system: microenterprises up to 15 people; small businesses up to 100 people; medium-sized enterprises from 101 to 250 people. With the tax object "income", the tax rate should be set at 2 percent for microenterprises, 3 percent for small businesses, 6 percent for medium-sized enterprises. With the object "incomes reduced by the amount of expenditures", the tax rate should be set at 5 percent for micro-enterprises, 7 percent for small enterprises, and 15 percent for medium-sized enterprises.

In the prospects for the development of this special tax regime, it is always necessary to take into account changes in the structure of the economy, the financial situation of Russia and other developed countries, and also take into account their experience of state support for small and medium-sized businesses. That is, it is necessary to improve the legislation in the field of taxation of small business in such a way that it is not just a declarative nature, but implemented in practice in full.

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# RELEVANT TOPICS MOTIVATING LEARNERS OF ENGLISH TO PRODUCE MEANINGFUL UTTERANCES

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Abstract: This paper explores conversational topics suggested for arousing students' interest in classroom discussions as a means of developing their speech skills. The purpose of this research is to compare teachers and students' expectations concerning the most welcome topics for communication tasks, the topics motivating students to produce meaningful utterances in response to communicative tasks set by teachers. Lack of linguistic means is usually seen as the main barrier, preventing students from verbalizing their ideas in the target language. However, for different reasons, it is the unwelcome topic which becomes the real obstacle, interfering with teachers' efforts to get their students speaking. Very few topics are equally favoured both by teachers and students. The article analyzes reasons for the negative response of students to certain topics marked by teachers as preferable for classroom discussions. To conclude, we identify the types of topics that preferred by students of foreign languages and emphasize the importance of studying the personality of students in terms of reliance on their social experience when developing speech skills in the target language.

Key words: conversational topic, target language, personal problem, cultural issue, social experience

### 1 Introduction

The task of motivating students to produce meaningful utterances in the target language has been the focus of academic research (Varlamova et al, 2016; Mukhametzyanova & Shayakhmetova, 2014) and teaching practices since the communicative approach was introduced in our classrooms. "Active use of the target language by students is considered to be an integral part of language acquisition" (Nunan, 1999). The main obstacles on the way to the successful mastery of oral speech are lack of linguistic means for expressing students' ideas and lack of interest in the topics discussed. Lack of linguistic means, both grammatical and lexical is seen by teachers as the major barrier on the way to speech production. According to the opinions given by the teachers in their blogs (Sulkarnaeva et al, 2018) and notes added to the answers in our survey, students abstain from expressing their opinion due to the low level of their communicative competence (teachers mean poor knowledge of grammar and vocabulary under study).

The desire to participate in communication involves, first of all, an impact on the motivational sphere of the interlocutors. Motivation is the main acting force, stimulating speech, when speakers try to solve communicative tasks and verbalize (as far as the communicative competence in the target language allows) their speech intent. When a communicative task is important to speakers, it will have priority over the search for linguistic means for verbalizing their ideas. Consequently, both teachers and researchers suggest relevant topics that would be able to motivate their students to produce meaningful utterances in the target language.

However, the topics that teachers suggest for classroom discussions fail to arouse students' enthusiastic response. After prefabricated conventional phrases are exhausted and all the prompts are included into their supposedly real dialogues, students stop. The seemingly exciting, in teachers' opinion, conversation skids to a halt. No heated debates, or at least lively talk follows. The usual explanation that teachers give in this case is students' limited vocabulary. However, our experience, which has given impetus to exploring this issue, has given rise to a different hypothesis: the point is the topic. When choosing a topic for a classroom discussion, teachers rely on the course book, or their own ideas about the relevance of the subjectmatter content for students' utterances. In this article we emphasize the special importance of studying the personality of students in terms of reliance on the social experience they have

acquired while developing the skills of foreign language speaking. Approaching this issue empirically, we have concluded that the most successful topics for discussion are cultural and ethical issues relevant to the audience, that is, the topics widely discussed by the society and affecting the sphere of students' interests.

### 2 Methods

Our research is based on empirical evidence, observation and quantitative analysis. We have collected numerical data concerning teachers and students' preferences for topics meant to motivate students to generate meaningful utterances and take part in classroom discussions. To this end we have conducted a survey based on a self-completed questionnaire, including only one question: "Which talking topic gets your students speaking?" (for teachers) and "Which topic do you enjoy talking about in your English class?" (for students). We have used the Student's t-distribution method for statistical analysis.

### 3 Results and Discussion

Teaching a foreign language in Russian schools is based on the principles of the communicative approach, in particular, on the principle of learner-oriented learning, when the interests and needs of language learners come to the fore. Pedagogical decentralization makes the learner a subject of communication, which enhances his/her speech activity and autonomy: "The topics and situations of communication should correspond to the students' real interests and capabilities, their needs, be personalized, creating conditions for their creative activity and independence" (Galeeva et al, 2011; Qiuxia, 2008).

It would be a simple task just to resort to students personal experiences every time we develop speech skills. However, teachers of English all over the world express their concerns about their students' unwillingness to participate in conversations in the target language. Just to name a few: "As an ESL teacher in China, one thing that we all struggle with on more than one occasion is getting our students to speak. I can recall countless stories exchanged between me and my fellow expat teachers involving a well-planned lesson brought to its knees by silence. Often, the problem is not the structure of the lesson or the activities: it's the topic. If students are not familiar with the topic or are just not very interested in it, a well thought out lesson can feel like a waste" (Villalobos Antunez & Bello, 2014).

"Trainers and teachers who are involved in developing students' English speaking skills often get frustrated because some students do not attempt to speak at all. When the teacher wants the students to be active they prefer to be passive. This is a universal problem. The teacher faced with a serious problem of passivity among students looks for a solution to make them active participants but doesn't succeed always. Why does it happen?" As an answer to this question prompted by a teacher of English in India, Albert P'Rayan suggests make students feel comfortable discussing any topic. He goes on to say that some topics may not arouse their interest at all. Prof. P'Rayan believes that the controversial nature of the topics can make all students express their views, even students with low level of proficiency (Huijie et al, 2017).

According to the guidelines in Russian teachers' books for schoolchildren learning a foreign language, teachers should focus on personal problems: "Students not only get acquainted with English as a means of expressing their own thoughts, but use it to realize their communicative intentions. In this way, schoolchildren are aware of the possibilities of self-realization by means of the target language. For example, they learn to talk about their problems in communicating with their peers, teachers and parents (Unit 4)" (Shostrom, 1967).

It seems obvious that most willingly we talk about ourselves and those things that we personally care about, that is, things based on our knowledge, experience and feelings. This method of teaching is often called personalization, which has a connotation of self-disclosure, even confession. Therefore, teachers should be warned of being cautious when referring to personal experiences and the relationships of students with their friends and relatives (Afanasyeva et al, 2016) not to build a communication barrier.

To maintain objectivity, we must admit that teachers do not require that students be absolutely truthful when giving information about themselves and their preferences - the main thing is fluency and accuracy. This thesis is underlined in almost all recommendations for tests of various levels: the examiners are interested in your communication skills, not in the actual information. By the time students reach the final stage of their schooling, the Russian National Exam, they are well aware of the "hypocrisy" of foreign language communicative tasks: the teacher pretends to be interested, and the student is supposedly talking about his/her interests and preferences. But what about generating real speech? What are teachers to do to get their students interested and willing to express their own opinion? Sincerity is especially important when working with younger students who do not realize the duality of our pedagogical intentions: the teacher solves his/ her educational tasks, and the student participates in real communication. The teacher's insincerity can injure a child so severely that it will cease to participate in formal communications, which do not give emotional feedback. In this case, the teacher is perceived as an active manipulator (Huijie et al, 2017), who uses communication tasks to solve their own problems, which have nothing to do with real-life situations.

To find out the preferences of teachers and students with regard to conversational topics, we have conducted a survey. The analysis of the research results is to understand if teachers take their students real interests into account when suggesting topics for classroom discussions, or they rely on their own assumptions about what students like and dislike. Seventeen topics are included in our questionnaire (see the table below):

Table 1. Analyzing the results of the questionnaire

No	Topics	Teachers Students		Difference
1	Ethical Issues	4	27	23
2	Cultural Issues	28	74	46
3	3 Current Social and Political Issues		46	33
4	Personal Problems	55	9	46
5	Family		12	43
6	School Activities	41	29	12
7	Maintaining Friendship	36	35	1
8	Health	20	31	11
9	Food	43	37	6
10	Sport	46	31	15
11	Music	38	43	5
12	Hobby	40	47	7
13	Clothes	27	27	No
14	Jobs	18	58	40
15	Computers (Internet)	40	31	9
16	Money	23	31	8
17	Crime	9	23	14

The table does not represent a complete list of topics discussed in the English language classroom. The purpose of this research is to compare teachers and students' expectations concerning the most welcome topics for communication tasks. Thus, we have not included the popular topic "Travelling" as the topic "Cultural Issues" is supposed to cover the area of sightseeing and cross-cultural interactions. While answering to the questions, both the teachers and students were asked to add any information they found relevant to the problem under study.

Eighty three school teachers from different schools in Tatarstan (Russia) were asked to underline the topics believed to be interesting enough to get their children speaking in the target language. The same question was asked of eighty three schoolchildren from different grades of schools in Kazan. No names or other personal information was required, the students were requested to state their grade and gender to make our conclusions more accurate. If not willing to participate, both teachers and students were free to leave our questions unanswered.

Our initial assumption was that one of the main reasons why teachers fail to get their students speaking is the wrong topic chosen for classroom discussions as these topics are either suggested by the textbook and teachers fail to adapt them to their students' interests, or teachers themselves have inaccurate information about the preferences of those they teach. After first tentative oral investigations into the problem, we conducted a written survey. The only question asked was: "Which talking topic gets your students speaking?" Initially, the questionnaire contained one more question – "Which talking topic fails to stimulate speaking?", but it was left unanswered by the majority of the teachers. Consequently, only one question remained.

The analysis has yielded results that have exceeded our concerns: very few topics were found equally interesting for conversations in the classrooms both by teachers and students: "Clothes" (27 – 27), "Maintaining Friendship" (36 – 35), "Food" (43 - 37) and "Music" (38 - 43). However, it is only one third, or about a half of the participants, who chose these topics as motivating ones. Those, who favoured the topic "Cultural Issues" constitute about 90% of the students and 32% of the teachers (28 -74), which means teachers definitely underestimate their students' interest in art and creative development.

Instead, teachers are all for discussing personal issues, the topic which is among the ones least favoured by students (55 - 9). This dislike can be easily explained by students' unwillingness to make public certain private problems, which they would like to conceal. In his blog, Scott Thornbury refers to the issue of personalization as "a pretext for a little bit of creative practice", which, however, may inadvertently uncover childhood tragedies. Neither have students chosen "family relationships" as the topic they would like to discuss, for it might create "potentially awkward moments in the classroom". Accordingly, Scott Thornbury asks the following questions: "But, irrespective of whether we think it's good for them, do learners actually *like* it? Do they like being quizzed about what they or their relatives were doing 10 days/months/years ago? Do they expect it? Do they see the value of it?" (Afanasyeva et al, 2016).

To answer these questions, we will explore other topics suggested for classroom discussions. As we see, there exists a large divergence of opinions on the topic "Ethical Issues" and "Current Social and Political Issues". Judging by the table, teachers fail to see that their students are mature enough to speak their minds when it comes to ethical (4-27), political or social problems (13-46). The same gap exists between teachers and students' preferences for the topic "Jobs" (18-58). We would like to mention here that among students who have chosen "Jobs" as the topic they enjoy discussing are not only senior students but also children from Grades 4 and 6 (aged 11-13).

Teachers believe students are keen on discussing music (48), sport (46), food (43) and hobbies (40). The table shows that "hobby" is also among the favourite topics with students. It is

not surprising as everybody would like to speak about things interesting to him or her. The problem is, whether others would display the same interest and join in the conversation if this hobby is beyond their preferences. This topic, simple as it seems, is a great challenge for teachers in terms of communicative-oriented activities.

To find out which of the topics are most preferable both for teachers and students, we have used Student's t-distribution test.

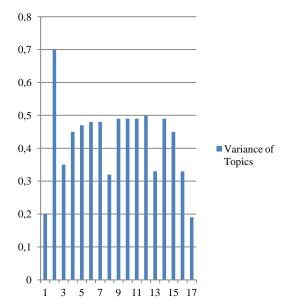


Fig 1. Variance of Topics

According to the data in the graph, this comparison has yielded the following results: "Cultural Issues" is far more popular than any other topic in Table 1. Least motivating are "Ethical Issues" and "Crime", although students are more willing to discuss them than teachers presume. "Family Relationships", "School Activities", "Maintaining Friendship", "Food", "Sport", "Music", "Hobby" and "Jobs" are the topics, which occupy middle position among the preferences. It means teachers have to do more preliminary research into their students' actual interests before formulating a communicative task for classroom discussions.

# 4 Summary

The development of speech skills is a challenging task for foreign language teachers as their students often feel reluctant to join in the conversation about the topic suggested for classroom discussions. Besides lack of linguistic means for verbalizing ideas in the target language, the reason is the topic itself. As our survey shows, teachers believe that "Personal Problems" is one of the most motivating issues, which can get their students speaking. However, students regard this topic as one of the least welcome for discussions. This fact (among other differences between teachers and students' preferences shown in Table 1) is the evidence that teachers rely on their own assumptions about what arouses their students' interest in the subject of conversation and makes them willingly participate in classroom discussions. Students' unwillingness to make their personal problems public is not taken into consideration, or is dismissed as far-fetched for no sincere confessions are required, just the use of prefabricated phrases appropriate in this conversational situation. Teachers underestimate their students' interest in cultural, political and social issues.

## **5 Conclusions**

Thus, the personalization of developing productive skills in a foreign language classroom implies greater targeting in the organization of educational activity: from the most general guidelines for the differentiation of tasks in terms of the level of

complexity of language material (accounting for the level of students' communicative competence) to taking into account ethnocultural interaction in the process of communication and psychological characteristics of the individual (identification of the type of personality), as well as students' social experience and their relationships in the family and the immediate environment.

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# ROLE OF THE HIGHER SCHOOL IN FORMATION OF THE FOURTH INDUSTRIAL REVOLUTION IN THE RUSSIAN FEDERATION

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Abstract: Authors conduct modeling of long-term economic cycles of national economic. Implemented estimations supported by methods of economic-mathematic modeling, allowed to determine perspectives and time horizons for transition of Russian economic into fairway of fourth industrial revolution, to conduct factor analysis on this basis and detect role of the higher school in system of transformations generating in future. Results of conducted study allowed to determine major problems in system of higher education of Russia from point of view of rates and quality of Russian economic development limitation in accordance with new forming global principles and mechanisms of economic growth. Method of study conduction is based on application of tools of statistic analysis of wide range of data that characterize institutional and opportunistic potential of national economic in period of 1965-2017, as well as tools of descriptive analysis that allowed to detect major drawbacks in higher education system, limiting perspectives of formation of economic development rates in accordance with detected sequential cycle of long-term development of RF economic. Study novelty is comprised in developed conceptual approach to determination of key directions of higher school development with taking into account of global tendencies of conversion of re-production processes and predictable phases of economic transformations in national economic system.

Key words: fourth industrial revolution, higher school, long-term economic cycle, role of Russian HEIs, scientific-technological development, system problems in higher education development.

## 1 Introduction

At present time, issues of perspectives and abilities of transition of Russian economic system into so-called fairway of fourth industrial revolution that received conventional name Russia 4.0 are gaining momentum to more and more degree. This type of economic development is based on absolutely new principles of humanity development; in their basis occurs practically complete absolutization of human, biological and digital technologies cooperation process. It is enough to note that, according to estimations of a range of experts and expert agencies, by the end of year 2035 it is expected that number of robotized and automatized work places will reach approximately 95% and approximately half of work places existing today will be unclaimed (Villalobos Antúnez. 2016).

It should be noted that Russian economic has a significant potential not only in part of synchronization relatively to global trends, process of entering into fourth industrial revolution, actively absorbing the global economic system, but also signs of rapid transition into a new type of economic pattern. At this, in spite of active role of state in this issue, expressed, particularly, in development and implementation of government-sanctioned program "National technological initiative" (Miriago, 2018), the most important factor that substantiates or, vise versa, refutes theses on possibilities of Russian economic transition into new reality, is the degree of readiness of economic entities to such

transformations and changes (Wu, 2014; Carayannis & Grigoroudis, 2016). Undoubtedly, this measure of readiness, in natural evolutionary manner, along with measures of state impact, will reach its summit and Russian economic will be integrated into global trends that anticipate the change of new technological pattern. The question is when this will happen, what key factors will promote this and what quality level of such transformation will be reached? The answer for these questions is very uncommon and requires its complex and system solution and analysis.

### 2 Methodology

One of possible tools that allows to approach to solution of question raised, may be the approach based on estimation and construction of long-tern economic cycles with regard to national economic system. After determination of current phase of long-term cycle economic development, its future transformations and possible perspectives of long-term development may be predicted. Due to this, questions that disclose perspectives of Russian economic transition into fairway of industrial revolution 4.0, may be solved on the basis of modeling tools for long-wave fluctuations of national economic system and identification of factors generating current and future phase shifts in the system of so-called big cycles.

Previously, in frames of publication of series of author's works dedicated to theme of economic cycles modeling on the basis of construction and estimation of economic agents' expectations (Safiullin et al, 2016; Yelshin, 2017), we presented, in sufficient detail, a methodological apparatus that discloses peculiarities of identification of cyclic fluctuations of economic of short, middle- and long-term nature, based on construction and estimation of economic agents' expectations.

Methods applied in this study are based on use of multi-factor approach, e.g. detection of set of factors impacting economic agents' expectations and, therefore, economic activity of system in general. At such approach, in the beginning, analyzed factors are united into sub-indexes representing a sum of multiple average weighted estimations by analyzed components. On the basis of this system of indicators characterizing certain types of activity and behavioral models and index method, the integral (composite) or aggregate index is calculated - "Index of rapid development cycles". At this, by cycles of rapid development in this work is understood periodical stable fluctuations of economic agents' expectations with specific types of laws, complying with change of short-term, middle-term and long-term opportunistic and institutional factors and forming conditions of economic dynamics phase shifts on the basis of transforming current and mental estimations related to upcoming transformations in the future: this, on the basis of known postulates of expectations theory, allows to increase regional forecasting quality, predict turning points of phase shifts of economic cycle dependently non programmable (identifiable) parameters of economic agents' expectations in timely manner.

Structure-logical chart of rapid development cycles modeling in generalized view is shown in Fig 1 (Safiullin et al, 2016).

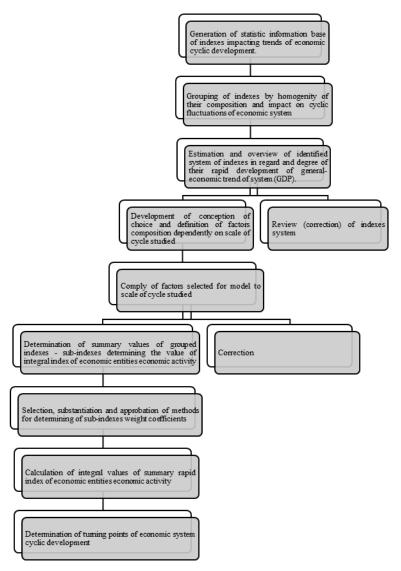


Fig 1. Structure-logical chart of rapid development cycles modeling

Search for solutions directed at identification of factors system in regard and degree of their rapid development relatively to general economic trend of system (IPI) was implemented by application of cross-correlation analysis tools.

# 3 Results and Discussion

Implementation of methodological procedures presented above allows to move to concluding stage - construction of so-called summary index of rapid development (RDI). Value of this index that estimates expectations of economic agents consists of calculated rows of indicators or sub-indexes.

In formula from, calculation of RDI looks the following way:

$$I_{i} = W_{1} \cdot I_{1i} + W_{2} \cdot I_{2i} + W_{3} \cdot I_{3i} + W_{4} \cdot I_{4i} + W_{5} \cdot I_{5i} + W_{6} \cdot I_{6i} + W_{7} \cdot I_{7i},$$

where  $I_i$  - value of rapid development index (RDI);

i-period value (in our case it is one year);

 $I_{li}$  index of urbanistic development in year i;

 $I_{2i}$  index of human capital assets in year i;

 $I_{3i}$  index of production and resource development in year i;

 $I_{4i}$  index of institutional and cultural development in year i;

 $I_{5i}$  index of economic activity development in year i;

 $I_{6i}$  index of research and development potential in year i;

 $I_{7i}$  – index of capital change;

 $W_1,\ W_2,\ W_3,\ W_4,\ W_5,\ W_6,\ W_7$  – weight coefficients of respective indexes.

By results of conducted estimations and calculations, according to stated methodological approaches, results, determining nature and trends of long-term cyclic development of national economic were obtained (Fig 2). Values of indexes were determined as weighted sum of standardized values of analyzed rows, generalized by group sign, constructed on the bases of factors detected by results of cross-correlation analysis.

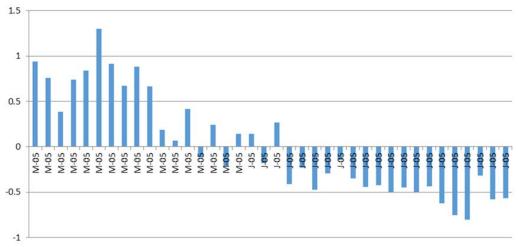


Fig 2. Long-term cycles of economic rapid development in period of 1951-1999.

According to obtained data on development trajectory of summary index of rapid development, possible crisis of economic depressed condition, from view point of long waves theory is dated by period of 1997-2000 (in spite of default of 1998 that happened in Russian economic). Therefore, we may suggest (by projecting data on rapid development on actual time trend) that phase of new long-term cycle in Russian economic, characterized by revival and development of new technologies, corresponding to sixth technological pattern, entered its "rights" at border of the end of 2000s and the beginning of 2010s. With taking into account of the fact that duration of this period of technological patterns change (embryonic phase in terminology of Glazyev is approximately 10-15 yours, phase of growth in RF economic will not occur until 2020-2025 (Glazyev, 1993).

## 4 Summary

Implemented estimations largely confirm that national economic of RF is developing in fairway of global tendencies. On the basis of conclusion about the change on new technological pattern predicted in period of 2020-2025, as well as on the basis of average valued of cycle phase duration (8-10 years) is expected that by 2030-2035, RF economic will enter the phase of active long-term growth. Therefore, we have all reasons to suggest that fourth industrial revolution will totally adsorb Russian economic in this time period; this is significantly synchronized with conclusion about the quantity of robotized and automatized work places in the world that would reach 95% to the end of 2035; approximately half of working places existing in the world today will be unclaimed.

However, in spite of obtained estimations and forecasts, the problem of quality of new long-term cycle of economic development of national economic stays an important unsolved question. In this case, quantity is understood as the level of compliance of parameters and structure of re-production processes to key factors generating new type of economic pattern. To such factors, as was presented earlier, may be related level of integration into Russian economic system of such tools as synchronization of artificial and human intellect, development Internet-things, nanoelectronics, nanotechnologies, anomaterials, nanotools, solar-powered, colloid nuclear power plants, medical high-precision technologies, emerging of unmanned transport, quantum computers etc (Freitas et al, 2013; Kruss et al, 2015).

In more concentrated form, listed tools of development complying with fourth industrial revolution are concentrated around the core pillar of future type of economic growth - digital economic, which development is largely supported by higher education system.

At this, we have to regret that at contemporary stage of development, in spite of obvious breakthroughs within last

several years, high school does not completely comply to expected challenges of future transformations in system of global re-production processes based on digitalization of economic, stipulating new type of arrangement and development of labor market, new trends in formation of labor productivity, new creative abilities of society (Gunasekara Chrys, 2004). Meanwhile, new type of economic growth requires new forms of organization of high school system, directed at development of such types of activity and types of labor organization that would promote and organically comply to new needs of labor market in 15-20 years

In spite of new requests and trends, at present moment a major part of Russia HEIs use the model of processes organization based on concentration of processes in educational environment ("teaching universities"), at this paying an insignificant of inadequate attention to issues of research and development sphere development and commercialization. In result of this, today higher school of RF plays insufficient role in organization of innovative processes in system of regional economic systems, and, accordingly, in national economic. Largely, current state of affairs is stipulated by insufficient attention to higher education branch in 90s. However, in spite of significant intensification of processes of higher school system development activation starting from 200s, problems, acquired in "perestroyka" epoch, are still there. The most important among them are comprised in insufficient financing of research and development elaborations (today the amount of financial resources of RF allowed for conduction of scientific researches and developments is approximately 1% of GDP, which is practically two-fold lower than similar average index in the world). For instance, amounts of financial resources allowed for researches and developments in RF for present moment are 10 folds lower than similar allowances in OECD countries. Nearly half of Russia HEIs is characterized by extremely low indexes of effectiveness in RTD sphere. For example, in 40% of Russia HEIs, amount of RTD calculated per one educational research employee is lass than 100 thousand RUR (a little more than 1 thousand EUR) (for comparison, the average value of this index in European countries is approximately 50 thousand EUR).

A significant drawback limiting the development of research and development environment in Russia regions is also comprised in absence of effective system of high category personnel training organization for active implementation of scientific breakthroughs and creation of innovations on their basis.

The most important problem in process of RF higher education development is also a low level of demand of engineering training programs among applicants. In other words, acquiring of special skills by technical directions of training are not popular among high-school students. For instance, according to published data of Ministry of Education and Science of RF, approximately quarter of all applicants for engineering

specialties have average USE score of approximately 55 points, which, in fact, corresponds to mark "satisfactory" in school disciplines of natural profile.

The key problem of Russian HEIs is also their "disconnect" from real sector of economic, contemporary achievements of science and technique. Due to this, implementation of target measures directed at harmonization of these phenomena and processes in result of construction of net relations with external and internal environment of universities is required.

Stating the foregoing, it may be noted that existing system of innovation and technological development of RF is significantly under-financed. Result of all considered phenomena characterizing major parameters of research and development sphere of Russian economic development is a low level of effectiveness of functioning of Russian HEIs, the core generators of researches and scientific developments. According to data of Center for Strategic Research and Higher School of Economics Report, "...today, Russia participates in less than 5% of those research areas that are developing in global market of researches and innovations most actively. There is a sharp lag in quantity of filed patents (40 thousand in Russia vs. 1300 thousand in China in 2017".

It seems that inertial development of higher education system in Russia in existing conditions would not allow the transition of RF economic into trajectory of accelerated technological development. Along with this, predicted trajectory of sequential long-term economic cycle, which stage of revival is expected in RF in 2016-2020 (Figure 2) would anyway promote transformation of re-production processes in national economic. However, quality of such changes may largely not comply with progressive technologies of development of than moment, based, as was previously noted, on tools of total digitalization of operational processes and creation of new forms of labor organization.

## **5 Conclusions**

Higher education system is a connecting link that is able and should provide quality transition of Russian economic in fairway off fourth industrial revolution and forming stable basics of economic growth. However, for occurrence of this process, a significant reevaluation of values and development formats of higher school and all educational system in general. And first of all, institutionalization of new working processes and results, new principles of higher school organization, oriented at growth of existing and new progressive scientific school, activation of commercial activity in scientific environment, development of innovation culture is required.

Elimination of stated problems in higher school sphere would allow to crease the basis promoting more progressive and accelerated development of national economic in period of sequential long-term economic cycle; now national economic system is at its beginning.

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## RUSSIAN AND CHINESE AXIOLOGICAL DISCOURSES

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Abstract: Russian and Chinese axiological discourses, speech and behavioral tactics of approval, compliment, their acceptance or non-acceptance are examined in this article. Study of etiquette tactics in comparative aspect is necessary due to expansion of cultural, economical and political contacts between Russia and China. The aim of this article is to determine linguistic and cultural peculiarities of axiological discourses use in Russia and China. It was detected that there are secular and Christian cultures in Russia; the latter exists mostly among Russian population. Secular culture is close to cultures of Western Europe and America; Russians often use estimative speech and behavioral tactics of approval and complement and tactics of their acceptance. Christian culture has a negative attitude to compliment; when receiving one, a man uses the tactics of its sincere disapproval. Within the national culture of Chine, along with others, exist Confucian culture of "Middle Way" that also suggests negative reaction for compliment and use of tactics of its disapproval, and contemporary secular tendencies that adopt secular ethics of world powers with exaggerated estimation represented here widely. Similarity of axiological discourses between particular cultures of Russia and China confirms the existence of universal ethical standards, common to humanity.

Key words: Russian language, Chinese language, speech and behavioral tactics, particular cultures, axiological discourse, approval, compliment.

### 1 Introduction

Expansion of inter-cultural contacts attracts attention of linguists to communicative standards of people from different national societies (Davies, 1987; Blum-Kulka, 1992; Bolgarova et al, 2014; Fatkhutdinova, 2015; Nurullina & Yusupova, 2016; Khusnullina et al, 2017).

In adequate understanding of people, a major role is played by etiquette speech and behavioral tactics; their concept was developed by Vereschagin and Kostomarov (Vereschagin & Kostomarov, 2005). According to these scientists, speech and behavioral tactics is a speaker's behavior line, homogeneous by illocution and manifestation, directed at achievement of strategic perlocutionary effect (Vereschagin & Kostomarov, 2005). E.M. Vereschagin and V.G. Kostomarov consider speech and behavioral tactics as a sapienthem unit, representing aprioristic and non-verbal inherent consciousness (knowledge and ethical attitude) (Vereschagin & Kostomarov, 2005; Ferrer et al, 2015). Following these scientists, let's consider that on the finite level of human mentality, speech and behavioral tactics is an integral sense-intent, and on surface level it is used in verbal stable manifestations.

The aim of this article is to determine linguistic and cultural peculiarities of axiological discourse use in Russia and China.

# 2 Methodology

Study methods are defined by set aim and have integrated nature. Description method with its practices of observation, generalization and classification of compared material; structural semantical method; method of contextual interpretation; unification method determining individuality of world picture in one or another language; comparative method; structural-functional method; method of cognitive analysis as study of system of signs that play a role in representation and transformation of information; contrastive approach were used in this work

## 3 Results and discussion

Estimation that also includes compliment serves as one of the most important ways of politeness approach strategy representation (Larina, 2009). Emotional estimation remarks help to manifest comfortable friendly personal interaction, bring out positive emotions of interlocutor, serve as method of

communicative collaboration establishment, which success depends on the knowledge of certain rules of conversation that reflect the mindset of communicants. In order to detect peculiarity of Russian and Chinese axiological discourses, it is useful to compare Russian and Chinese mentality with American, Western-European and Japan cultures. English-American communication rules are connected with rules of social psychology: it is a positive thinking, self-enhancement, autonomy, fell good that lead to free expression of one's feelings, frequent compliments and agreement with them. In Japan, same as in numerous non-European cultures, standards of conversation are self-disgust and self-humiliation, according to which a person should speak depreciatingly about itself and its relatives, in order to debase itself in front of communication partner thus demonstrating its respect to him. However, Japanese conversation scenarios are based on discrepancy between what person tells and what it thinks and feels. In course of debasing, Japans think about themselves very good (Wierzbicka, 1999; Tahavieva & Nigmatullina, 2017). Wierzbicka cites indicative story from Kataoka, "The Terrible Son", showing different attitude to praise of Americans and Japans. American family extolled Tomio, Japanese student, to his father, who answered by calling his son ill-bred, egoistic, stupid, terrible and lamented that his son is fit for nothing, while nonetheless, deep in his mind, he knew that Tomio is an outstanding young man and was very proud of him (Wierzbicka, 1999).

Emotionality, irrationality, non-agentivity, love to morale (Wierzbicka, 2011), strive to internal spiritual unity, commonality that is not a set of elements but certain entirety, organically internal unity of people on the basis of freely deliberate qualitative relation ("love") by common spirit (Kolesov, 1999). Spiritual cohesion of certain layers of population led to allocation of spiritual (Christian) and secular (atheistic) cultures within Russian society. Secular culture, following Western European and American ethics, allows wide use of speech behavioral tactics of approval and compliment. Tactics of approval includes, either potentially or actually, situation of approval R (I think that it is good that thus-and-so and thus-and-so: frequently, R is people's deeds, competence in work), as well as it can comprise approval substantiation (...because it will lead to this and that). Manifestations of approval tactics include performative I approve, emotional estimation words good, well, amazing, wonderful, great, bravo, good boy/girl, smart boy/girl: He made her repeat this. She repeated obediently. - Great! Smart girl! (A. Tolstoy).

Compliment is an over-sized, exaggerated estimation. The most frequent are: speech and behavioral tactics of compliment about person's appearance (manifestations: You are very beautiful today; You are so bright, unusual; I cannot get an eyeful of you etc.) and speech and behavioral tactics of compliment about the age (manifestations: You are getting younger and younger; You have not changed a bit; You look younger etc.). There is an opinion that English use compliments more frequently than Russians, who are distinguished by being more reserved (Larina, 2009,). Scientists explain Russians' repugnance to exaggerations by the fact that for people who are used to live in close collective, truth and sincerity are communicative values (Arutyunova, 1954; Wierzbicka, 2002). It may be admitted, provided that in Russia, reserve in use of axiological discourses is more related to Christian culture, since the compliment underlines the importance of external qualities and not of internal ones, especially valued in environment of faithful: kindness, honesty, decency, moral purity. Speech and behavioral tactics of answering the compliment are also different. Tactics of compliment acceptance is characteristic for secular society (manifestations: from now on I will always look like this; I am trying to keep fit; you always tell me nice things; I will not leave the Komsomol and will be young for ever etc.), tactics of its non-acceptance is characteristic for religious (manifestations: do not praise me anymore; you embarrass me; you flatter me etc.).

Chinese national specifics of mindset is defined by the idea of zhong yong zhi dao, "Middle Way" or "Golden Mean". conception is instituted by the second book of Ssu Shu "Zhong Yong" (Confucian, 2004). Zhong yong is one of Confucians' provisions, according to which one should be unprejudiced and assume moderate compromise position in relation to people and things. Zhu Sih understands by middle the name of something that is not a deviation to any side, i.e. something that does put neither too much not too little salt. The major source of teaching of "Middle Way" is an ancient Chinese philosophy. According to this teaching, there is a state of the middle (when enjoyment, anger, sadness and joy are not expressed) and state of harmony (when these feelings are expressed appropriately) in people's Middle is the most important basis of people's actions in the Celestial Empire; harmony is the way that should be followed in the Celestial Empire. The principle of mutuality that states that one should not do to others anything that one does not with to be done to him should be adhered to. When someone holds superior position, he should not have a scornful attitude to inferior ones, and when someone holds an inferior position, he should not court superior ones. At superior position one should not be presumptuous, and at inferior position one should not demonstrate defiance. The way of superior man is invisible at the beginning, then becomes noticeable; the way of inferior man has only the flash, then decays. When there is an order in the state, words of superior man accord prosperity, where there is not, the silence of superior man helps him to preserve himself. This is how Tan Aoshuan formulates major provisions on ancient Chinese philosophy that lie in the basis of "Middle Way" teaching: A man should keep his temper low, be balanced, practice self-improvement; he should not impose on others anything he does not like himself, offend inferior ones, complain about his fate, offend people, get involved in escapades, flaunt his merits; when there is an order in the state, a man should step forward with his ideas, and in troublesome times he should hold his tongue (Tan Aoshuan, 2004,). This scientist finds similarity between Christian and ancient Chinese ethics. While comparing text from Gospel of Matthew (5:39) "...who heats your right cheek, turn the other cheek to him" and text from "Zhong Yong" "Do not do to others anything you wish not to be done to you" and conclusions of culturally stipulated scenarios formulated by her "It is bad to do something bad to other people" "<...>I will not do what I wanted to. This is good", she makes a conclusion about their contextual closeness (Tan, 2004,). Ancient Chinese ethics is expressed in communication. As Tan Aoshuan (Tan, 2004,) states, in Chinese culture based on teaching of "Middle Way", a negative reaction at direct praise is a custom. She adduces the scenario behind this:

"It is not good to tell nothing,

when other people speak good about you;

it is good to tell something like:

"This is not true, I am not that good as you think".

Therefore, the Chinese, bred on ancient Chinese philosophy, are trying to tell no compliments and upon receiving compliment they demonstrate its non-acceptance. At this, speech and behavioral tactics of approval are widely used in Chinese language and culture. They relate to people's behavior, good cooking skills etc. Let us show some manifestations of one's deeds: you did a right thing — You are done very well; do so further — you always do this; your way is right — You find the right way; Well done! — he praised you are awesome! he's gone.

However, in China of recent decades, cultural traditions co-exist with contemporary tendencies. External and internal image of the Chinese changes, they are more and more oriented at American and Western-European ethics. Chinese youth starts to accept compliments willingly. Speech and behavioral tactics of compliment about person's appearance has manifestations: there is no girl more beautiful than you; your appearance would eclipse everyone etc. They answer for praising by smile and

express gratefulness, using speech and behavioral tactics of compliment acceptance; manifestations: thank you; I am very pleased; I am glad that you like me; I am glad that you have such an opinion about me etc.

### 4 Summary

There are secular and Christian cultures in Russia; the latter exists mostly among Russian population. Secular culture is close to cultures of Western Europe and America; Russians often use estimative speech and behavioral tactics of approval and complement and tactic of their acceptance. Christian culture has a negative attitude to compliment; when receiving one, a man uses the tactics of its sincere disapproval. Within the national culture of China, along with others, exist Confucian culture of "Middle Way" that also suggests negative reaction for speech and behavioral tactics of compliment and use of tactics of its disapproval, and contemporary tendencies, close to secular ethics of world powers with exaggerated estimation and its acceptance represented here widely.

### **5 Conclusion**

Axiological discourse includes speech and behavioral tactics of approval and compliment, as well as speech and behavioral tactics of reaction for estimation vocabulary. Particular cultures within one national community effect peculiarities of axiological discourse. Similarity of axiological discourses between particular cultures of Russia and China confirms the existence of universal ethical standards, common to humanity.

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## SOME ASPECTS OF MODELING THE NON-OBSERVED ECONOMY

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Abstract :One of the problems on obtaining adequate parameters for a non-observed economy is the lack of scientifically based models of its evaluation. The generality of approach to this phenomenon is accompanied by a large formalization of models, what does not allow the true scale of the non-observed economy, its structure and development tendencies to reveal. The paper attempts to build a business model of a non-observed economy on the basis of modeling the transfer of non-cash funds to unaccounted-for cash money, as well as discriminating "logit" models. The mechanism for concealment of monetary resources using cash out transactions is a well-established business process that allows a taxpayer to use it as the main tool for conducting the most sophisticated transactions of a shadow nature. The authors discuss the issues of building the non-observed economy models at the micro level. It is pointed out that to date no adequate models of the non-observed economy have been developed. It is stated that the commonability of approaches to this issue is accompanied by a large formalization of models, what does not allow the true scale of the non-observed economy, its structure and laws of development to reveal. It is the authors' opinion that the use of the proposed non-observed economy models will provide reliable information on the latent processes taking place at enterprises in the conduct of their financial and economic activities with the purpose of taking adequate measures for the timely neutralization of phenomena that are not monitored by official statistics.

Key words: non-observed economy, latent processes, shadow cash flows, hidden wages.

## 1 Introduction

The key element of the non-observed economy are dummy short-lived companies, which close the inconsistencies of commodity and financial flows associated with the use of unaccounted cash funds by legally operating enterprises. One of the reasons for the spread of unaccounted cash turnover is the high level of taxation of wages in comparison with the low level of social guarantees. This contributes to the development of the practice connected with distribution of "backdoor" salary or wage payments which tend to increase in the conditions of inflation and growth of consumer prices. In particular, in the Republic of Tatarstan they entered the daily practice of payments in the wage system and account for more than 50% of the official wage (Pushkarev, 2017; Shekarbaghani, 2017).

The practice of "shadow" payments is especially common in the sector of small and medium-sized enterprises. At large enterprises, the distribution of shadow revenues associated with tax evasion is difficult, since a large number of potential beneficiaries of shadow wages increase the risk of spreading undesirable information. Therefore, the payment of shadow bonuses applies only to trusted representatives of the administration. However, imperfection of the current legislation and weak control over its use stimulate the desire of managers and major shareholders of large enterprises to regularly violate it, evade payment of tax obligations and expand the circle of potential recipients of "envelope" wages.

# 2 Methodology

To analyze a non-observed economy at the meso- and micro level, the authors have used materials of the Federal State Statistics Service, the Bank of Russia, the IMF, Deutsche Bank Research, the British Petroleum, the Bureau of Economic Analisys, the World Trade Organization, the Forest and Agriculture Organization (FAO) of the United Nation, the Center for Financial and Banking Research Institute of Economics of the Russian Academy of Sciences, as well as the results of other scientific research. An economic-mathematical approach is adopted that assumes the use of econometric and statistical methods of analysis in the capacity of the main approach to building the non-observable economy models: the method of relative and average values; variational, correlation-regression and dispersion methods; method of constructing dynamic series; index method; method of expert evaluation.

### 3 Results And Discussion

The non-observed economy problem is in spotlight in recent years. The results of the study show that the assessment of the non-observed economy is usually limited to its parameters at the macro level (Fesina, 2015; Villalobos Antunez, 2016).

In the fourth quarter of 2017, the authors conducted profound informal interviews and expert surveys of specialists and managers of small enterprises in the Republic of Tatarstan to study schemes of tax evasion which are in use there. In 2017, 12 enterprises used the cash-withdrawal scheme out of 20 small enterprises of the Republic of Tatarstan, and four of them resorted to it sometimes (Smirnov, 2016).

The main content of the cash withdrawal model is that a taxpayer enters into a contract with a dummy short-lived company to perform fictitious works (services). In accordance with the concluded agreement, the taxpayer makes a non-cash payment to the short-lived company that cashes them charging a certain percentage of the commission for this service. As a result of the transaction, the taxpayer receives money to its bank account, minus the commission of a dummy short-lived company in the form of unaccounted cash (Smirnov, 2016).

The study of the process of concealment and cashing of funds (Vorontsova et al, 2015) made it possible to distinguish the functions and distribution of responsibilities of the parties involved in this process (Table.1).

Table 1. The responsibility matrix of a business process for transferring non-cash funds to unaccounted-for cash

No.	Function	Base taxpayer enterprise	Front short- lived company-	Manager
1.	Formal transfer by the enterprise - taxpayer of monetary funds in a non-cash form to the front-line short-lived company	R	P	I
2.	Hand-over to the enterprise of a formal report on the work performed by a dummy short-lived company	P	R	I
3.	Illegal transfer of unaccounted cash to the enterprise - taxpayer by a dummy short-lived company	P	I	R

Note: R - responsible; P - participant; I - informant.

The authors have developed the non-observed economy model for a complex object (Vorontsova et al, 2016) under meso- and macroeconomic constraints, which allowed us to describe the movement of shadow money flows at the micro level (Vorontsova et al, 2016; Fesina & Kozlva, 2018).

A dynamic model of the complex object involves the use of three groups of quantitative indicators:

- Indicators reflecting general aspects of financial and economic activities and obtained from official accounts (revenue from sales of products without VAT and excises, the average monthly wage of one employee, labor productivity, etc.).
- Indicators reflecting specific aspects of financial and business activities, obtained from the reporting of control bodies, as well as audit reports (the number of cases of submission to the enterprise of a requirement for recovery of significant amount of taxes, tax liabilities, etc.).
- 3. Indicators reflecting aspects of atypical financial and economic activities, obtained as a result of in-depth informal interviews with representatives of law enforcement and control bodies (the proportion of work which is off-the-books in the total volume of work performed, the number of cases with reporting data distortion, the conclusion of fictitious contracts, manipulation of prices, costs, etc.).

At the first stage, the model provides for the division of the entire set of economic entities into classes, each of which consists of several enterprises with similar conditions for conducting financial and economic activities and the volume of production. To perform a comparative analysis of the enterprise performances in each class, a single reference enterprise is assigned, the data of which are specified on the basis of dynamic standards (Fesina, 2007). It is assumed that all parameters of the reference enterprises are distributed according to the normal distribution law. The indicators of financial and economic activity of enterprises in each class are compared with those of reference enterprises in accordance with the calculation procedures established by the model. As a result, a probabilistic distribution of enterprises with the most efficient and least efficient mode of functioning of its complex economic system is obtained.

At the second stage of modeling, the cut-off coefficients and cascade filters in the context of indicators from the second group are established for the enterprises with the most efficient and least efficient mode of operation. The cutoff coefficients are used to obtain the probabilistic distribution of enterprises from the point of view of nonspecific aspects of their financial and economic activities. This makes it possible to distinguish valent and suspicious enterprises among the valent enterprises, valent and invalent enterprises among suspicious enterprises, and suspicious and invalent enterprises among invalent enterprises. For newly obtained probabilistic distributions of enterprises, a block of cascade filters is introduced from the system of indicators characterizing latent phenomena in tax accounting and book-keeping.

At the third stage of the simulation, enterprises are subsequently filtered on the basis of indicators that reflect atypical aspects of their financial and economic activities. The cutoff coefficients for valent enterprises are zero, since they are not characterized by non-observed financial and economic activity; they are greater than zero for invalent enterprises, and for suspicious enterprises they are set in the form of a combination of indicators adopted for suspicious and invalent enterprises. This allowed us to obtain a three-dimensional probability distribution of valent, suspicious and invalent enterprises. An expert evaluation of hidden return derived from the officially recorded turnover was used as a cascade filter for valent and suspicious enterprises.

At the fourth stage of simulation, the adequacy of the distribution of valent, suspicious and invalid enterprises was checked using heuristic rules that reflect the criterial risk conditions for the valent enterprise (Bokun, 2016):

50 small business respondents participated in the restricted expert survey the result of which were grouped data used to obtain output quantitative characteristics of the business process for the formation of an unaccounted-for cash turnover..

The expert survey provided information on the relationship between the two groups of indicators:

- Gross income of a dummy short-lived company and the level of its commission;
- 2. The official release of products (works, services) and the level of its concealment.

In the process of preparing the questionnaires, the data on revealing the criminal cases related to the identification and cancellation of front-line dummy companies were used as the benchmarks for the relationship of the indicators of the first group.

Expert estimates obtained from the two groups of indicators X and Y are schematically presented in the form of a correlation matrix in Table 2.

Table 2. Correlation Matrix of Correspondence between X and Y

YX	$\mathbf{Y}_1$	$Y_2$	$Y_3$		Yn	$\sum n_{xi}$
$X_1$	n <sub>11</sub>	n <sub>12</sub>	n <sub>13</sub>		$n_{1n}$	$\sum n_{x1}$
$X_2$	n <sub>21</sub>	n <sub>22</sub>	n <sub>23</sub>	•••	$n_{2n}$	$\sum n_{x2}$
$X_3$	n <sub>31</sub>	n <sub>32</sub>	n <sub>33</sub>		$n_{3n}$	$\sum n_{x3}$
	•••	•••	•••	•••		
X <sub>m</sub>	n <sub>ml</sub>	n <sub>m2</sub>	n <sub>m3</sub>	•••	n <sub>mn</sub>	∑n xm
∑n y	$\sum_{v_1}$ n	$\sum_{\mathbf{v}^2}$ n	$\sum_{y3}$ n	•••	∑n	∑n xy

where n  $_{ij}$  is the repeatability of the pairwise values X  $_{i}$  , Y  $_{i}$ .

Table 1 shows that each value of characteristic X corresponds to the distribution of Y and vice versa. The correlation matrix made it possible to determine the correspondence between the values of two expert values: X  $_1,\ Y$   $_1$  and X  $_2$  , Y  $_2$  in the form of a ranked discrete distribution series. For expert values X  $_1,\ Y$   $_1,\ it$  is presented in Table 3, and for expert values X  $_2$  , Y  $_2$  - in Table 4.

Table 3. Distribution of expert values X  $_{1}$  and Y  $_{1}$ 

X ij	X 1	X 2	X 3	X 4	X 5	X 6	X 7	X 8
X yi	2.0	5.0	4.0	6.2	7.0	8.3	5.0	8.1 and more

Note:

X  $_{\rm ij}$   $^{\rm 1}$  - gross income of a dummy short-lived company, cond.

X vi - commission of the front short-lived company,%.

Table 4. Distribution of expert values X 2 and Y 2

X ij l	7.9 1	20. 3	22. 8	35 .1	42. 6	94. 7	102. 4	112. 3
X yi I	Y 1	Y 2	Y 3	Y 4	Y 5	Y 6	Y 7	Y 8

Note:

 $X_{ij}^{-1}$  - official release of products (works, services), cond. m.u.;

X  $_{\rm yi}^{-1}$  - the level of concealment of officially produced products (works, services), %.

Expert assessments X and Y have been checked for compliance with the distribution laws. For each pair of them, a form of relationships is chosen. It was revealed that expert assessments X  $_{\rm 1}$  and Y  $_{\rm 2}$  obey the normal distribution law, and the expert estimates X  $_{\rm 2}$  and Y  $_{\rm 1}$  are, respectively, the lognormal and uniform distribution laws. The regression equation for the two

expert judgment groups X  $_1$  and Y  $_1$  and X  $_2$  and Y  $_2$  is is described by a sixth-degree polynomial:

For expert assessments of X  $_{\rm I}$  and Y  $_{\rm I}$ , the regression equation is represented by the following expression:

$$\hat{y}$$
  $_x$  = - 3E - 45  $_x$   $^7$  + 3E + 24  $_x$   $^3$  - 5E - 11  $_x$   $^5$  + 7E - 0.9  $_x$   $^2$  + 0.006  $_x$   $^2$  + 2.38  $_x$  + 196.2

The coefficient of determination (R  $^2=0.893)$  indicates the adequacy of the mathematical model to empirical data. The significance of the determination coefficient is verified with the help of Fisher's F-criterion. It was revealed that F  $_{\rm obs.} > F$   $_{\rm cr}$ , therefore, the condition of significance is satisfied.

For expert assessments of X  $_2$  and Y  $_2$ , the regression equation is represented by the following expression:

$$\hat{y}$$
  $_x$  = 2E + 14  $_x$   $^5$  + 12E - 0,9  $_x$   $^3$  - 9E + 1,9  $_x$   $^6$  - 3,8  $_x$   $^4$  + 7,9  $_x$   $^5$  - 15,302  $_x$  + 104,321

The coefficient of determination (R  $^2=0.902)$  indicates the adequacy of the mathematical model to empirical data. It was revealed that F  $_{\rm obs.}$  > F  $_{\rm cr}$  , therefore, the condition of significance is also satisfied.

In the case when the endogenous variable, which appears as the non-observed economy, is not known, it could be expedient to use discriminant models "logit" and "robit" which are preferably supplemented with regression models. Models differ in what distribution function they use ("logit" - logistic, "robit" - normal). So, in the "logit" model, the probability of gaining growth in an non-observed economy is described by a logistic function that is mathematically written using the following expression:

$$\exp (B^T X) / [1 + \exp (B^T X)],$$

where  $X = (X_1, X_2, X_n)$  is a vector of explanatory variables;

 $B = (B_{1}, B_{2,...}, B_{n})$  is the vector of fixed coefficients;

The authors have built stochastic "logit" models for two and three variables from the whole set of responses and predictors. The results of calculations are presented in Table 5.

Table 5. Indicators of "logit" models of the non-observed economy in the municipal districts of the Republic of Tatarstan for 2017

Variable	Coefficient	T-stat	% progn	R 2 McFadden	Ln L	p-value	AIC	BIC	HQC
U 16	1.694	1,901	0.4.0	0.789	-7.23	0.000000	24.39	26.85	32,44
U 17	2.397	2,704	94.0						
U 17	2,890	2.134	01.0	0,726	-10.34	0.000000	29.65	44.18	36.67
U 8	0,001	1,305	91.8						
U 17	3,259	2,651	74.0	0.611	-8.28	0.000000	27.33	31.90	21.18
Do 19	2,834	2,311	74.0						
				•					
U 17	8,864	2,164	85.15	0.942	-4.36	0.000000	12.87	13.24	11.32
U 15	15,392	2,345							
		•	•	•	•				•
U 17	4,856	5,138	02.7	0.518	-6.21	0.000000	13.42	19.10	36.83
Y 18	3.292	5,146	92.7						

Table 5 shows that the most significant responses that cause the development of the non-observed economy in the municipal districts of the Republic of Tatarstan are the variables Y  $_{15}$  and U  $_{17}$  which belong to the segment of fictitious and criminal economy (Y  $_{15}$  - the number of manipulation cases with actually incurred costs; At  $_{17}$  - the number of investment fraud cases identified).

The authors have built stochastic "logit" models for three segments of the non-observed economy: hidden, underground, fictitious and criminal economy. Stochastic "logit" models by segments of the non-observed economy are built in the form of one-, two- and three-factor models with a different combination of structural factors. The results of calculations are presented in Table 6.

Table 6. Indicators of "logit" models for segments of the non-observed economy in the municipal districts of the Republic of Tatarstan for 2017

Variable	Coefficient	T-stat	% progn	R 2 McFadden	Ln L	p-value	AIC	BIC	HQC
X 1	0.026742	0.906							
X 2	0.126798	3.142	74.3	0.2067	32,44	0,075693	72.44	68.24	63.79
X 3	0,432,790	1.534							
	•	•	•		•	•	•		•
X 2	0.234601	2,029	67.4	0.0953	26.95	0.024117	85.16	66.36	62,42
X 3	0,321983	0.556							
	•	•	•	•	•	•	•	•	•
X 2	0.394709	4.506	83.9	0.0701	37.19	0.044110	78.34	73.51	64.90

## Note:

 $X_{\ 1}$  - the latent economy;  $X_{\ 2}$  - underground economy;  $X_{\ 3}$  - fictitious and criminal economy.

Table 6 shows that the most adequate one-factor stochastic "logit" model with structural segment  $X_3$  is fictitious and criminal economy.

<sup>&</sup>lt;sup>T</sup> is the sign of transportation.

### 4 Summary

The widespread distribution of cash out transactions is explained by the receipt of unaccounted-for cash by taxpayers in a noncash form, what is associated with a minimal risk of their return (Bekker, 2015).

Decomposition of components of the business process for cashing of monetary resources received in absolute terms, and allows us to determine its output parameters in the form of underreporting of tax payments, hidden revenue, as well as hidden wages (Eliseyeva and Terekhov, 1998; Degtyarev, 2017). The results for the single-factor "logit" model analysis showed that, in the aggregate of predictors, the most important variables are those which determine the development of a fictitious and criminal economy, and in the aggregate of responses, are those which determine the development of a hidden economy. Single-factor "logit" models were built with various combinations of the most significant responses and predictors. The results of the calculations showed that if more than three variables are included in a model, it becomes non-stochastic.

### **5 Conclusions**

A non-observed economy is a phenomenon inherent in all countries of the world. Today, it should be considered as a powerful socio-economic factor that has a major impact on all aspects of society. The shadow and official sectors of the Russian economy are tightly intertwined, and it is senselessly to analyze them in isolation from each other. Structural changes in the economy, the tax press and administrative pressure on business entities affect not so much the total volume of processes which are not monitored by official statistics, but rather the distribution of shadow flows between economic spheres.

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# SOME PECULIARITIES OF THE NATIONAL CONSCIOUSNESS OF THE REPRESENTATIVIES OF THE TATAR LANGUAGE AND CULTURE (ON THE MATERIAL OF THE CONCEPT TUY (WEDDING))

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Abstract: In recent decades, quite a lot of works dedicated to exploration of language picture of the world and providing scientific-methodological basis for this study occurred on the basis of material of russian and other languages of Russia. This article is dedicated to linguistic-culturological analysis of one of the key concepts of tatar language picture of the world - the concept of "wedding". Concept of "wedding" builds around itself a special sense space having a structure, isomorphic to structure of semantic field (core, center and periphery) but different from it by being two-layered - linguistic-culturological field, expliciting in forms of language and culture. Lexeme wedding with meaning of celebration, holiday, feast is a core of the field. Such realias as (the birth of a baby, a jackfruit, yesterday was the last homer), saban tue, ej tue and their verbal forms are located in the center. Periphery consists of words-concept of secondary nomination: Yes Tuesday, Monday, Monday, Monday, Tuesday, Tuesday, Tuesday, Tuesday, Tuesday, Tuesday, Tuesday, Tuesday, Tuesday, Monday, Tuesday etc. Among all weddings, aphid holds a special place, because a man participates directly and consciously in it only. This explains a reach lexic composition and high frequency, with which verbal forms (birne, buildak yeget, dimlay, ishbek bava, kaklagan kaz, etc.) Are used; these mean the given realia, with their synonymic, antonymic, associative and other relations.

Keywords: linguoculturological field, language picture of the world, tatar linguistic culture, concept, tuv.

#### 1 Introduction

In contemporary linguistic science that encapsulates the change of scientific paradigms, process of reinterpretation of language role in generation and functioning of major mechanisms of human cognition and culture-creative activity. In this connection should be noted studies of N.D. Arutyunova, Z.Kh. Bizheva, T.V. Bulygina, M.V. Zainullin, R.R Zamaletdinov, V.I. Karasik, O.A. Kornilov, Yu. S. Stepanov, A.D. Shmelev and other, on material of Russian an other languages of Russia, dedicated to studying of language picture of the world; these served as scientific-methodological base of this study.

Wedding is the most complicated conceptual structure, In the center of linguistic-culturological field are located such realias and their lexic forms as гомернен өч туе (бэби туе, яшьлек туе, кеше гомеренең соңгы туе), сабан туе, өй туе. Commonality of all above-stated realias composing the basis of "Tui" concept-sphere center is concluded in the fact that they are united by the central idea of solemnity and differences are traced in frequency of use and stylistic shade of their verbal forms. It should be noted that originally, lexeme туй was used for naming of all solemn events off a large scale (ancient Turkic word ton -"feast, arranged by khan" (Akhmetyanov, 2001), further its meaning became narrower and туй became mostly perceived as a part of family-routine customs fixing transition stages in human life-cycle (birth, marriage, death): бэби туе, яшьлек туе, гомернең соңгы туе – женаза туе. Its original meaning is preserved in names of holidaysСабан туе, өй туе. In modern Tatar society, other holidays are called by the word бәйрәм. But by sense load, lexeme туй is wider than the word бэйрэм.

Separate theoretical aspects of issues considered in this articles are exposed in works of scientists from general linguistics and Turkish studies department of Kazan Federal university, who conduct studies in the field of Tatar linguistic-culturology under the charge of professor R.R. Zamaletdinov(Vildanova et al, 2017), F.R. Sibgayeva (Sibgaeva et al, 2017), E.A. Islamova (Zagidulina et al, 2016), R.M. Bolgarovoy (Khusnullina et al, 2017), G.R. Mugassimova (Yuisufuva, 2016) etc.

Studying of scenario concept "Tuy" related to family routine customs had also stipulated addressing to works of Tatar scientists folklorists M. Kh. Bakirova, F.S. Bayazitova and other

(Yusupov L.R., Demyanov, 2017; Bayazitova, 1992; Bakirova, 2007)

#### 2 Methodology

The main task of this study is a complex language learning in interconnection with culture. On this basis, we made an attempt of practical material study by methods of linguo-culturological field; under this we understand a certain thematic aggregate of lexical-phraseological units, in which lexical background the most significant cultural and social peculiarities of nation are reflected. Units of lexical-phraseological level are "the mirror of folk culture, national psychology and philosophy", and semantic and structural-semantic connections of words reflect connections and relations between subjects and phenomena of reality actual for human and society, its real and ideal objects and thus convey peculiarities of national world perception, setting models of worlds view and world understanding for individual (Shendeletev, 1999; Villalobos Antúnez, 2015). Trough prism of thematically united words, characteristic features of real culture subjects are reflected and fixed. Thematic approach based on logic and concept categories stays one of the most productive and frequent practices of studying and learning of lexical material. After uniting into groups of maximum concentration by denotative and connotative sign, language realias are easily compared to realias of other languages, therefore supplementing linguo-culturology, of theoretic basics linguistics, psycholinguistics and other fields of knowledge, on one hand, and confirming practical significance for lexicography, translation science, methods of foreign language teaching, practice of communication etc., on the other.

# 3 Results and Discussion

The core of linguoculturological field "Tuy" is lexeme туй with meaning of celebration, holiday, feast, joy. Here also belong such derivatives as туйбашчы, туйчы, туйлау, туйлашу, туйлык, туй-муй, туй-төшем; туй итү, туй уйнау, туй ясау.

Tatar nation think that there are three weddings in the life of a тап: бәби туе, яшьлек туе, кеше гомеренең соңгы туе женаза туе, fixing transitn stages of human life: birth, marriage, death. All these three weddings express the idea of a toddler, bridegroom and bride into another age and social status (birth; creation of new society cell, a family), and of a dead man - into "other world" (death). Among all weddings, яшьлек туе holds a special place, because a man participates directly and consciously in it only: Кешенең гомерендә өч туе була, диләр. Тугач, өйләнешкәндә һәм үлгәч – женазасы. Беренчесе белән соңгысын кеше үзе белми дә кала. Никах туенда гына табын түрендә үзең утырасың (М. Magdeyev) (literally It is sais that there are three wedding in a life of a man. When he is born, married and dies. The man does not comprehend the first and the last one. Only at your wedding you a sitting at a honorable place) (Shendeleyeva, 1999; Vizel, 2018; Pihlainen, 2002).

According to perception of ancestors, youth become adult, rise on its feet and gain courage at entering into marriage union. Namely this custom is a connecting link between the past, the present and the future.

# 4 Summary

The main verbalizer of яшьлек туе realia is lexeme туй. At learning the use of this lexeme in composition of phraseologisms, proverbs, texts of literature and media, it can be noticed that in national language consciousness it is marked by the following signs:

#### 1) Hospitality

Туйның яме кунак белән (proverb) – literally All beaty of the wedding is guests.

Йосыф. Һу-у, туй өстәле ризык-нигъмәтләрдән сыгылып тора, сыгылып. Казылық, каклаган каз, пешкән үрдәк, шашлық, парлаган бозау ите, бәлеш, куллама, токмач, куян ите (R. Batulla) - (literally Yousup. Ooh, wedding table is groaning with food. Breast cut, cured goose, fried duck, shish-kebab, ham, balesh, kulamma, noodles, rabbit meat...).

#### 2) Solemnity

Каләм бии, / дәфтәремдә / Зур тантана, туй килә (G. Gilmanov) – literally: Pen is dancing / on the paper - / Big holiday, a wedding comes.

# 3) Immensity

Туй авыл белән, жил – давыл белән (prov.) – literally: Wedding should involve the whole village, wind should be with storm.

## 4) Noisiness

Камилэ. Бөтен Татарстанны шаулатып туй ясарга жыенасыз икән (I. Yuzeev) – literally: Kamilya. I see you are going to arrange such wedding that all Tatarstan would hear it.

**5) Emotionality** (in should be noted that in Tatar language picture of the world the national stereotype «туй үпкәсез булмый» – "there is no wedding without offense" is frequently used both directly, explicitly, and in hidden foem, implicitly):

 $\Gamma$ өл чәнечкесез булмас, туй үпкәсез булмас (prov.) – literally: There is no flower without thorns, there is no wedding without offense.

Чукынып китсен туйлары, бер тамагым туймады (prov.) – literally: To hell with their wedding, I did not eat enough).

### 6) Propagation

Туйлар гөрлөр тауда – авылларда / Дөвам итөр нәсел минем дө (R. Minnullin) – literally: Wedding will roar / in mountains, in willage / My acnestry will be continued.

# 7) Aestheticism

Өс-башы бер дә харап, дачага түгел, туйга жыенган диярсең (A. Gilyazev) – literally: The clothes are not plain - seems that he was going to wedding instead of a summer house.

### 8) Ethicism

Туйга барсаң, туеп бар, улың-кызың куеп бар (prov.) – literally: When going to wedding, go here well-fed and leave you children at home.

## 9) Duration

hәй, ничек кенә туйладык әле! Башкаларныкы кебек ике көнгә генә түгел, атна буена сузылды безнең туй! (V. Nurullin) – literally: Quite a wedding it was! Our wedding wene on not for two days, like everyone's, but a whole week.

### 10) Playfulness, entertainment

Туй туемлык өчен түгел, күнел өчен (prov.) – literally: Wedding is not for eating, but for having a good time.

Биисе килмэгэнгэ туй килешми (prov.) – literally: Wedding is not for those who does not like to dance.

#### 11) Honesty, responsibility

Туең булсын дисәң, биш тиен көмештән торма (prov.) – literally: If you want ta have a good wedding, do not spare any money.

Туган-тумача, кардәш-ыру, якын-тирә алдында берәүнең дә сынатасы килми. Туй нихәтле шәп булса, никах та шултикле нык булырга тиеш. Уен эш түгел ул туй, түгел (G. Bashyrov) – literally: Nobody wants to show it to family, kin and friends. The better the wedding, the stronger the marriage will be. Wedding is not a joke, oh no!

# 12) Support of young family

Йосыф. Бүлэклэр өстенэ туйга азык төяп килгэннэр. Әнә, Мәжнүннең апасы белән жизнәсе авылга кайтып ун капчык бәрәнге алып килгән.

Tahup. Ерак туганнары Сарманнан биш куян жибәргән, ди. Бишесе дә сарык хәтле... (R. Batulla) – literally:

Yousup. Along with gifts, they brought food for wedding. See, sister Madzhnuna and her husband brought ten bags of potatoes.

Tagir. Remote kin from Sarmanov sent them five rabbits. All five as big as a sheep...

#### 13) Large-scale involvement

Туй мәжлесе барышы, әлбәттә, бер язмага гына сыеп бетмәс иде. Туй егет ягында ике көн, ике кич дәвам итә. Башта туганнары, ерактан килгән өлкәннәр бәйрәм итсә, икенче көнне яшыләрнең бергә уйнап үскән кордашлары, сабакташлары, дуслары жыела. «Туйдан беркем дә туймас» дигән әйтем юктан барлыкка килмәгән (media) – literally: Process of wedding feast could not be describe in one story only. Wedding on bridegroom's side lasts for two days. First kin, elders and guests from far away are celebrating; on the second day schoolmates and friends gather to celebrate. It has been always said: "Nobody would get tired of the wedding".

# 14) Advatages in comparison to marriages without wedding feast

Каравыл кычкырмыйбыз без, / Түзәбез тыйнак кына, / Мәжлесләрдә – уйнап-көлеп, / Өйләнсәк – туйлап кына (R. Minnullin) – literally: We do not call for help / We're waiting patiently. / When there is a feast, we are having a god time, / When there is a marriage, it should be only with a wedding.

# 15) Opulence

Бәйге – атлыныкы, туй – тунлыныкы (prov.) – literally: Competition is for the one with horse, wedding is for the one with fur-coat.

# 16) Costs

Туйлаганга туй, ясаганга уй (prov.) – literally: Wedding for guests is a good time, for hosts it is cares.

Борчуларның шундый кайнап торган бер мәлендә туй хәстәре башланды. Туйдан соң абзарда ничә генә сарык калгандыр, туй күпме тавыкның, ничә баш каз-үрдәкнең башына житкәндер, келәттә күпме генә он калгандыр, мондый чакта анысы белән исәпләшмиләр (G. Bashyrov) – literally: In one of moments full of care, the preparation to the wedding begun. How many sheep are left in a barn after wedding, how many ducks and geese had to be sacrifices, how much flour is left in a cellar - no one is counting this during the wedding.

# 17) Carelessness, idleness

Дөнья акыллыга — уй, юлэргэ — туй (prov.) — literally: Life for a wise one is thinking, for a stupid one it is a wedding.

#### 18) Youth

Туй китте. Туй белән бергә кемнендер яшьлеге китте... (A. Yeniki) – literally: Wedding went away and took somebody's youth with it.

#### 19) Family ties

Быел елыбыз авыр, туй кебек зур мәшәкатыне күтәрә алмыйбыз, ди... Анысы инде берәүгә дә жиңел түгел дә бит, туғанлык хакына күтәрәләр (A. Yeniki) – literally: He says that this year is difficult, so they may not be able to cope with wedding cares... Well, it is not easy for anyone, but for family ties sake we should support them.

#### 20) Completion

Туй кызыгы өч көнгә (prov.) – literally: Wedding for three days

Туйлары үткэн инде (phras.) – literally: The wedding is finished already.

#### 21) Customs

Туй белән биргәннәр аны да, / Искечә укытып никахын (M. Aglyamov) — literally: And she was married, with wedding / with conduction of nikakh in old way.

Машиналарда урамнарны әйләнеп туйгач, туйда катнашучылар егет йортына кайталар. Һәр жирдә була торган йола – киленне мендәргә бастыру, яшьләргә балдан, майдан авыз иттеру капка төбендә үткәрелә. Соңгы вакытта бал-май янында кабарып пешкән икмәк белән тоз барлыкка килде (media) – literally: After traveling all streets, wedding participants go to bridegroom's house. A custom that is performed everywhere - a pillow put under bride's feet, feeding the newly-weds with honey and butter - is conducted at the gate. In recent time a fresh-baked bread with salt is added to honey and butter.

### 22) Planned event

Яшьләрнең бер-берсен яратуы ике йортка да мәгълүм, ике йортта шыпырт кына туйга әзерләнде (N. Gimatdinova) – literally: In both families is known that young couple love each other, so both sides were secretly preparing to the wedding.

# 23) Exuberance

Туйга туйганчы ашарга-эчәргә киләләр (. Yuzeev) — literally: The wedding is attended for a generous meal.

## 24) Religiousness

August 11<...> Илфат Фэйзрахмановның улы Зөлфэт белән Илзирәнең туе узды. Хәмерсез мөселман туе булды ул (media) – literally: On August 11 <...> took place the wedding of Ilfat Fayzrakhmanov's sun, Zulfat and Ilzyra. It was a non-alcohol Moslem wedding.

# 25) Absense off fixing to a certain time

Язгы туйларның хикмәте бар, ди. Күңеле гел яшь кала, ди (N. Gimatdinova) – literally: They say that spring weddings have a secret: souls would stay forever young.

Ибраним. Көз айлары – туй айлары диләр, Фәүзия (Т. Minnullin) – literally: Ibragim. You know, Fauziya, they say that autumn months are a wedding season.

# 26) Harmony with time, epoch

Заманасына күрә туе, даласына күрә куе (prov.) – literally: What is time such is a wedding, what is steppe such is a sheep.

Ибраhимов. Без сиңа комсомол туе үткәрдек, тантаналы узды (Т. Minnullin) – literally: Ibragimov. We throwed a comsomol wedding for you, it was solemn.

27) Color (here should be noted that definitions red and white took roots in times of Soviet power, with non-religious customs that emerged in that times: new type of wedding feast – кызыл туй, and wedding feast for elders, performed in traditional style – ак туй (Urazmanova, R.K. 1984); at present day the white wedding is associated with Islam, i.e. a feast without haraam, alcohol):

Никах көне, никах көне безнең, / Бүген безнең кызыл туебыз (Gulsarvar) – literally: Today we have a day of nikakh / Today we have a red wedding.

Ике гашыйк / бер-берсенә / <u>Вәгъдә биреп</u>, ак туй көтә (G. Gilmanov) – literally: Two lovers / after exchanging love vows / wait for white wedding.

## 28) Strength

– Егерме өч ел! Димәк, тиздән көмеш туегыз булырга тиеш (A. Yeniki) – literally: Twenty-three years! So, soon there will be a silver wedding.

#### 29) Symbolicity

Ай-ай-ай! Зур да туй буласы икән бу! Кибәхужадан гына сигез пар (G. Bashirov) – literally: Oh-wow-wow! It seems that this would be a big wedding! Eight couples from Kibyakozi village only!

# 30) Officiality

Законлы вә никахлы туйлар белән тәбрикләргә рөхсәт итегез, бай әфәнде (R. Batulla) – literally: Accept congratulations, master bai, with legal wedding, with nikakh.

# 31) Negative attitude to cross-marriages

Мария. Туйда үбешү электән калган йола инде.

Нурхэмэт. Сездә калган ул, бездә түгел. Сезнең туегызда үбешкәнне мин үзем дә рәхәтләнеп карап утырам. Сездә аны килешле итеп эшлиләр. «Горько» дигән сүзе дә бар, бездә бит аның сүзе дә юк (Т. Minnullin) – literally:

Mariya. Kissing at the wedding is an old custom.

Nurkhamet. You kept it, not we. While kissing at your wedding, I watch with pleasure, too. And you know how to do it. And you have "gorko" word, and we do not even have it (Russian word "gorko" spoken at the wedding means that newly-weds should kiss).

Thus, hospitality, generosity, noise, fuss, playful manners, opulence, large-scale involvement, customs etc. define the essence of "Tuy" concept.

# 5 Conclusions

Tatar nation thinks that there are three weddings in the life of a man: бэби туе, яшьлек туе, кеше гомеренең соңгы туе (literally, wedding of a baby, wedding of young, wedding of saying farewell to dead). Among all weddings, яшьлек туе holds a special place, because a man participates directly and consciously in it only. This explains a large composition of linguo-culturemes (балдаклар, кияү, кияү бүлэге, кэлэш, никах, ярэшү, кода-кодагый, кода жыры, кыңгырау, мэһэр etc.), that reflects in national language conscience the following: 1) ethnically shaded complex of customs and traditions with a certain symbolic: су юлы күрсэтү, кияү мунчасы, кыз урлау, кыз ярэшү, ишек бавы etc.; 2) social, world view standards of the nation in sphere of family and marriage relations; 3) legal standards; 4) aesthetic and ethic standards; 5) life of Tatar nation in all complicity of its manifestations.

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# SOME PROBLEMS OF TRANSLATION OF MODERN TATAR POETRY INTO THE RUSSIAN LANGUAGE

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Abstract: In article, on example of translations of modern Tatar poets by Russian poets-translators, are detected peculiarities of artistic reception of Tatar literature. Theme selected is insufficiently studied in literature studies, in spite of its increased interest to issues of translation as a form of dialog between different literatures and languages of modern Russia, Bilingual "Anthology of New Tatar Poetry" issued by "Octyabr" journal in 2015 is a factual material of the study. Collection represents poems of young Tatar poets who entered literature scene at the beginning of XXI century: Luiza Yansuar, Lalaya Gibaddullina, Yulduz Minnullina, Lenar Shaekh. The goal of this article is consideration of different approaches and strategies in translation of modern Tatar lyrics into Russian language, definition of place of poets-translators' national identity in perception of artistic works of Tatar authors. Study confirmed that poets capable to reproduce the variety of RF cultures and maintain their inimitable voice, create works that translate artistic world of foreign language author adequately and accurately. In other case, overcoming of identity of artistic works and complete dissociation from source occur. It is established that modern poets-translators (V.Salimon, G. Vlasov) maintain the adherence to their poetic principles, adapt text of translated author for their aesthetic attitudes. The most complete disclosure of uniqueness of the poetic world of modern Tatar poetry is achieved by those translators who are close to the life of an Eastern man, his spiritual and cultural values (S. Aflatuni, V. Murtakhanov).

Key words: translation, Tatar poetry, Russian literature, national identity, dialog of literatures, variety of cultures.

#### 1 Introduction

At present time, movement towards cultural identity, characteristic for nations of Russia, and, at the same time, activation of new forms of inter-literature interactions between them promote extension of borders between literatures. This stipulates search for new forms and methods of inter-cultural interactions, in line with which wide opportunities for contacts between Russian and national literatures are outlined.

Role of translation increases; due to this, Russian language readers obtain possibility to extend their concept of literature of nations of the Russian Federation, including Tatar poetry of the beginning of XXI century, Among collection of recent years, a particular place is held by bilingual "Anthology of new Tatar poetry" issued by "Octyabr" journal in 2015. Collection represents poems of young Tatar poets who entered literature scene at the beginning of XXI century. This collection puts researcher in the field of translation into ambiguous position, because here, along with original translations of modern Tatar poetry, one may found translations where peculiarity of Tatar verses is lost completely.

Factual basis of this work are translations conducted in in line with two opposite tendencies in modern Russian literature. On one side, there are translations of domestic poets who belong to Tashkent school: Subkhat Aflatinu (Yevgeniy Abdullayev, born in 1971) and Vadim Muratkhanov (born in 1974). They are most familiar with the world of East. On other side, there are those poets, whose creative works were formed in line with existing tendencies of Russian poetry and culture of XX century: German Vlasov (born in 1966) and Vladimir Salimon (born in 1952).

# 2 Methodology

Conducted study is based on scientific concepts formed in modern domestic and foreign interpretation and translation studies and comparative linguistics, where the problem of translation of language and composition peculiarities of original in translated texts is raised (Savory, 1957; Qiuxia, 2008; Hodder & O'Connor, 2017; Sulkarnaeva, et al, 2018; Hatim & Munday,

2004; Varlamova & Safiullina, 2015). According to words of G. Gachechiladze, "translation is always a reflection of original artistic reality, however it is no less valid than any original work" (Fakhrieva et al, 2017). Difference between translator's activity and original creative work lies in translator's dependence on subject of translation that should be reproduced in other language.

In our study we adhere to concept stating that translation is one of the forms of dialog in different national literatures. Methodological base for scientific searches in the field of selected theme comprises works of scientists dedicated to position of translation in the system of inter-literature reception and dialog. As Russian researcher Ya.G. Safiullin writes: "In a dialog lies acknowledgment by each of its participants (different from himself) and jointed pass to knowledge, senses, not obligatory finished by agreement" (Gachechiladze, 1980).

In translation as form of dialog relations, a complicated dichotomy of "me" and "other" is manifested, because translation is built on embodiment of poet's author conception, his aesthetic ideal by meas of other language. Along with that, this convey by means of native language has its source in artistic conscience of the translator as the carrier of specific national identity and cultural values.

For instance, in modern comparative linguistics, a significant attention is paid to role of national identity in intra-literature dialog; thoughts about ways of changing (transformation) of writer's identity in other language involved in translation of his works are developing (Safiullun, 2010; Fakhrutdinova et al, 2017; Ibragimov and Kamaliyeva, 2015; Ibragimov, 2016). There is a righteous statement that "identity s one of the factors that define inter-literature interactions. <...> Different identities, after being engages in relations of mutual complementations, give birth to new senses common for them" (Bekmetov, 2015; Villalobos Antúnez, 2018). Emergence of new content, "new senses" originating from sphere of things connecting the translator with his culture and language, his national identity acts as one of debatable aspects of artistic translation of modern Tatar literature into Russian language.

Therefore, goals of study conducted are related to consideration of different approaches and strategies in translation of lyric works of modern Tatar authors into Russian language, definition of place of national identity of poets-translators in perception of artistic works of Tatar poetry of the beginning of XXI century.

# 3 Results and Discussion

Modern Russian poets belonging to different branches acted as translators in collection "Anthology of New Tatar Poetry", 2015: Victor Kulle, Vladimit Gandelsman, German Vlasov, Sukhbat Aflatuni, Vadim Murtkhanov and other. All translations were conducted by interlinear crib, which role depends on poets" creative skill. Interlinear crib may emasculate the source, because image system of the latter cannot be reduced to its vocabulary; at the same time, it promotes expansion of translator's imagination, promotes the translator to expand "me" on "other" and create works, capable to convey the same impact on reader as a source verses.

Before we address to comparative analysis of translations, let's say some words about poets-translators.

Sukhbat Aflatuni (Yevgeni Abdullayev) - poet, prose writer, one of the founder of informal union of young writers of Uzbekistan, created in 1999 - "Tashkent poetic school". Sandzhar Yanyshev, Vadim Muratkhanov also participated in this union.

Modern critic, Tatyana Kolmogorova, remarks: "S. Aflatuni, V. Nuratkhanov, I. Odegov, A. Tork, S. Yanyshev are at home and guests in the variety of Russian prose of XXI century. In their artistic pictures of the world is embodied complicated interaction

of creative potentials of integrated thinking that multiplies energy in search for harmony of ethnic groups and cultures" (Safiullin, 2012).

High sensitivity to past, poetization of childhood, strive to apprehend the lost is inherent to authors of Tashkent school. Representatives of this school usually refer to philosophic lyrics tradition. "Signature feature of "Tashkent poetic school" manifest is that it has not only purely literary but clearly defined passionate pathos. One of image formulas found by young poets - "Half-bloodness showed a new "micro-race" with its peculiar mentality" (Kolmogorova, 2015).

German Vlasov and Vladimir Salimon are poets with their inimitable voice and own poetic manner of writing. Their original poetry receives ambiguous estimation from modern critics. For example, Grigoriy Kruzhkov in his after-word for Vlasov's book "Girl with a Headband" writes: "Poetry of German Vlasov is out of tune with school logic and grammar. It wants to translate impression in all its instantaneous image and freshness, first of all. It consists of color strokes, light spots twinkle of cold winter day, flecks of April sun, blots of rain. It is a hide-and-seek game with life, it is a music of accidents, eternal search for something that is not from this world, endless bemusement by something that is here" (Yanyshev et al, 2001).

Dmitriy Bak notes: "World of Salimon's verses is habitable, closed, action if usually set somewhere out of town (at summer house?), often at early morning; often morning flights of birds bring thoughts about angel apparitions - and this is it all. More or less. Of course, listed motives are not obligatory present as a whole set, but even taken separately, they give birth to words which humble bravery takes away the breath of post-conceptualism epoch reader" (Vlasov, 2016). A range of modern critics underlines stylistic dowdiness of some poet's poems included in collections of 2010s.

We stated a brief reference information on creative works of Russian poets in order to further underline the way their individual poetics peculiarities were reflected in translated texts.

In the center of our attention were, on one side, translations of Aflatuni and Muratkhanov - poems of Luiza Yansuar (born in 1981), Liliya Gibadullina (born in 1987); on the other side were translation of Vlasov and Salimon - poems of Yulduz Minnullina (born in 1985), Gulnaz Gasisova born in 1991) and Lenar Shaekh (born in 1982). In order to obtain more reliable conclusions, in course of works, comparison of translated works with original works of stated Russian Poets was conducted.

Let's address to translations of poets familiar with East world, whose artistic world represent an example of integrated thinking.

Adherence of Aflatuni and Muratkhanov to philosophical lyrics is also expressed in selection of poems for translation. For instance, poems of Liliya Gibadullina and Luiza Yansar in translation of Aflatuni and Muratkhanov sound rather originally. Both translators are feel free in the poetic world created by Tatar poetesses, joining original poetics of verses with specific philosophicity characteristic for their own poems.

Poem of Liliya Gibadullina, "The furrows of the gallbladder" in translation is named by the first row: «Let it be for heaven torn...», translated work is filled by the same moods of sadness and loneliness as the source poem. Not even one detail of source was left without attention: poet translates each row practically verbatim, inspired by its essence. This is where complete embodiment of form and content of Tatar poem in Russian translation comes from. Translator's innovation occurred only in refusal of capital letters, in some cases, in order to maintain the unity of verse.

The century goes - you'll run to chase it

along your streets, quick, quick -

you, nameless prophets, trying to catch

this fruitless century (Bak, 2015).

The poem «People» of L. Yansuar in translation of Muratkhanov is one more exampel of joining of philosophicity of Tatar author's poetry with original poetics of the poet-translator himself. He managed to conduct a translation which is practically equilinear to source; metre of this poem, iambic pentameter, recreates abilities of 9-10-syllabilic metre of the source.

Vlasov and Salimon use a little different approach to poems of Tatar poets. For instance, in his translations, Vlasov strives completely recreate original poetics of Yu. Minnullina. In translation of the poem, fast change of view points convincingly combines with cinematographic optics. However, text of Tatar poetess is transformed in accordance with principles of Russian language consciousness, expressions corresponding to carriers of Christian world perception are introduced into translation.

We see even more discrepancies with source in translations of Vladimir Salimon. It seems that ambiguous nature of his own lyrics left its stamp on translations. This may be confirmed on example of translation of Lenar Shaekh's poem «Sping rules in my soul».

The soul took root in flesh and blood,

whatever happens to me now,

no matter how the time will run

between my fingers in cold and heat.

I have a sadness in my heart.

Since when the rain had gently knocked

at our window, stop my ears,

and nothing will protect us now.

But can't we hear a mellow chime

of steppe bell-flowers in the wind?

Oh, had we turned deaf, my love,

in fleeting moment of a time?

Oh, didn't we grow in one, my love,

In hundred years togetherness

And aren't we now as one, my love,

As earth molecules? (Bak, 2015).

Translation of V. Salimon

Tatar poem in built on parallelism. Lenar Shaekh maintains the unified beginning of each quatrain, only the key word changes in each verse: spring –sadness, grief –chime –you. Last rows of first three verses are also repeated, until in the end of the poem, persona finds himself in unity with beloved one (Shaekh's poem is an example of love lyrics).

In this case, translator does not take into account of source peculiarities listed above, creating a work, incomparable with souse both on formal and content levels. There are images in Salimon's translation that corresponds to his own poems; he completely stripes the translation of Shaekh's poetic features, at this maintaining his own artistic manner of writing (for example, verses from Salimon's poem: But when the fog will melt away // And ray of sun will shine in dark // behind by window lifting crane // goes tall and strong in recent time).

Therefore, poets-translators in course of creating literature translations, maintain adherence to their poetic principles, adapt the text of translated author for their attitudes. Poets familiar

with the world of an East man, his identity, manage to translate variety and uniqueness of Tatar poets' artistic world.

#### 4 Summary

Presented review of translation of modern Tatar poetry in Russian language allows to distinguish different approaches to translated material of modern Russian poets, each of them having his own inimitable voice. Study confirmed that poets whose national identity is related to East culture and thus allows to understand variety of RF literatures better, create translations that disclose spiritual world of a foreign language author more adequately and accurately (S. Aflatuni, V. Muratkhanov).

Presented analysis confirms the role of national identity as a specific matrix of the most important cultural values in translator's consciousness. Identity of translators allows to express the idea of national peculiarity of "other" in paradigm of modern poetry in Russian language. Namely this strategy is, in our opinion, the most correct, because it allows to present the multiplicity of modern Russia literatures via Russian language in all richness of its aesthetic abilities and artistic forms.

#### 5 Conclusions

In case of consideration of translated works conducted by modern Russian poets, we come to a conclusion that ability to convey national identity depends on position of a poet who creates the translation. Poets capable to reproduce variety of cultures and maintain their inimitable voice without mixing positions of "Me" and "Other", create works that convey artistic world of a foreign poet adequately. In other case occurs overcome of artistic works identity and complete disconnection from translated author; this leads to disappearance of source poem in Russian tradition and emergence of some simulacrum having insignificant artistic value.

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# THE CONCEPT OF "WOLF" IN THE WORKS OF RUSSIAN AND TATAR WRITERS (BASED ON THE PROSE OF I. BUNIN AND N. GIMATDINOVA)

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Abstract: In this study, the authors address the problem of the representation of the concept "wolf" in Russian and Tatar prose of the twentieth century. In light of the national language image of the world and the relationship with the folklore tradition, the linguistic and semantic aspects of the realization of the linguistic and literary concept "wolf" in I. Bunin's and N. Gimatdinova's works are investigated. The authors analyze the associative-semantic groups in the realization of the concept "wolf" in the works under consideration: "wolf – mam", "wolf – nature", "nature – civilization", which are most typical for the writers of the twentieth century and are closely connected with the folklore tradition. The image concept of wolf becomes the original yardstick of the deeds of the characters, the criterion of their moral characteristics, which makes Russian and Tatar literature the concept "wolf", closely connected with the folklore tradition of the two peoples, reflects two different branches of human consciousness the western and the eastern, which, among other things, defines the concept "wolf" as a national category. The wolf for the Tatars is a totemic animal, the keeper of the family, at the same time in Russian folklore this hypostasis of the image of wolf practically disappears. Bunin defines wolves through the irrational principle and associates them with the feeling of Love as the foundations of Being, N. Gimaddinova, also gravitating toward folklore tradition and irrationalism at the same time, symbolically linking the image of wolves with the foundations of Being, first of all puts forward the idea of harmony between man and nature.

 $\label{eq:Keywords: concept, wolf, archetype, associative-semantic group, mentality, conceptual sphere.$ 

#### 1 Introduction

The analysis of literary concepts in a fiction today is becoming quite effective in understanding the laws of author's thinking. The conceptual approach has been developed in linguistics, including in linguoculturology. Concept as a notion has not yet been exactly defined, but in many respects it is associated with the notion of mentality, as well as with archetype. Linguoculturology defines the concept as a cell of culture in the mind of the author. In science there has appeared the notion of archetypical concept formed not only at the level of the collective unconscious, but at the national level, the level of mentality of the people. Archetypical concepts expressed initially in the works of folklore are deeply mental; but mentality is expressed, in M.A. Shelyakin's opinion, "first of all, in language works - in the texts being rife with world views, intentions and belonging to a certain time, man, society' (Shelyakin, 2005).

It is necessary to distinguish the linguistic and literary understanding of "concept". We will consider the concept rather as a literary notion - referring to literary concept. Here we tend to the definition by V.G. Zusman, who most clearly formulated the literary treatment of the concept in his works. Justifying the possibility and necessity of including the notion of concept into the term system of modern literary criticism, the scholar writes that reliance on the concept opens up new opportunities in representing literature as a communicative literary system. "The literary concept is an image, symbol or motif that has "an exit" to geopolitical, historical, ethnopsychological moments that lie outside the work of literature" (Zusman, 2001). Literary concept at the same time is considered as a unit of individual consciousness, author's conceptual sphere, verbalized in a single text of the writer's works (which does not exclude the possibility of evolution of conceptual content from one period to another) (Tarasova, 2010). It is believed that literary concept and literary image are the categories of the same order, reflecting different mental operations. "However, these concepts are diverse. Literary concept as a unit of consciousness of the writer is much more complex and significant than the image as a means of expressing the author's image of the world. Literary image can be a representative of the concept in the work, comprehending its main components – as a rule, conceptual and figurative, emotional" (Tsurkan, 2018). It is the latter statement that determines the logic of analysis of the concept "wolf" in the texts of Russian and Tatar prose below. Thus, the aim of the investigation is to reveal the representation of the literary concept "wolf" from the Russian and Tatar authors at the level of the figurative system, relying on the lexical field of the text in particular.

#### 2 Methodology

The methodology for revealing the features of realization of the linguoculturological and literary concept in the literary text draws from the analysis of the literary text previously developed by the authors of this article through the characteristic of associative-semantic groups that synthesize both the linguistic and literary principles of the works. At the same time, the authors of the article rely on the latest data on the conceptual and comparative analysis of two national literatures in the articles of recent years (Nagumanova et al, 2017; Ibragimov et al, 2015; Li et al, 2017; Tikhonova et al, 2017).

As we wrote in our previous articles, concept is a cell of culture in the author's mental consciousness (the definition by Stepanov) (Stepanov, 1997; Nurhayati, 2018). Many writers of both Russian and Tatar literature prefer the people's tradition, which makes it possible to reveal a particular literary realization of a folklore natural concept in their works through figurative system. The analysis of associative-semantic groups in the realization of a concrete concept enables to determine the mental level of literary image, especially one that goes back to the archetype. Here you can talk about the archetypical concept in the work of the writer.

#### 3 Results and Discussion

I. Bunin as a realist of the twentieth century is very akin not only to the classics, but also to folklore, which determines his interaction at the mental level with popular Russian ideas. This makes it possible to actualize the conceptual analysis of the text, highlight key concepts in the realization of the author's conception. One of "the supporting" concepts of I. Bunin's story "Wolves" is the concept "wolf", brought out into the title of the work and defining the author's idea, including the very picture of amorous theme and Bunin's concept of love. Let us single out the invariant characteristics of the concept "wolf" in Russian culture. The concept "wolf" functions in a variety of interpretations and becomes a special sign. Initially, it represents a strong predatory beginning. Wolf is "a ferocious predator whose hunting nature commanded (Khazankovich, 2009). At the san man's respect" At the same time, wolf was comprehended into the totemic animals. Totemic animals were "the points of reference of the ethnic worldview, and then these images got literary and aesthetic transformation in national literature" (Sokolova, 1998; Villalobos Antunez, 2003). The image of wolf is found in European legends and appears, mainly, as a werewolf. Thus, the basis of the folklore archetype Wolf is the pagan and mythological representations of the ethnos about the beast, the variation content of which is determined by the type of ethnic culture: wolf can be perceived as a tireless warrior, Beast-progenitor or werewolf beast. At the same time, Russian fairy tales often represent wolf as "a grey robber", a greedy and stupid creature.

The concept of "wolf" in Bunin's story is realized through such semantic groups as "wolf – predator", "wolf – nature", "wolf – man".

The associative-semantic group "wolf – predator", "wolf – nature" is actualized at the beginning of the story. The wolf is immediately pictured as a powerful predator who, with "an amazing audacity, when at the peasant's cottages there one was already having supper, ... stabbed a sheep in one yard and hardly

carried it away" (Bunin, 1980). The concept "wolf" is constantly associated with the concepts "darkness", "death", "destruction", with which the story begins. In the middle of the story the wolves appear already in reality in front of two characters - a girl and a grammar-schoolboy. These are three big wolves, in the eyes of the rjnjhs [there flashes transparent green shine, then red - transparent and bright, like hot syrup of red currant jam. Describing wolf-predators, Bunin pays special attention to color details; red, black, grey and green. The opposition "life – death" is actualized at the level of color. The semantics of Chaos is before us. Bunin uses the folklore invariant of the concept of wolf, associated with the semantics of force, destruction.

At the same time, wolves as a natural phenomenon are associated with the concept of nature (the story creates the natural vertical and horizontal – "heaven - earth"). However, Bunin defines wolves as ones to be infernal entities and, perhaps, to reflect the irrational, incomprehensible beginning. Wolves stand at the wall of the forest, which is deeply symbolic and connected with the idea of a metaphysical border between two worlds (real and surreal). Thus, the protagonists of the story are, in fact, in an extreme situation – between life and death.

The vertical and the horizontal to be created in the text, defined by Bunin's existential code, is organically connected with number symbolism. The wolves are three in the story, which again refers to the folk fairy-mythological tradition. "Three" is the embodiment of absolute perfection and often reflects the hypostases of the divine: Creation - Conservation - Destruction; Spirit - Soul – Body. "Three" is a perfect number, since when it is divided, the central equilibrium point remains. It is considered to be complete, perfect, harmonious. The images of the three wolves are associated with the idea of the unity of ambivalent existence - harmony and destruction simultaneously. In Bunin's story, thus, the concept of "wolf" turns from the archetypical concept into a philosophical one.

At the same time, the concept "wolf" is used by the author as a kind of presentation of his characters, their characterization. The associative-semantic group "man – wolf" is connected with the opposition "strength – weakness". The feminine appears to be strong and active in this story by Bunin as well. Wolves are the touchstone that allows us to see the true colors of the characters. The scar that is the result of the struggle does not disfeatures the heroine, but gives a special charm, becomes a symbolic detail.

Certainly, the story is not about the wolves. Its main theme is the theme of love as a kind of flash that illumines a person's life. This situation of outbreak in a person's life is vividly represented by the writer at the language level: twinkling stars, summer lightning, match fire, glow of fire, sky flame. The culmination of the fiery concept was revealed at the time of the appearance of the wolves. The love concept is constantly associated with the dichotomous opposition "darkness - light". The semantic field "love - fire - blaze - earthly passion", which is connected with the symbolism of the image of wolves, is actualized. The appearance of these grey predators in the story can definitely be considered to be an impressive metaphor for the realization of a love story, the love of flash, the love of wildfire. The encounter with wolves, thus, is a metaphorical characteristic of love passion, deeply earthly, momentary and at the same time irrational, eternal, like the writer's wolves themselves. Between harmony and chaos, according to Bunin, there is a category of love as the central point of equilibrium of the world.

# 4 Summary

In a completely different vein, the concept of wolf is revealed in the work by N. Gimatdinova, whose works are also characterized by an unrealistic beginning. In the story "In the Corral" we see the embodiment of the concept "wolf", defined by the national Tatar folklore tradition.

Wolf in the world of Tatar folklore is the highest symbol of freedom in the animal world, a symbol of independence. At the same time, wolf is also a symbol of fearlessness. In any fight the wolf fights to the finish: victory or death. Under normal

conditions, the wolf will not allow, for its part, to offend the weaker. Ancient ancestors have passed down the highest philosophy to the Tatar people precisely through the image of wolf. The Turkic tribes considered wolf to be a sacred animal, so it became a totem. It was the image of the white wolf that was considered to be sacred. Wolf in Tatar mythology becomes the savior of nations, the ancestor of the tribe, and the white wolf – the deity (Urmachev, 1994). The image-concept of wolf has traditionally passed into Tatar literature from Turkic mythology and folklore.

N. Gimatdinova's novel presents, in contrast to I. Bunin's, originally a two-color solution: white wolves and grey wolves, which is determined by symbolic opposition "good – evil", "light – darkness". Hayat, who lives alone in the corral, is the only person who understands the language of wolves, and a bearer of a kind, harmonious beginning. Here we find the associative-semantic group "wolf – man", which is based on the idea of natural Harmony. Although others do not accept the heroine, she is surrounded by animals, among them are wolves. They guard the house and the peace of Hayat. The natural Harmony is before us, and wolf is understood here as a totemic animal – the guardian of the old covenants, the natural beginning.

The heroine is genetically connected with white wolves (she comes from the lands of white wolves), which is symbolic. At the same time, the concept of forest plays an important role. According to R. Fathrakhmanov, forest is a place of refuge from all afflictions. The symbolism of forest is represented here, as in Bunin's story, in the tideway of the folk tale. "The tragic loneliness of Hayat is opposed to the inhumanity of our society, which shows the destruction of the harmony of human community. The forest is the place where harmony between people and nature is perfect. Such open-hearted natures can only live there. Antihuman society perceives them as white wolves, and they are doomed to be ruined. Therefore, moving Hayat to the village leads her to frustration" (Fathrahmanov, 2003). The concept "wolf", as we see, is associated with the people's ideas about wolves as royal animals guarding Nature, maintaining its harmony. From the very beginning wolves are traditionally in Tatar folklore the keepers of nature and its unwritten laws, the principles of nature. In the story "In the Corral" via the concept of wolf, the opposition "the natural - the civilized" is vividly marked. The main character becomes the bearer of the natural principle, and her close harmony with nature is symbolically denoted by the concept "wolf". N. Gimatdinova does not use the image-concept of wolf to express the feelings of her characters, as Bunin does. She is concerned about the connection between man and nature and the alienation of a civilized person from primordial values.

# 5 Conclusion

So, the wolves in the story of the Russian author are presented as an ambivalent image-concept in which the situation of metaphysical duality is determined by a certain being-unity. Wolf symbolizes here the love beginning in its particular irrational modification and is the main metaphor of the text. The concept "wolf" is comprehended in the concept "love" of the Bunin's story as its metaphorical part. Thus, the association-semantic group "wolves – love" in Bunin's story is built on the principle of "part – whole". The number symbolism (three wolves) marks the embodiment of the Bunin's view of the world in the story. Love as a category is conceived by Bunin as the key and central concept of Being at the crossroads of the vertical and the horizontal (sky – earth), life and death, chaos and harmony.

The Tatar writer puts the paradigm "man – nature", "nature – human society" to the first place, where the white wolf becomes a deified symbol of the harmony between nature and man, the harmony of human feelings. Being a sacred totem symbol, it is opposed to the disharmony of the world of people, punishes the characters for their moral inconsistency. Thereby, the first place is given to the lexemes that designate nature and color (white color, "forest" semantics). If Bunin's forest is the border of two

worlds, Gimatdinov's forest is a symbol of the natural world. The unity of the main character with the inhabitants of the forest, including the wolves, indicates her spirituality and moral principles. The world of the heroine is harmonious, unlike other characters. The writer's white wolf has a symbol of true existence. It is noteworthy that, like Bunin's concept of wolf, Gimatdinova's concept of wolf is related primarily to feminine. Bunin sees strength in woman, above all, the power of love as a source of life. Thus, despite the different nature of representation of the concept "wolf" in view of the peculiarity of its national manifestation, the two authors are like-minded in solving the eternal questions of being, reaching the level of being. The concept of wolves as a sign of being in stories of two authors is defined by the feminine principle. But in Bunin's these are: "wolves - woman - Love"; and in Gimatdinova's -"wolves - woman - Nature".

As the analysis of two products of different national literatures shows, actualization of the methodology of the conceptual approach to the fictious text allows not only to reveal the features of the works of two authors, but also to reach the level of author's conceptual sphere, the level of author's consciousness and mentality.

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#### THE DISCOURSE OF ISLAM IN FRENCH POSTCOLONIAL NOVELS

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Abstract: The necessity to study the discourse of Islam in the context of French postcolonial novels remains the actual problem because postcolonial French literature, as an artistic reflection of reality, becomes a kind of prism through which the literature can look into the Islamic world. The purpose of this paper is to analyze the discourse of Islam in French postcolonial novels of Mustapha Tilii's "Glory of the Sands", Ahmadou Kourouma's "Allah is not obliged" and Yasmina Khadra's "The Attack". The image of Islam in postcolonial French literature is mediated, this image was refracted in the individual creative vision of the author's world, but it forms the image of Islam among the world and the French reader. Here were identified three main discourses of Islam - "Secular Islam", "Islam as the religion of its roots" and "Islam as a way of life". The materials of this paper may be interesting and useful for those who are interested in French literature of the postcolonial period and religious studies.

Key words: postcolonial novel, discourse, Islam, literature, religion

#### 1 Introduction

Postcolonial French literature is a production of culture that had the influence of the imperialistic process and emerged from the zone of colonial influence. This literature appeared after the destruction of the colonial world, under the conditions of the formation of independent national states and the choice of identity.

The problem of the postcolonial French novel does not have an independent field of study. Both in French and Russian works, this topic is considered as a section of studies devoted to the French-language literature of Maghreb, which was studied at different times by Auguste Viatte, Charles Bonn, Progozhin, Boruyeva (Viatte, 1980; Bonn, 1985; Progozhina, 2001; Boruyeva, 2015).

The theme of Islam as the culture-forming religion of the Maghreb countries (former French colonies) and the religion that ranks second in France in terms of the number of believers, comes to the fore not only for French culture, but for the whole world literature. Postcolonial French literature, as an artistic reflection of reality, becomes a kind of prism through which the world literature can look into the Islamic world. The image of Islam in postcolonial French literature is mediated, this image was refracted in the individual creative vision of the author's world, but it is this image that forms the image of Islam among the world and the French reader. Despite the relevance of the topic, the problem of the discourse of Islam in the postcolonial novel has not been investigated. However, in Russia and France there are humanitarian studies devoted to the place and role of the Islamic factor in France. This problem was dealt with by researchers Ponkin and Boyer (Ponkin, 2005; Boyer 2006).

The purpose of this article is to look at how the theme of Islam unfolds in the French postcolonial novels of Mustapha Tlili, Ahmadou Kourouma and Yasmina Khadra.

## 2 METHODOLOGY

To solve the research problem posed in the article, we use discourse analysis. Discourse analysis, used in literary criticism, is a complex approach to the interpretation of an artistic text, in which a textual analysis, working with formal and content characteristics of a text, is supplemented by an appeal to the semantic context of the work. In a fictional work the fictional is refracted with the real through individual author's perception and is embodied in the artistic discourse. In order to fix the discourse, you need to turn to the storyline, pay attention to the disclosure of the characters, the scene and what is happening.

### 3 Results

In the analyzed novels, we identified three different discourses of Islam:

- "Secular Islam";
- "Islam as the religion of its roots";
- "Islam as a way of life".

#### 3.1 The discourse of "Secular Islam"

The discourse of "Secular Islam" can be clearly traced in two of the investigated novels - "Glory of the Sands" and "The Attack". The main characters are Dick Casey and the successful doctors Amin Jaafari respectively. They do not abandon their roots and remember well their childhood associated with religious education and the fulfillment of religious orders, but their education and integration into European society changed their faith without shaking the essential foundations of Islam. On the pages of the novel "Glory of the Sands" we observe the reflections of Dick Keizy about the "God of Islam" as an Abstraction or Absolute: he does not call God as "Allax", does not pronounce appropriate religious formulas mentioning the prophet. The following quotation seems indicative in this respect: « I, God, Eternal, Bodiless, I, Something - Horrible, Almighty and Magnanimous ... I recognize you all as equal before Me» (Tlili, 1987; Karpanina et al, 2018). The nature of the reflections in this quote shows us that the main character, recognizing the existence of God, thinks of Him out of context traditions of Islam. At the same time, considering Islam as an integral part of his life, Dick Keizy contrasts himself with Islamism and jihadism as a painful form of Islam.

Belief in the God is opposed to mysticism and religious secrecy, faith is thought by Dick Keizy as a certain kind of rationality. «Your sorrows, your sorrows ... I will heal them, I will quench them forever with this calligraphy frozen like ice ...» thought Dick (Tlili, 1987). Islam as religion is designed to preserve the harmony of the individual or is the guarantee of the peace of mind in the vicissitudes of life's adversities, but it is not the mystical "Divine will", but the "radical therapy of the Supreme," a harmony that is rationalized and materialized in shamail (Progozhina, 2012; Villalobos Antúnez, 2001).

The discourse of "Secular Islam" is a form of rationalized Islam, in which the foundations of faith are proposed to be singled out from the cultural diversity of the Maghreb countries and adapted to the European cultural system. "Secular Islam" is the Islam of people assimilated in European culture: they received a classical European education or grew up in metropolitan cities and perceived European culture as their own. The discourse of "Secular Islam" in many respects repeats or, it might be even said, reflects the concept of Euroislam that exists in the EU among liberal Muslims, which says that Islam can not be Moroccan, Algerian or Arabic - Islam, as a world religion, basically contains universal values, which, according to Tariq Ramadan, the main theorist of Euroislam, must be preserved as a primary Islam. A Muslim living in Europe can not live strictly according to Sharia law, he must interpret them according to European norms. (Ramadan, 2003).

# 3.2 The discourse "Islam as the religion of its roots" $\,$

The discourse "Islam as the religion of its roots" is reflected in the novels "The Attack" by Yasmina Khadra and "Glory of the Sands" by Mustapha Tlili. This discourse reflects the process of finding its roots among migrants of the second and third generation. This discourse reflects the tragedy of the identity crisis that unfolded in post-colonial reality, when migrants and colonizers, crossing cultural boundaries, learned a completely different cultural identity (later theorists would call it "hybrid"), which naturally includes elements of culture from both the West and the East. These people have no roots but they have the right to choose their own roots, which raises the problem of lostness. Here the East does not accept the Europeanized "brothers by faith", treating them as traitors and for the possibility to return to their roots, it demands the refusal of Western values in the name of the so-called "truth". Also the European intelligence does not

want to put up with the presence of another value system in the European space (Khadra, 2003; Tlili, 1987).

The theme of lostness as part of the discourse "Islam as the religion of its roots" is well represented by Youcif Muntasser the hero of the novel "Glory of the Sands". Youcif was twice orphaned. His biological mother, a Bedouin, refused him; his foster parents were French who did not excommunicate the boy from his cultural roots and who brought him up. So, Youcif received a classical Muslim education in madrasah and European education. The tragedy of his hybrid identity was the tragic death of his foster parents, who were executed by Algerian nationalists. Then, as a teenager, he concentrated all his energy to break all ties with his roots: he leaves for America to become "different." «Now Yusif had such an American look. He was felt in everything: in clothes, in behavior, in a manner of speaking, reasoning» (Tlili, 1987). In our opinion, Mustapha Tlili consciously chooses America as a haven for Youcif, as an image of a melting pot in which the French and Algerian roots should be harmonized. But this idyll, like the policy of multiculturalism in Europe, was a rather fragile construction. Youcif had only one meeting with the Pakistani Haider and once traveled to Mecca so the fragile idyll collapsed: « On that day in Mecca, Youcif walked around the Kaaba wrapped in white cloth ... He circled round and prayed to Allah, the Lord of his childhood, with whom met again; he made his walk with the most sincere prayers, calling upon the Almighty to purge him from the contamination of the West» (Tlili, 1987). Ethnoconfessional identity, as one of the forms of rigid identities due to a stable confessional component, does not allow multiplicity in a cultural sense. So Yusif, making ritual walks around the Kaaba and praying to Allah, finds himself again. But even this finding himself in the religion of childhood does not become a way out for Youcif: he, as absolutely lost in this world, is wailing to Allah, and this is no longer a prayer, it is a full-fledged challenge to the power of Allah by the terrorist capture of the mosque in the heart of the holy city of Muslims. In the tragic history of Youcif's life, as well as in the tragic life of the heroine of the novel "The Attack", Sihem Jaafari, is seen the whole insolubility of the identity crisis which became the brainchild of postcolonial reality. Do the authors themselves see the way out of this situation? In our opinion, the authors do not see a universal way out of the current situation, because generally it does not exist, but the way out can hide in the personal tragedy of each hero, as it happens in the main characters in the novels "Glory of the Sands" and "The Attack". "You can return to normal life - if you can!" - says one of the police officers to one of the heroes of the novel "The Attack" after he finds out that his wife blew herself up in a children's cafe. Is it possible to return to life after this?

The discourse of "Islam as the religion of its roots" reflects the processes of re-Islamization (return to the religion of the ancestors) and the radicalization of Islam that occurred in connection with the collapse of the policy of multiculturalism and the acculturation of migrants into European civilization. This discourse is expressed, as we see from novels, in several planes - in a personal individual crisis and tragedy, when a return to the religion of ancestors is seen as a kind of return to oneself, so religion is seen as a support for experiencing difficulties. Culturally, a return to religion can be seen as an alternative to the dissolution of the globalization process in the monoculture. Politically, the appeal to religion is seen as a division of spheres of influence.

# 3.3 The discourse "Islam as a way of life"

The discourse "Islam as a way of life", reflected in Ahmadou Kourouma's novel «Allah is not obliged», represents Islam not as a culturally-forming religion that regulates the life of its parishioners and sets a certain character for the entire Muslim society, but as an image rather sarcastic about the traditional way of life of a Muslim. The first thing that attracts the attention when you get acquainted with the novel is the ubiquitous use of ritual prayer formulas of Islam through a comma with the established expressions of obscene lexicon «I do not speak like decent black Africans: shit! scum! Bastard! - And I say different

words in the language of Malinka, for example: faforo! (Faforo means: I swear by a member of my father, or just a father, or your father.) Or: Nyamokode! (Nyamokode means: fucking Valaha!)» (Kourouma, 2000). Regular repetition of these expressions through a comma throughout the novel at the end of reading creates a stable association between these concepts. We can only assume that if the author uses this method consciously, then in this way he wants to demonstrate to us that under the use of prayer formulas in everyday life, not the high religious meaning, but the principle of habit, can be hidden, while the use of obscene lexicon subjects the entire sacral to profaning the meaning of the prayer formulas «Allah Akbar!» «Bismillah» and others.

On the pages of the novel "Allah is not obliged" Islam is presented as a set of religious superstitions and a manifestation of ignorance. In order to emphasize the state of ignorance of Muslim society, Ahmadou Kourouma represents the Muslim population of the village in which the protagonist was born and raised, as a community with a syncretic religious worldview in which the norms of Islam are intertwined with ancient pagan and magical beliefs. So, for example, the main character, describing his life in the village, tells that he believes in the existence of past lives !)» (Kourouma, 2000).

Religious rites prescribed by Islam are performed by village sorcerers, and if villagers fall ill or die for no apparent reason, locals explain these events by the curse of a witch or sorcerer !)» (Kourouma, 2000).

We believe that in the depiction of religious ignorance, Ahmadou Kourouma uses the same reception of the association, linking elements of the ritual cult of Muslims with magical beliefs, as in the depiction of the prayer formulas described above. The author does not hide his attitude to the depicted religious ignorance, but expresses it in the tragedy of the main hero. So, from the story of Birahima, we learnt that his life was tragic: he is a child-soldier who shoots people from a Kalashnikov's rifle, and to be brave, he smokes hash. Birahima considers a mother's curse as the cause of his tragedy. From the story of the main hero, we learnt that Birahima was growing up since birth in a mother's hut, his mother suffered from the fact that her foot was rotting. As soon as Birahama had grown up, he heard from the old people of his village that his mother was not dying of illness, but she was devouring her own leg, because she was a sorceress. As soon as he found out that his mother was a sorceress, he did not return to the mother's hut any more and had not time to say goodbye to her before her death. This happened because of his belief that a respectable Muslim does not have the right to share food and shelter with the infidel. Later, the grandmother told him that his mother was never a sorceress, and he realizes the pain of losing the opportunity to spend the last hours of the mother's life next to her. «My grandmother explained that maman had been killed by Allah with just the ulcer and all the tears she was always crying. Because Allah up in heaven can do whatever he likes; he doesn't have to be fair about what he does here on earth. That day I found out that I caused grief to my mother, a great sorrow» !)» (Kourouma, 2000). This tragedy will poison the boy's attitude to himself, he can no longer stay in his native village, he leaves it and life leads him to the settlement of the lost children - the children of mercenary soldiers.

One of the leading themes of the discourse "Islam as a way of life" is the theme put forward in the title of the novel - the theme of theodicy (justification of evil). How to explain the presence of evil in this world? The author, in our opinion, responds with irony: «The Almighty is sitting in the sky, and he does not care, he does what he wants, and he does not have to always and everywhere be just in his earthly deeds»!)» (Kourouma, 2000). But how then can a Muslim continue to believe in the God?

Ahmadou Kourouma reveals to us the everyday philosophy of explaining the existence of evil in a world where Muslims continue to pray and bring more sacrifices to their God, because if the sacrifices and prayers that were already offered did not

help, then they were not pleasing to God, and God waits for other sacrifices.

The discourse "Islam as a way of life", as we could see, reflects the caricature of religion. The author simplifies the religious reality of Islam, reducing the need of a religious person to the desire to receive dividends from God.

#### 4 Discussions

Postcolonial French literature is a masterpiece that has undergone the influence of the imperialist process and emerged from the zone of influence of colonization. This literature appears after the destruction of the colonial world, in the conditions of the formation of independent national states and the choice of identity.

In the post-colonial world, not only the national cultures of the Maghreb countries are changing, but the former metropolis, France, is increasingly influenced by the increasing migration flow and Islamization. In French literature, French-speaking Arabs are becoming increasingly prominent, their novels receive prestigious European literary prizes, they raise the problems of the inconsistency of the policy of multiculturalism. It is impossible to ignore these phenomena - they need to be studied, for the reality of the modern world indicates that the meeting, the dialogue of cultures, their peculiar metisation, interaction and mutual relations are continuing. These processes can not be stopped any more, which means that it is necessary to attest to them as objectively and fully as possible.

#### **5 Conclusion**

Summarizing our article, we can note that in the postcolonial French literature there is no single discourse of Islam. In the literature we analyzed, we identified three possible discourses: "secular Islam", "Islam as the religion of its roots" and "Islam as a way of life". The religious discourse of the French-language literature is related to the "nomadic" theme and reflects the integrating and disintegrating functions of religion in the process of adapting the wave of migrants. It can also be noted that the use of the discourse of Islam in postcolonial literature by authors is often used as a means of attracting public attention for literature recognition.

As we could observe in the analyzed novels, the authors through the heroes show that the postcolonial character of the francophone world freed man from religious identity by a regulated tradition and society. The heroes of postcolonial works themselves construct their identity at times in opposition to the proposed options by social reality.

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#### THE EDUCATIONAL FUNCTION OF THE TATAR CHILDREN'S JOURNALISM

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Abstract:The mass media have a strong influence on the formation of children's minds. Journalism for children performs a number of functions. Publications for children should act as socially responsible institutions of society, performing the function of socializing the individuality. They should not moralize, act as mentors, but they must become true friends. Only in this case, journalism will help the child to open himself up, to develop, to fulfill wishes and fantasies, to become adult, to learn. Children's journalism in the Tatar language emerged in the early XX century. For quite a short time, it was able to find its direction and principles. Children's publications in the Tatar language have chosen a suitable, non-assertive, but the right style and tone of communication with readers. Tatar newspapers and magazines for children stand as a guard over the safety of childhood, protecting it from destructive forms of behavior, help spread the humanity and harmony in society. At the same time, modern Tatar journalism for children could play its role in preserving the nation, its culture and language.

Key words: mass media, children's journalism, Tatar journals, educational function of journalism, journalistic functions.

#### 1 Introduction

The functions of journalism in the modern world are revealed to everyone in their own way and everyone understands and perceives them in different ways. In journalism of the beginning of the XXI century, special attention is paid to two of them - the function of informing and entertaining function, which sum means the dissemination of information through entertainment. In journalistic science, such actions are usually called an infotainment (White, 2003).

At this point, it should not be left unnoticed the opinion of Professor Ya. Zasursky, who believes that even if journalism entertains, it should not prevent people from preserving universal human values. He wrote that under the current situation, when schools are in crisis and educational, pedagogical and analytical roles of journalism are so important.

There are ideals, thanks to which journalism is alive: it is humanism, protection of civil rights, humanity. However, in the modern world the journalist is primarily busy making money. By the way, study of educational role of the periodical media, radio, television and the Internet is not a popular topic today. The analysis of journalistic activity and media systems in general is aimed mainly at increasing the circulation, increasing the number of readers, thereby expanding the opportunities for advertising and profit.

Nevertheless, the educational function should remain one of the basic principles of journalism. Especially when it comes to children's media. As a social phenomenon, educational activity exists from the beginning of human society. Among the journalists, many people aspire to spread humaneness and kindness with their articles in the world. At the same time there are authors directly engaged in writing for children - children's writers and poets, children's journalists.

Every child is a unique person. Every child is worthy of respect for his personality. In education, a personal, individual approach is necessary.

# 2 Methodology

Based on the nature of the material of the research and the aims of the work, the descriptive, comparative, historical-comparative methods, logical analysis, the system approach, retrospective analysis and others are widely used in philology.

The scientific and methodological basis of the research was the legislative acts, the work of homeland and foreign scholars in journalism, linguistics and literary criticism, as well as works on pedagogy and sociology.

The methodological basis of the research was made by the works of foreign and homeland scientists (Lowery and DeFleur, 1988; McCombs and Shaw, 1972; Buzin, 2012; Ilana, 2016; Miel, 2008; Vologina,2011; Kohanaya, 2013; Metlenkov, 2018; Rudenko, 2003; Garifullin and Mingalimov, 2015; Sabirova et al, 2015; Galiakhmetova, 2004; Zayni and Guseinov, 2016; Villalobos Antunez, 2016).

The empirical base of the research was printed media in the Tatar language, official statistics, media sites.

#### 3 Results and Discussion

Despite the fact that Tatar children's journalism emerged at the beginning of the XX century, it managed to find its direction and principles in this short period. Truly, some of these principles have not been acquired, but mastered through the experience of Russian and foreign children's journalism.

Until the middle of the XVII century there were no children's books in the world. The first collection dedicated to children is the book "The World in Pictures" by Jan Amos Kamensky. And the first children's magazine was the "Leipzig Weekly Leaflet" (1772-1774) published in Germany.

Russia also started with magazines. According to historians of journalism, until 1917, at various times in Russia, about 300 journals were published for children and adolescents. Most of them were published in Moscow and St. Petersburg. When some of them were published without interruptions for almost dozens of years, others limited themselves to a few issues.

N. Novikov's journal "Children's Reading for the Heart and Mind" is the ancestor of children's journalism in Russia. It was produced in 1785-1789. In the form of an attachment to the newspaper "Moskovskye Vedomosti".

Magazines "Friend of Youth" (1807-1813), "Library for Education" (1843-1846), "Snowdrop. Journal for Children and Youth" (1858-1862) continued the ideas of the first edition: they printed poems, stories, novels, popular science articles on history and geography. On the one hand, it can not be said that the content of all these publications attracted children, because in them the edifying style was prevailed. But, on the other hand, the very fact of the appearance of children's publications has laid the foundation for the creation of not only literary but also journalistic materials addressed to children and adolescents (Ilana, 2016).

In the 60 years of the XIX century, children's journalism began to promote with a wider audience. In schools, children from different classes began to study, and therefore the content of children's magazines changed, as they sought to meet all the needs of children. In the best children's publications published works of famous Russian prose writers and poets, scientists and teachers, as well as translated works of art from foreign sources. All this played a special role in the upbringing of a modern personality, a young man worthy of his time.

Traditions of Russian journals were continued in Tatar children's journalism. Before 1917 (before the October Revolution), several children's editions were published in Russia. The most famous of them are "Children's Education", "Bright Road", "Education", "Children's World". Despite the fact that their programs were similar, the magazines tried to cover all aspects of the life of a young reader: publications on public life, culture, morality, science, recreation organization of that time can be found on the pages of publications.

the very first of them, was issued from January to May 1907, there were only 5 numbers. The magazine "Tanguage" was published in 1908 on two issues per month, printed in the printing house of the brothers Sharafovs. Since in 1908 the printing house was closed with the accusation of distributing anti-government books, the magazine also had to close down.

The magazine paid much attention to regulating of relations, establishing friendship between them, raising a child as an intelligent, educated, moral person. Published in Kazan for three years, the magazine "Ak Yul" managed to release 67 numbers (Kohanaya, 2013).

As it is known, the beginning of the XX century will be marked by the beginning of the appearance of the first Tatar-language newspapers and magazines and the formation of Tatar journalism. What was observed in children's journalism, when the functions of Tatar journalism were not yet formed? What principles were abstained by publishers, editors and authors of the first children's magazines in the Tatar language? Scientists note that they were issued in the literary and artistic direction, the readers were brought up aesthetic taste, served as a kind of a tool for knowledge of the world.

In modern Russia, in Tatar, several publications are published for children: the magazines "Flame", "Sabantuy - name of the national holiday", "Rainbow" and "Silver Bell". Magazines are published in the city of Kazan, the newspaper is in the city of Naberezhnye Chelny.

The "Salavat kypere" magazine is positioned as a Tatar literary and art magazine for preschool and primary school children (from 3 to 12 years).

For children of secondary school age there is the publication "Sabantuy", which began to be published in 1924 in the form of the newspaper "Young Leninist". Since 1991, it has been published under the name "Sabantuy", and since the beginning of 2014 it has become a kind of magazine. The readership is children and adolescents aged 8 to 15 years.

For children of middle and senior school age, the journal "Yalkin" is published. In addition to professional journalists, the authors of the magazine are high school students and university students, they are included in the children's editorial board of the publication.

The weekly newspaper "Komesh kyngyrau" is the only newspaper for children in the Tatar language. It is addressed to children from 7 to 17 years old and their parents.

All these editions are issued under the supervision of JSC Tatmedia. (JSC Tatmedia is a company that united dozens of media, established in 2007 by the decree of the President of the Republic of Tajikistan after the adoption and entry into force of federal laws restricting the rights of municipalities to act as founders of the media. Today, the JSC includes 85 branches, which produce 99 newspapers, 16 magazines, 21 television companies, 13 radio stations are operating, magazines and newspapers are published in Russian, Tatar, Udmurt and Chuvash.) (Zayni and Guseinova, 2016).

The first two journals began to be published at the dawn of Soviet Russia, have gone a long way for almost 100 years. During this time, the ruling forces, the policy of the country, have changed, nevertheless, even in such conditions, children's publications have never changed their purpose.

And this goal is expressed in the desire to educate educated, educated, moral, hardworking personalities - people of the next generation.

What is happening today? In modern society, the value of real education is lost. For children, the fact of studying in paid well-known schools, universities, rather than getting an education, is sometimes higher. In such circumstances, it is not so easy to be able to disclose the meaning of concepts education, intelligence, to educate in adolescents the desire to possess these qualities.

It is gratifying that children's publications in the Tatar language try not to change the universal values. And on the paper version of magazines and newspapers, and on constantly updated websites of publications, the need for knowledge for the full realization of the personality is constantly emphasized.

But getting knowledge can not be an end in itself. It serves for something more meaningful, it helps to choose the right (where the ability and desire combine) for a particular person's profession, to become the best in this profession, to benefit society. There are a lot of publications in children's publications about the choice of professions, in which education is a necessary condition for its development.

Our society is in danger - the Tatar people are on the path of forgetting their own history, language, values. Tatar journalism is one of the ways to combat this danger. Especially in the realities, when the social language in schools is studied only at the parents' will, and therefore, is almost not studied (parents do not need additional disciplines), Tatar journalism can play its role of preserving the nation, its cultural symbols, language.

The media educates its readers. At the same time, the society educates its newspapers and magazines, radio and television. The society sometimes negatively affects the media, because market conditions claim that "everything is sold and everything is bought". It is this influence that gave rise to the so-called "tabloid press" in the post-Soviet media space. When there is demand - such publications or programs will always exist, since they have their own audience.

Unfortunately, adult media, whose audience is often children and adolescents, promote sexual freedom, the use of alcoholic beverages, the routine of crime, and often idealize criminals. Unpleasant anecdotes are posted, the fact of betrayal in the family rises, in the programs the authors delve into the dirty underwear of popular people, 14-15 year old girls tell without any embarrassment how many men they had...

The development of human society was not always based on positive developments. Negative, too, were, they passed from generation to generation, new ones were added to them. Therefore, society always struggles with them through invisible moral laws.

As the scientists point out, "the protective "belt" of culture in the media for children should be the guarantor of the safety of childhood, prevent destructive forms of behavior, promote the spread of humanity and harmony" (Vologina, 2011).

In the conditions of moral crisis in the society, issues of moral and ethical education in the family are especially important. After the 1990s, when hurricanes of "Reconstruction" went through the country, some moral foundations of the society also broke down. If in the Soviet era the education of the younger generation was carried out by the school, pioneer and Komsomol organizations, the post-Soviet period did not start talking about education at first. It was announced that the school is engaged only in education, and the family should be engaged in upbringing; children began to believe that such concepts as conscience, morality, kindness, humanism became outdated, self-centeredness developed, which was perceived as the only correct variant of the person's emotional development. Fortunately, such a period did not last long, rather quickly the society began to understand that misdirected or even nonexistent educational activity in educational institutions could lead to the collapse of society.

The language of publications, the language of communication with the child through newspapers and magazines receives a special significance. Children's publications in the Tatar language were able to find the right style and tone, because nothing could be achieved by the edification.

Even at such a young age, adolescents see, notice and understand everything, because they have an excellent tool for studying the relationship between people and development from the emotional side - the Internet. Something can be taught only if you look at things through the eyes of a child, if you speak his language.

A teenager is not a child, he learns to distinguish between good and evil. During this period it is necessary to familiarize him with the real life, supporting that only really educated, informed people are able to solve social tasks.

#### 4 Summary

Unwillingness or inability to distinguish between good and evil can lead to disastrous results. That's why children's and teen's publications should pay special attention to moral education. What does it include in itself? First, according to publications in children's magazines, a child from a young age should know what moral norms and rules exist in society. Secondly, children in journalistic materials, as well as in publications, see children like themselves as positive examples, on the basis of which a desire for morality is brought up.

On the other hand, children's publications reveal the negative aspects of our life, show their harm, poor influence on society, moral degradation with harmful habits. Such pictures of life in the media help the adolescent find the answer to the question "what should not be?" Develop a sense of disgust, a fear of such qualities.

With good ones we should take an example, with bad - a lesson. Here is the principle of the children's and teenage media in the Tatar language.

#### 5 Conclusions

Children and adolescent media can fight bad habits. They show what alcoholism can lead to, talk about the dangers of smoking, introduce the fate of people who took drugs. At the same time, magazines introduce children to interesting activities, talk about other countries, encourage them to travel, i.e. show that without bad habits the world is so beautiful.

Children's publications in the Tatar language are urged not to get lost in this complex world, to fight for their own happiness, to become active participants in the creation of a future society.

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# THE NATIVE LANGUAGE AS A SUBJECT OF A POETIC REFLECTION IN R. BUKHARAYEV'S LYRICS

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Abstract: Works of R. Bukharayev (1951-2012) manifesting the phenomenon of cultural frontier, have a special artistic nature that requires scientifically substantiated and adequate aesthetic estimation. On the basis of sonnet sequence "Almsgiving of the Native Language" included in collection "Kazanian Snows" (2004), the attempt to analyze semantics and peculiarities of "native language" concept functioning in artistic system of R. Bukharayev is conducted for the first time, which seems to be significant for definition on national and cultural identity of the poet who created his works in Russian, English, Hungarian languages and, at the same time, was no stranger to Tatar literature and culture. Methodical system of studying of works created on cultural boundaries and externalizing new forms of "hybrid" identity is supported by theory of trans-culturalness developing in foreign and domestic literature studies. Authors established that in analyzed sonnet sequence, the native language becomes an object of cognition via multi-stage definition. Metaphorically cumulative chain is created; here, phenomena that belong to different rows of reality conceptualization collide and intersect. Concept of "native language" is disclosed via space constructing: an attractive image of home ground, opposed to outland, is created; persona of R. Bukharayev realizes its engagement to topoi of national culture (Kazan, Kaban lake, Bulka, Bulgary) and elements of national existence. Native language considerations are related to theme of memory - memory of a separate individual, memory of nation, people about their roots, about old times, about past, about history, Theme of native language is disclosed by poet in historical-cultural aspect. Without knowledge of ethnic group language, persona of sonnet sequence is trying to identify itself with it by other parameters: enters into dialog with poetry of G. Tukay, elaborates and continues his traditions on level of themes, motives, images. Command of native language is also handled by poet in existential sense, as internal fundamental need of individual. Ignorance of native language is handled as estrangement from one's roots, predestination for life without motherland, for disconnection with fellow countrymen. Authors established that position of sequence author is characterized by duality related to processes of his national and cultural self-identification. Obtained results are significant for understanding of artistic-aesthetic nature of literature manifesting phenomenon of hybrid identity

Key words: Russian-language literature, hybrid identity, identification, deixis, persona

## 1 Introduction

Personality and works of R. Bukharayev (1951-2012) had been attracting attention of critics and theorists of literature. Researchers endorse poet's lyrics into context of Russian literature. V. Bondarenko, while telling about Bukharayev's artistic fate, called him "a traditional Russian poet with Tatar blood" (Bondarenko, 2011). R. Sarchin draws parallels between R. Bukharayev & Tyutchev, Lomonosov, Derzhavin (Sarchin, 2011). M.I. Ibragimov, with regard to poet's works, use the concept of "multiple identification" (Ibragimov and Kamaliyeva, 2015). Novelty of out approach to poet's works study consists in its apprehension as phenomenon of cultural hybridity in its artistic-aesthetic manifestation.

Poet wrote in Russian, Tatar, English and Hungarian languages. While creating his works in Russian language, R. Bukharayev was, at the same time, connected with Tatar culture and literature, This connection is stipulated by cultural and biographic contexts (poet lived in Kazan in 1951-1974). Formation of poet's identity occurred in conditions of cultural frontier, dialog of Russian, Tatar, English, Hungarian cultures that finds its reflection in different forms in works of R. Bukharayev. According to own words of the poet, "until age of three I spoke Tatar only but later all my life had been translated in Russian: it became the language of studying, questions and answers, pleas, desires and self-expression in... poems, as sincere as possible. My thoughts, from brightest to darkest and most shameful, were also translated into Russian language...' (Bondarenko, 2011). On the basis of material of sonnet sequence "Almsgiving of Native Language" included in collection "Kazanian Snows" (2004), the attempt to analyze semantics and peculiarities of "maternal language" concept in artistic system of R. Bukharayev is conducted for the first time, which seems to be significant for definition on national and cultural identity of the poet.

Study of artistic-aesthetic nature of literature manifesting in inter-cultural dialog would allow to determine specifics of world's image created in it, characterize principles of works subject sphere arrangement, their genre, composition and stylistic peculiarities.

#### 2 Methodology

Theory and methodology basis of conducted study is composed by works of domestic and foreign scientists (Tlastanova, 2004; Bhabha, 1994), who develop trans-cultural model of artistic development that suggests "cultural diversity and universality as possessions of one individual, state on virtual belonging of one individual to multiple cultures" (Berry & Epstein, 1999).

Works dedicated to study of phenomenon of borderline as place of intersection of diverse semantic currents and birth of new senses had influence on conception of proposed study. Borderline performs structural functions of separation of friend from foe, internal space from external one. Yu.M. Lotman calls borderline the "hot" spot of semio-formation processes, a place of continuous dialog (Lotman, 1996; González & Villalobos Antúnez, 2016). In solution of set tasks, inter-cultural approaches are actual; their resulting quality is detected in a row of contemporary works (Birova, 2014; Smirnova, 2016; Kryłow, 2017).

#### 3 Results and Discussion

Sonnet sequence "Almsgiving of Native Language" is included in collection "Kazanian Snows" (2004); here the native language becomes an object of cognition via multi-stage definition, ascending to form of deixis¹. In sequence of R. Bukharayev is also created metaphorically cumulative chain, where phenomena that belong to different rows of reality conceptualization collide and intersect. In thoroughgoing enumerative and coordinative row of cumulation, characteristics related to language and different spheres of human existence act indiscreetly.

Concept of "native language" is disclosed via construction of space and time, first of all. Occurs process of grouping and integration of elements that form semantic field of image of home land, with which native language form not different but one syncretic reality. Images of garden, veg patch, wooden house with stive and apple become key images for disclosure of motherland concept: "... Garden, veg patch and house of wood / Stove with flames of red and blue / Apple, only one in whole garden... Listed topoi create specific axiological space opposed to the outland, where "there is no house, no garden, not even me" (Bukharayev, 2011).

While suffering from loneliness, poet feels keenly his disconnection from home country. A currant leaf becomes a symbol of lost home land, which persona is sick for: "Oh, is that you, my homeland, calling me / by ring of brook? My lips are parched. / I wish to breath the smell of early currant leaf / from evening bush..." (Bukharayev, 2011; Farkhoutdinov & Isavnin, 2017). Universal images and symbols: "White garden", "flock of apple-trees", "house of wood" and others acquire existential significance for persona and form philosophical and metaphysical layer of the text. They represent "space" way of thoughts as a special methods to overcome alienation from home land, disconnection from it, and restoration of connection with motherland is a necessary condition for harmonic existense of an individual.

<sup>&</sup>lt;sup>1</sup> Form of deixis gives a character of "External pointing gesture directed at named object" to "definition" and revive archaic type of identification of the phenomena and its name, so-called "bi-nominative" type of syntactic structure, "where there is no relation of subordination between determined and determining explication, e.g. There is no act of predication in its own sense and the law of complete identity" [13, p. 175, 176].

Native language considerations are related to theme of memory memory of a separate individual, memory of nation, people about their roots, about old times, about past, about history, Smoke plume, odors of ground are that personal, cryptic things for persona, returning it in its childhood: "But mystery of life became much clearer to me / I did not stamp my feet in earthly dust in vain: / They're back, my memories of childhood days / in streaming of smoke, in smell of ground..." (Bukharayev, 2011).

Return for one's origins, roots, reunion with motherland become the basis of a main lyrical event that unite 14 sonnets in integral whole. In the last sonnet, persona returns to home land but does not overcome the internal alienation from its country fellowmen ("Noise of mistrust and noise of evil-speaking / are greeting me in my home state", agonizing feel of guilt ("I walk my country as I would through stubble / I walk and eat the dust, my mind is blur" (Bukharayev, 2011).

The image of the road has both particular and metaphorical nature, marking the limits of human life journey: "I went being young and I returned being gray". Antithesis of memory and oblivion is projected in persona's spiritual way. On one hand, he states: "Mute memory is hundred times betrayed". On the other hand, particular marks of home nature and way of life, constantly present in hero's memory, are diverted beyond the limits of time and established in their absolute and eternal meaning: "... I close my eyes and I can see: white garden / and clouds are shining over apple-tree flock" (Bukharayev, 2011). Therefore, memory becomes the basis, which is not only joins separate episodes of a human fate, but also reunites broken organic and spiritual connections.

Theme of native language is disclosed by poet in historicalcultural aspect. Native language is "Kulgali's heritage", "speech of Mukhammedyar and Tukay", "verses of Derdmend". Sonnet sequence is threaded by intertextual connections with poetry of G. Tukay, first of all with poems "Native Language" (1909) and "National Melodies" (1909) that were translated by R. Bukharayev. For R. Bukharayev, same as for G. Tukay, native language is a supreme spiritual, moral and national, family value. In R. Bukharayev's poetry the family and ancestry motive also sounds but it is embodied in truncated form. For G. Tukay, speakers of his poetized native language are people of his person blood, his kin - father, mother, grandmother. For R. Bukhharayev, this family chain consists of one link only grandmother. Language is identified with a ball of yarn that following generations were unable to hold: "One more: a ball of yarn from fairy tale /rolled in our home at late time of the night / and me and grandma couldn't not hold it still: / Where did it roll, my little ball of yarn? / Oh, didn't you meet it on your endless ways, / Lost speech of home land?» (Bukharayev, 2011).

In sonnet 12, connected to poem "National Melodies", R. Bukharayev, following G. Tukay, gives his artistic-aesthetic interpretation of one of nationally specific concepts of Tatar culture: "Tatar grief is sweet. / Tatar seal is clean". But, while in "National melodies" poem an existence and subjective unity of "me" and "we"i is established, persona concentrates emotionally-psychological experience of national "we" in its inner world, in R. Bukharayev's work, subjective syncretism, inherent for his predecessor, is ruined. "Me" and "motherland" ("you") to which persona addresses questions, for not one but different integrities. Bonding function of national existence starts ti be performed not by language but by other things that are capable to express stable, existentially significant experiences and states of nation's mind in conditions of language loss: "And on Kazanian squares, from time beginning / night cries and moan before the dawn are heard / by ears - instead of native language" (Bukharayev, 2011). "Night cries, moan before the dawn" give birth to feeling of belonging to the national in soul of persona.

For R. Bukharayev, same as for G, Tulay, the native language is a word of pray, language of communication with God, so it is defined as "ornamental script of live Arabian writing", "ancestral speech", "gold-embroidering needle" that stitches "melted

ornament", "call of Azan" etc (Bukharayev, 2011).Peculiar catalog of images is created; their sequence is defined by principles of construction of artistic world as some specific synthetic whole, wheten namely the language plays a unique role: it connects past and present, micro- and macrossmos, reality of private and historical life.

Command of native language is also handled by poet in existential sense, as internal fundamental need of individual. Expressing his concept of underlying forces that direct the flow of human life, poet determined the native language as "word of love", "freedom of feelings and thoughts", "a voice of soul", "brook ringing", "sacred treasure" (Bukharayev, 2011), that lies on the bottom of Kaban Lake etc, All these comparisons speak about the fact that native language is a priceless gift for a poet that he, alas, does not have but without it he cannot think about a full-fledged existence for himself.

Significance of command of namely native language for an individual is disclosed on the background of command on other languages - Hungarian, English, Russian. Ignorance of one's own, native language is experiences as absence of "freedom of feelings and thoughts, as "life of a fool and blind", in general - as absence of spiritual and moral landmarks in the life. "Mukhammedyar, do tell me, who is friend, and who is foe?" (Bukharayev, 2011).

Speech is opposed by silentness, for which a man becomes doomed when deprived of his native language: "mute memory is hundred times betrayed", "to doom a heart for silence", "in silences of mutes I watch as cranes are melting in the sky", "through shame of eternal silence", "the silence of the old is honest, more than words" (Bukharayev, 2011). Ignorance of native language makes the poet "mute". Tatar language, which the poet did not command, is compared to fair streaming river that runs "somewhere over there, far away". Poet reproaches himself for disconnection from home land, native language, he considers his silence to be a shame.

Finally, the most horrible thing that ignorance of native language dooms a man and a poet for, is alienation from his roots, being doomed for life without home land, for disconnection from fellow countrymen. In analyzed sonnet sequence is reflected an agonizing effort of lyric subject to overcome this alienation: he is ready to essay an exhaustible spiritual task to "recover harmony of ornamental verses", to share everything that "homeless" soul "brought from the outland with it, / what it had heard, being breathless, in foreign parlances, in music strange" (Bukharayev, 2011).

## 4 Summary

Therefore, in sonnet sequence "Almsgivng of Native Language" the understanding of native language as fundamental origin of both individual-personal existence and family-social and natural-cosmic one is disclosed.

While thinking about native language as about the greatest national-historical and cultural value, the poet uses form of deixis. Principal multiplicity of formulations, definitions of native language, is such that each one of the, while highlighting something separate and particular, becomes a source of universal spiritual experience of persona.

Each one of "definitions" is independent and represents different origins and s[heres of life that have principally different content and different value: history, art, nature, individual memories of a man and memory of nation.

"Definitions" are connected to each other by isomorphism of strophical forms of sonnets included in "sequence", presence of magistralis creating sound, composition and stylistic rhythm of poetic cycle.

Theme of native language is projected at wide variety of rows of reality conceptualization, establishing symbolic correspondence between them,

#### 5 Conclusions

In sonnet sequence "Almsgiving of Native Language", dramatic experience of an individual, caused by "disconnection" from his national identification, conducted in form of language is reflected. Lyrical subject of R. Bukharayev is identified with empiric subject as individual conscience carrier. Along with that, this subject also acts as carrier of ancestral conscience of that part of ethnic group where change of its language constituent occurred. Without knowledge of ethnic group language, he tries to identify himself with it by other parameters: enters into dialog with poetry of G. Tukay, elaborates and continues his traditions on level of themes, motives, images; realizes its engagement to topoi of national culture (Kazan, Kaban lake, Bulak, Bulgary) and elements of national existence; unites himself with his country fellowmen by religious commitment. However, this tendency is opposed by other, connected with deep intimate and lyrical experience of language ignorance and unmastered alienation from country fellowmen.

This duality of author's positions, connected to organic engagement with his people, its history and culture, on one hand, and limitless alienation from it on the other, is significant for understanding of artistis-aesthetic nature of literature, manifesting the phenomenon of hybrid identity.

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# THE TAX FACTORS ASESSMENT OF INVESTMENT ACTIVITY OF THE RUSSIAN FEDERATION REGIONS

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Abstract: The article covers approaches to evaluation of investment activity factors in the regions of the Russian Federation; the major issues of the tax burden impact on investment activity indicators are considered by ranking regions in comparison with the average Russian indicators; the direct dependence of the regional situation in the group on its level of social and economic development is stressed; status of investment tax credits use in Russia is generalized; the conclusion about necessity to solve problems that do not allow to efficiently use it as a tool of fiscal expansion for the regional investment activity stimulation, is made.

Key words: regional economic development, tax burden, investment activity, capital investment, index of actual volume in capital investment, tax benefits, investment tax credit.

#### 1 Introduction

The effectiveness of the fiscal policy implementation largely determines the overall economic climate in the country and opportunities for regional development (Adigamova et al, 2014; Zaidullina & Demyanova; 2017). An important aspect of regional development is investment activity. However, crisis phenomena in the economy of Russia and the world as a whole have aggravated existing problems by uneven distribution of investment activity in the regions of the Russian Federation. The regions holding leadership for many years, weakened their positions in 2014-2015, and, on the contrary, the once-depressed

regions showed a marked increase. However, by the end of 2016, the situation returned to the past trend and the leading regions of investment for development, such as Moscow, St. Petersburg and Tatarstan, had returned their bargaining strength.

One of the most common opinions about negative factors affecting investment activity is the tax burden level. It is commonly believed that the higher the tax burden level, the lower the investment activity level (Orlova & Khafizova, 2014). The complexity of evaluating the impact of tax factors on investment activity is that it is impossible to reliably estimate influence of one or another tool of tax regulation. The tax burden level in the economy as a whole may be distributed unevenly across the regions, because the structural differences in the Russian Federation are very big. The economy sectoral structure of the region and its social and economic development can both strengthen and weaken the influence of the tax burden on investment activity in the region.

# 2 Methodology

There are many approaches to the identification and evaluation of investment activity of both regions and corporations in the literature. In this study, the regional investment activity is understood as a degree of intensity of investment processes in the region taking into account resource capabilities of regional economic system.

The level of investment activity calculated as the ratio of gross investment as a percentage of Gross National Product, and the level of the tax burden calculated as the ratio of tax revenues to Gross Domestic Product in the Russian Federation as a whole, are comparable.

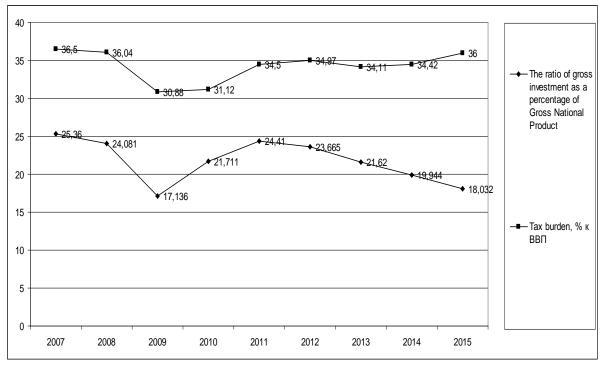


Fig 1. The correlation of the index of investment activity and the tax burden in the Russian Federation in 2007-2015

According to Figure 1, the trends are oppositely directed only in 2015. Until 2015, the correlation of investment activity and the tax burden has unidirected trends. It suggests that the impact of the tax burden cannot be regarded as a key negative factor of investment activity decrease.

According to the International Monetary Fund, the decreased investment activity is a problem typical for the post-crisis period (Dorling, 2015; Villalobos Antunez, 2001). In particular, in the developed European countries, the main factors of negative effects on the dynamics of investments were "economic policy uncertainty" (uncertainty of entrepreneurs in business expansion

prospects) and the high debt burden on business. According to experts from the International Monetary Fund, in most European countries, as well as in the euro-zone as a whole, changing of the standard deviation uncertainty index by one point caused a decrease in capital investment mainly by 0.03-0.1 percentage point. Higher borrowing levels also adversely affect the investment: increase in the share of borrowings in the capital structure by 1 percentage point reduced the ratio of investment to

the capital investment by 0.01-0.04 percentage point (Oehler et al, 2017; Safiullin et al, 2012).

The certain potential to increase investment activity can be realized at the expense of savings and accumulations characterizing the propensity to invest. We compare gross savings, accumulations and capital investment, for illustrative purposes, all three indicators are taken as a percentage of GDP (Fig 2).

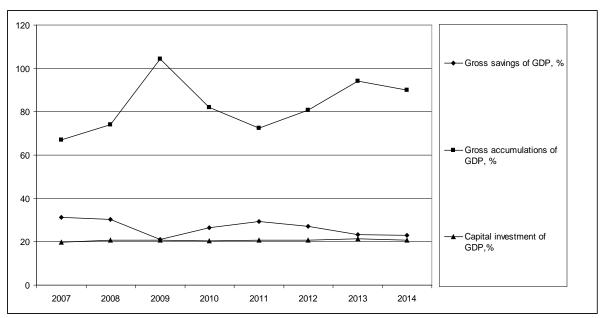


Fig 2. Dynamics of gross savings, gross accumulations and capital investment, % of GDP

Gross savings continue to decline from 2011, i. e. own resources of Russian companies are spent on consumption of owners and savings of people.

The sampling analysis of organizations about capital investment purposes provided by the Federal Public Statistics Service deserves attention. The main purposes of investment selected by respondents in 2014, were:

- replacement of worn-out equipment and machinery (69% of respondents):
- automation or mechanization of existing production process (50% of respondents);
- energy saving (41% of respondents).

Moreover, such purpose as increase in production capacity with expansion of nomenclature of production was 33% in 2014, whereas in 2005 it was mentioned by 38% of respondents. During the period of import substitution and competitive advantages of market access restrictions for foreign producers, such a tendency can cause concern (Alyakina and Khisamova, 2014). The structure of capital investment has not undergone significant changes, however, positive developments resulting from the current situation also were not observed.

One of the possible directions of growth in these circumstances should be the structural reform in the direction of high-tech investment (Koch et al, 2016). Not all domestic industries can compete in the world market (for example, consumer industry),

but there are a number of industries that can be growth drivers of the economy as a whole. These are defense industry and agriculture. The tax regulation issues should be analyzed from the point of view of the multiplier effect on the economy. The investment tax credit is a tool which potential is not realized. Its convenience and capabilities of pinpoint response are not used in full (Cincera & Veugelers, 2014; Doraszelski & Jaumandreu, 2013).

Turning to regional characteristic of investment activity level of the regions of the Russian Federation, it is possible to form four groups depending on the dynamics of the index of actual volume in capital investment.

To assess the regional investment activity, we use the indicator of the index of actual volume in capital investment.

IAVCI = CIb/CI \* 100%, where

IIAR is the index of investment activity of the region, %;

CIb is the total volume of capital investment for the reporting year in annual average prices of previous year;

CI is the total volume of capital investment for the previous year in annual average prices;

According to the Federal Public Statistics Service, in 2014, the Russian Federation constituent were distributed as follows.

Table 1. Distribution of the Russian Federation constituents by the level of investment activity in 2014 (in comparable prices;

as a percentage to the previous year)

Index of actual volume in capital investment	Number of the Russian Federation constituents	Name of the Russian Federation constituents
up to 99.9	39	The Republic of Adygeya, the Buryat Republic, the Republic of Ingushetia, the Republic of Karelia, the Chuvash Republic, the Karachay-Cherkess Republic, the Kamchatka Territory, the Krasnodar Territory, the Krasnoyarsk Territory, the Perm Territory, the Khabarovsk Territory, the Astrakhan Region the Belgorod Region, the Vologda Region, the Irkutsk Region the Ivanovo Region, the Kaliningrad Region, the Kaluga Region, the Kirov Region, the Kurgan Region, the Kursk Region, the Leningrad Region, the Magadan Region, the Moscow Region, the Nizhny Novgorod

		Region, the Novosibirsk Region, the Omsk Region, the Orenburg Region, the Oryol Region, the Pskov Region, the Ryazan Region, the Tver Region, the Tomsk Region, the Yaroslavl Region, the Jewish Autonomous Region, the Khanty-Mansijsk Autonomous District, the Chukotka Autonomous District
100.0-109.9	28	The Republic of Bashkortostan, the Republic of Komi, the Mari El Republic, the Republic of Mordovia, The Sakha (Yakutia) Republic, the Republic of Tatarstan, the Udmurt Republic, the Altai Territory, the Zabaikalye Territory, the Primorye Territory, the Stavropol Region, the Bryansk Region, the Voronezh Region, the Kemerovo Region, the Lipetsk Region, the Murmansk Region, the Penza Region, the Rostov Region, the Samara Region, the Saratov Region, the Sverdlovsk Region, the Smolensk Region, the Tula Region, the Tyumen Region without autonomous districts, the Ulyanovsk Region, the Chelyabinsk Region, Moscow, St. Petersburg
110.0-119.9	12	The Republic of Altai, the Republic of Daghestan, the Republic of Kalmykia, the Republic of North Ossetia-Alania, the Republic of Tuva, the Republic of Khakassia, the Vladimir Region, the Kostroma Region, the Novgorod Region, the Smolensk Region, the Tambov Region, the Yamalo-Nenets Autonomous District
120.0 and above	4	The Republic of Kabardino-Balkaria, the Chechen Republic, the Volgograd Region, the Nenets Autonomous District

According to the Table, the majority of the Russian Federation constituents have slowed the rate of its investment activity in 2014 compared to 2013. Herewith, the index of capital investment for 2014 in Russia amounted to 103.36. The situation in 2015 slightly improved. The total index of actual volume of capital investment throughout the Russian Federation as a whole

amounted to 104.70, however, the number of regions with the index of actual volume of capital investment up to 99.9 increased to 42

If you compare the data of Table 1 with indicators of debt of the Russian Federation constituents on the investment tax credits, you can identify its impact on investment activity.

Table 2 .The dynamics of debt on the investment tax credit to the budgetary system of the Russian Federation in 2010-2014, thousand rubles

Region	2010	2011	2012	2013	2014	2015
The Belgorod Region	•	-	-	-	7,500	5,500
The Komi Republic	98,559	300,000	300,000	250,000	50,000	-
The Khanty-Mansijsk Autonomous District – Yugra	-	-	-	98,531	146,848	146,848
The Tula Region	-	-	-	-	-	52,607
The Omsk Region	-	-	-	-	-	1,839
Total for the Russian Federation	98,559	300,000	300,000	348,531	204,348	206,794

According to the Table, we can conclude that the popularity of the investment tax credit is very low. For a long time, the only organization OAO Mondi SLPK has received the investment tax credit for corporate property tax which is the regional tax. In 2015, the investment tax credits for the regional part of the income tax were granted in the Tula and Omsk Regions, for local taxes - in the Belgorod Region and for federal part of the income tax - the Khanty-Mansijsk Autonomous District. None of five regions, which benefited from the investment tax credit, has not included in the group with dynamics of the actual volume index of capital investment of more than 100%. On the contrary, three of five regions were in Group 1 by the level of investment activity in 2014. It is noteworthy that in the Tula and Belgorod Regions there was an increase in industrial production in 2015 (Sabitova et al, 2016; Roschupkina, 2013).

The problems of application of such tax regulation tool as the investment tax credit are lied in their inaccessibility. From 2015, the changes were made to the Tax Code, which supplement the grounds for granting the investment tax credit. If, until 1 January 2016, one of the grounds was R&D implementation or technical upgrading of own production by the taxpayer, including those aimed at protecting the environment against pollution with industrial waste, in the current edition of the Tax Code the implementation of measure(s) to reduce negative impacts on environment provided for in p. 4 of Article 17 of the Federal Law dated 10.01.2002 No. 7-FZ "On environmental protection" is an independent ground for granting the investment tax credit. Such measures include: introduction of the best available technologies; designing, construction, reconstruction of water supply systems or other special constructions; installation of equipment to improve fuel combustion modes and other specific equipment. There is no point to expect significant growth in the

number of investment tax credits, because the growth of R&D is problematic under conditions of limited investment resources (Ernst et al, 2014; Lokshin and Mohnen, 2012).

# 4 Conclusion

The calculations show that the investment tax credit allows to attract financial resources at a lower rate compared to the commercial credit, however, the administrative complexity of the investment tax credit and interaction of public authorities with the taxpayer in the process of its granting, make slow its using.

According to a survey of companies that are members of the Russian Union of Industrialists and Entrepreneurs about the effectiveness of the public support, the investment tax credit is not used due to absence of grounds for obtaining the benefit (41.8%). One of the possible directions of growth in these circumstances should be the structural reform in the direction of high-tech investment. Not all domestic industries can compete in the world market (for example, consumer industry), but there are a number of industries that can be growth drivers of the economy as a whole. These are defense industry and agriculture. The issues of the investment tax credit granting should be analyzed from the point of view of the multiplier effect on the economy. It is needed to separate the order and terms of granting the investment tax credit for R&D and innovation, as well as by industry. The investment tax credit is a tool which potential is not realized. Its convenience and capabilities of pinpoint response are not used in full. The administrative barriers and unwillingness of taxpayers to overcome them because of poor financial effect significantly restrain its use.

Summing up, it is necessary to underline once again that the investment tax credit plays a very modest role in the stimulation of investment activity of the regions, despite its capabilities.

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# THE TRADITIONAL FIELD OF FUNCTIONING OF THE REGIONAL HIGHER SCHOOL AND DEVELOPMENT OF A PARADIGM OF ITS DEVELOPMENT (ON MATERIALS OF THE REPUBLIC OF TATARSTAN)

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Abstract: This article was prepared in part of research project No. 16-06-00062, supported by RFFI. The subject of the research is the analysis of the paradigm of RF higher education development in the system of regional field of functioning and its compliance with the current and future needs of the emerging innovative landscape. The main emphasis in the work is put on the understanding of the educational potential of regional systems and identifying ways of movement of financial and information flows in the field of science and higher education, taking into account the regional specifics of the traditional field of functioning of higher education and the specific features of the organizational and economic development of the ritriorial systems. In the framework of the article the methods of generalization, descriptive analysis and synthesis of scientific information resources, including research of foreign and domestic authors – experts in the field of development of the higher education system were used. Personal experience in the analysis and evaluation of tools and mechanisms of development of the educational environment was used. The main conclusions of the study are scientifically reasoned conclusions about the fact that the process of reprogramming the educational environment in Russia should be based on the formulation of technology of constant updating of training courses, which minimizes their delay in responding to changes in the realities of science and innovative sphere of national and global level. On the basis of the established system of evolutionary development of the educational sphere, a general picture of the regional innovation landscape is developed, which needs to be corrected and contributes to the solution of actual problems in the field of stimulating of innovations in the region.

Key words: Higher school, reproduction of traditions and innovations, regional innovative landscape, educational and methodical schemes, consulting of fundamental disciplines

#### 1 Introduction

Higher education and its resources now play an important role in the effective and successful development of both regional and national economic systems. At the same time, we can say that in the world community, focused on the formation of the information society, there is a stable trend of increasing the importance of this role of higher education and its resources. This means that higher education is no longer just a tool for the innovative development of national systems, but also a tool for their strategic development, which determines the success of social relations in all areas. This increase in the importance of higher education resources, in turn, suggests the need to coordinate and create effective mechanisms for regulating the development of the national/regional higher education system and increasing the public impact of its resources. This is especially important for the Russian Federation, which currently lags far behind the advanced countries in terms of development and efficiency of the applied use of scientific and educational potential of higher education, which, accordingly, does not allow it to take a worthy position in the world markets and complicates the development of its economic system.

Higher school is just one of the institutions of public life, the activities of which are closely intertwined with the activities of other public institutions with their own guidelines and trends of development (Wu, 2014; Tuan, 2017). Consequently, the study of the features of higher school development requires understanding of what logic of development these public institutions have, as well as how the interaction of society and its institutions happens with the system of higher school in its development and use of its resources. The analysis of this kind is complex, difficult to structure, but at the same time it is essential for improvement of the efficiency of the use of higher school resources, because it allows you to understand correctly and in more detail what society wants to get from the higher school and what it is ready to provide for its development.

The effective development of higher education and the creation of mechanisms for its regulation is complicated by the fact that there are certain conflicts between the interests of different social institutions and the interests of the higher school due to fundamental differences in value systems. However, regulation implies the impact of certain public institutions on higher education. It is obvious that the existing conflict of interest will be manifested in the process of regulation: society will actively impose its system of values on higher education, while higher education will actively resist it, which will be manifested not only in defending its own interests, but also in ignoring certain public needs.

Another objective aspect of the development of the higher school system and the complexity of its regulation is that the higher school is one of the structural links (institutions) of regional and national systems (Varshavsky, 1998; Villalobos Antúnez, 2016). Consequently, the regulation of higher school development and its transition to a new level are connected, first of all, with the change of views, values and professional training of individuals of society, which is obviously a long-term process, which involves more than one generation, and requires the creation of well-designed strategic development programs and their phased implementation.

Consideration of higher education as one of the structure-forming links between regional and national systems also means that qualitative changes in the structure of this institution necessarily lead to certain changes in the development of society (Willis, 1986). Therefore, in the formation of mechanisms for regulation and use of the potential of higher education, it is necessary to determine not only how certain methods of regulation will affect the development of the higher school, but also what (at the level of the "second wave") changes it will entail in the system of social relations and the system of social values. This article is devoted to the solution and understanding of the issues raised.

# 2 Methodology

To analyze the characteristics of the studied regional innovation environment, one can use the dichotomous triad method, highlighting the following dichotomies:

- traditional field-innovative field;
- institutional field-technological field;
- landscape field-network field.

The allocation of these field types allows to evaluate the scientific and educational potential of regional systems and to identify the ways of financial and information flows in the field of science and higher education.

### 3 Results and Discussion

Traditional education in the views of its potential and real consumers, as a rule, is steadily associated with the study of the fundamental foundations of knowledge and is not in real demand both because of a certain reassessment of the value of these foundations, and due to the significant obsolescence of their "fixed assets" - the scientific base that underlies the educational and methodological schemes and methodologies of bringing the student to the "cutting edge" of science and (Psacharopoulos, 1994). Also, the decline in demand for traditional education is largely due to the lag of provincial science from this "cutting edge", which is largely a consequence of the long-established regional isolationism as a set of ideas about the objectivity of the backlog (provincialism).

Such representations arise from narrow-minded associations of type "classic - tradition - irrelevance." However, Philistine consciousness ignores the fact that, firstly, the established classification of sciences is not yet a condition of their "classical" irrelevant or non-actualization, and, secondly, what is much more important, science as a whole should be considered as a complex of humanitarian technologies with a lagging effect, having a "long - term turnover".

On the other hand, the regional scientific and teaching corps, largely due to its spontaneous structuring, already reproduces in its own environment the Philistine approach to its goals and objectives, often "adjusting" the scale of objective values under the momentary activity of individual sections of the regional landscape of capital (Carayannis and Grigoroudis, 2016). This leads to the fact that in the relevant traditional training and research centers they teach soundly in fundamental areas, but what they know themselves, and not what you need to know at the level of modern requirements.

Thus, the most relevant area of application of efforts in the field of consulting of fundamental disciplines is the formulation of the technology of constant updating of training courses, minimizing their delay in responding to changes in the realities of science itself. This reprogramming technology involves:

- qualified assessment of modern scientific achievements, which requires connection to specialized information networks and to all information flows in the relevant scientific areas:
- re-conceptualization of the relevant information fields, taking into account the new information dominant and the reprogramming of the relevant consulting threads;
- elaboration of "joints" of fundamental disciplines, their mutual "breakthroughs" and on this basis forecasting of further development of the relevant scientific and applied directions:
- development of mechanisms for recognition by one science (discipline, direction) of potential problems within the framework of another one at the level of both applied and fundamental interaction, etc.

From a substantial point of view, the following trends that deserve careful study have emerged in the process of "mastering" the fashion trends of the West by Russian science and education.

The phenomenon of the initial development of simplified consulting in new industry areas (management, insurance, marketing, banking, reengineering technologies), followed by the complexity of the subject and the development of relevant research areas. In fact, within the existing information landscape, "sowing of seeds" was carried out to initiate the formation of a certain required information environment and infrastructure of "germination" of scientific schools in the future. Such a strategy was typical for the directions that had no direct analogues in Soviet science, and was based on the transformation of the existing conceptual apparatus of general theoretical disciplines in the domestic science of the corresponding profile.

Crafts began to develop quickly, to some extent using mathematics, which was due to the universality of its language (Kruss et al, 2015). Soviet probability theory schools were able to switch almost painlessly to the development and independent development of the formalisms, underlying the actuarial calculations of the theory of insurance, the theory of finance and risk management. Of course, over time, the effect of the phenomenon under consideration gradually fades.

Another trend was reflected by the phenomenon of the desire to preserve old scientific knowledge through reformulation and presentation in a new language, in generally accepted terms. The emergence of this phenomenon was stimulated, on the one hand, by the presence of points of contact in domestic and foreign studies on the related profile (for example, the theory of

management and Cybernetics), and on the other - the return through the "administrative markets" to the planned administrative regulators. Thus, the reference to the topics related to vertical integration and financial and industrial groups is a reflection of the significant development of the processes of vertical integration in the Russian economic system and the desire of some of the ruling elites to restore the old economic order (Freitas, 2013). It is interesting to note that examples illustrating this phenomenon can come to us from the West, so to speak, "entirely", as in the case of institutional economic theory.

It is obvious that in the framework of the developed innovation environment the considered phenomenology can have only local significance, while under the modern Russian conditions this phenomenology of spirit is a quite significant factor influencing the logic of development.

#### 4 Summary

In general, according to the levels of problems that stimulate innovation, in particular, in education, the following general picture of the regional innovation landscape can be offered.

1. Global problems - expected man-made disasters and natural disasters. The first set of problems sets the challenges of planning and ecology of the metropolis, in the broadest sense — from the rhythmology of urban networks to the recognition of risk consortia, necessary for the prevention and dispersion of street disturbances or to identify potential outbreaks of epidemics. More generally, it is a management task, but not of a structure, but of a habitat (it is, of course, an anthropogenic environment). Innovations in the field of" recultivation " of the environment should be connected, first of all, with the greening of harmful chemical industries, and in the future-with their removal from the places of residence of people.

It is necessary to highlight the global security problem in connection with the generally recognized assessment of the activities of a number of international organizations as terrorist. In this regard, education itself acts as a humanitarian anti-Terror technology (Brovkin, 2018). The task of education in many ways is the involvement of large masses of the population in the system of values, excluding attempts on life, rights and freedoms of the individual.

- 2. State reforms these are, first of all, problems of management, i.e. optimization of management structures at all levels and branches of power. The most important part of the management reform should be the optimization of the management of the state's provision of compulsory social services to the population (health, law enforcement, housing, transport, pensions, etc.).
- 3. The relationship of the type of "federation -region". Traditional innovations in servicing of functioning clusters will be complemented in connection with the problems of the first group. The latter act here as the problems of ecology and safety of road and air transport, going into the field of both humanitarian problems and purely technical requirements. Also, the most important problem is the depletion of regional energy resources of the Republic of Tatarstan and, as a result, the collapse of the remaining "sovereignty-forming programs". This will entail both the search for a substitute in the emerging information vacuum and the ever-increasing release of labour and intellectual resources. In this regard, the role of innovations in the field of division of powers between the region and the Federal center, humanitarian technologies to change the structure and improve the efficiency of the labor market and improve the management of migration flows.
- 4. Humanitarian problem. With sufficient share of confidence it is possible to express the idea that the state policy in the field of control over the gene pool of the country currently involves two main components: 1) selection of the most active parts involved in the process, managed by the network management, and 2)

control over the remaining part through government control, exercised through traditional state institutions. In accordance with this policy (in a number of aspects objectively reflecting the self-identification of Russian citizens), the main innovation flows will also be divided: the classic "human rights" will be improved mainly within the group 1), while for the group 2) social guarantees will be at the forefront. Moreover, humanitarian technologies will be increasingly used as instruments in the latter case.

#### 5 Conclusion

Relying on the presented arguments and axioms, it should be noted that the regulation of the process of development of higher education and the use of its potential is a rather complex process that requires significant resource costs. However, this should be seen as a necessary condition for the intensive development of society, the formation of progressive views and the creation of prerequisites for a real economic, political and social recovery of the national economic system. Higher education should not develop "on its own" — it is a public institution, and therefore its functioning should be focused primarily on the public interest. At the same time, higher school, like any other system, according to the law of energy conservation, is selfish, i.e. internally it strives to realize its own interests, which, ultimately, manifests itself in the form of development of "science for the sake of science itself " (Gunasekara, 2004). However, such principles of functioning of science do not allow to speak about it as socially significant, which in the long term can lead to a systemic collapse of higher education within the national system. This, of course, is undesirable both for the higher school itself and for the society, which in this scenario is deprived of the tool of intensive innovative development, which is necessary in the conditions of limited resources and increased global competition. Therefore, external regulation of the higher school and its adaptation to the public interest are necessary within the framework of the strategic development of national economic systems. And the creation of adapted tools for its development in accordance with emerging trends in the global/national/regional environment is a necessary condition for the effectiveness of development not only of the educational environment, but also of the economic system as a whole.

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# VERBALIZATION OF THE OPPOSITION "YOUTH – OLD AGE» IN RUSSIAN AND GERMAN FOLKLORE

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Abstract: The problem of the correlation of the members of the opposition "youth - old age" has been relevant for a long time for many researchers, which is largely due to the socio-discursive basis of the myth concepts "old age" and "youth." This article is devoted to the linguistic peculiarities of the realization of the folklore opposition "youth - old age" on the basis of proverbs of Russian and German nations accumulating folk wisdom and fixing the traditional national picture of the world. The main methods of research were the method of special selection of folklore material, the multiple etymology method of M.M. Makovsky. In addition, methods of quantitative, descriptive, linguocultural and comparative analyzes were applied. In the course of the study it was found out that the labeled member of the opposition is its second term - "old age" - because of the appearance of traces of the archaic ancient ritual for old people - "farewell ceremony "to kingdom come", information about which is almost absent from the collections of modern parpoemias. The rite was accompanied by rituals associated with the transition from life to death and then again into life ("second birth"). The etymological data of the basic concepts of the dichotomy is presented, the final classification of all proverbs according to the thematic groups with a total of 14 is compiled, the discrepancies in the number of paroemias is analyzed, the uneven filling and total lacunarity of some thematic groups are noted.

Keywords: opposition "youth - old age", life, death, farewell ceremony "to kingdom come", ritual, subject classification.

#### 1 Introduction

The problems of studying the national proverbial pictures of the world, the reflection of universal concepts in them and certain specific features of the native speaker are among the main issues of modern linguistics. Proverbs accumulate the wisdom of the people and fix the traditional picture of the people's world (Ibrahimova et al, 2017; Fattakhova et al, 2017; Bochina, and Adamka, 2015; Zamaletdinov, 2010; Mieder, 1992). However, each society has its own system of ideas about reality, its own view of the world, a special type of national identity and national character (Tulusina et al, 2016).

The problem of the correlation of the members of the opposition "youth - old age" has existed for a long time, which is more connected with the sociodiscursive basis of the myth-concept "old age", analyzed in our article along with the myth-concept "youth". The keywords are lexemes with the root стар- (old) and their derivatives, as well as бабушка; молод-, мал- and their derivatives; дитя, детство; der Alte, alt, die Jugend, jung, der Junge.

# 2 Methodology

The method of a special selection of paremiological material from Russian and German proverbial collections (Dal, 2004). and the method of etymological analysis that plays an important role in restoring the original values of the folklore units we study (Shansky and Bobrova, 2004; Fasmer, 1964).were used as methods for analysis. We also used the material of M.M. Makovsky, where the author, using the method of multiple etymology, showed that one and the same value could be expressed by several metaphors (Makovsky, 2014). In addition, methods of quantitative, descriptive, linguocultural and comparative analyzes were used.

# 3 Results and Discussion

# 3.1 Etymological analysis of paremiological units

The etymology of the word young (Common-Slavic) is not established in some Russian etymological dictionaries, for example, in the dictionary of V. Dal. More preferable is the interpretation of mold (>young after the development of pleophony and rejection of the final reduced) as an infix

derivative (infix - 1 -) from the same stem (med / met-) as the word throw out. The initial value is "newborn" ("thrown out" of the womb) (Dal, 2004).

According to the dictionary "Alle Sprichworter" the lexeme young is akin to the lexeme of anc.Prus. maldai «young man», maldian «foal», maldunin «youth», anc.Ind. «soft, gentle, meek», Greek. soften, loosen, Lat. mollis (from \* moldvis) «soft», Arm. melk «pampered, listless, weak», anc.Ir. mäldash « gentle, pleasant», anc. Eng. «meltan», (melt, liquate). Along with \* meld- it was \* meldh-, copm. anc.Ind. mardhati, mṛdhati « to fall, weaken », Greek. «pampered, tender», Goth. mildeis «meek» The ancient words stem ending with -n is represented in \* molden- (see « infant », anc.Prus. maldenikis "child".

old – i.e. – sta-r(o)- («big», Com.Slav. – star, star «old », o.sl. – old.

The word "old" is known from the Old Russian era (XI century), borrowed from the Old Slavonic, where the forms «old», « old » date back to the common Slavic root star, star and further - to i.e. based on sta-r (o) -. The following words are of the same Indo-European origin: Nor. storr ("big"), anc.-Ind. sthira ("strong, firm"). Related words: ukr. Old, Slovak. stary. Derivatives: the old man, the old woman, grow old, outdated, old age (Shansky & Bobrova, 2004; Alekseeva & Chernov, 2017).

Etymological Dictionary of German under the editorship of M.M. Makovsky gives the jung for "young". Life in ancient times was portrayed in the form of a thread or hair, where knots (childhood, juvenility, youth, old age) were tied; as they were unleashed, a person approached death (comp. ind.eur. \* jeu-"binden", "trennen"> "jung", comp. German jung "young," Ind-Aryan jungha- "hair," hat. ug "death" (ind.eur. \* jeu- "unite, tie", but also "untie, disconnect").

The German jung "young" is correlated with Rus. 10r (area of sunshine, warmth, flowering), and on the other hand - with lith. jega "power" (the unity of the universal Alpha and Omega). The "rejuvenating" force of fire is also taken into account (this motive is widely represented in folklore): i.e. root \* jeu- "bind, bind, weave" can relate to the flames. Comp. semasiological parallels: Indo-Aryan. kora is "young," but i.e. \* ker- "to burn"; Rus. " young ", but English. smoulder "smolder", "quietly burn." Water also rejuvenated: comp. Eng. yung is "young," but i.e. \* au - / \* eu- "water" (Makovsky, 2014).

Alt "old", comp. anc.fr. ald, Dutch. oud, goth. alþeis. When the pagans left the camp, they left the old people behind. Comp: Germ. alt "old", but i.e. \* el- "fremd". Comp. semasiological parallels: lat. vetus "old", but i.e. \* suet- "alone, apart, by oneself"; Rus. старый, but anc.ind. tar "old"; lat. senex "old", but lat. sinere "to leave", anc.Eng. èald "old", but Eng.dial. led "extra". In a number of cases, the old people were simply expelled from the clan: comp. Lith. aldinti «hinaustreiben». "Old" can be correlated with the concept of "weak, sick, defeated": comp. Frisian. gammel "sick, weak," irl. gamal "fool, feeble-minded"; anc.ind. gam "sterben, vergehen" (Makovsky, 2014; Villalobos Antúnez & Ganga, 2016).

The end of life (compare the Latin letum "death") was considered in ancient times as a continuation of its beginning (aldr "Leben"); Life and Death were conceived accordingly as the unwinding and winding up of the divine Nodes, and the totality of Life passing into Death and Death passing into Life were considered as the divine Wholeness.

Consequently we consider, the i.e. \* al- , \* el- "schneiden", "biegen, drehen" (comp. Lith. eldijà "shuttle", i.e. \* el- "sich rasch bewegen", Swed. eldr "fire": the burning Fire-Soul as a symbol of the entwinement of Life and Death and as the personification of the soul of the Ancestor, as a symbol of the lower light and the upper light, comp. lat. altus "high, upper",

but also "bottom, bottom; deep". The integrity of the circle "life-death" and "death-life" was conceived as Struggle (compare el, joll "Streit"), as Climbing the "ladder to heaven": comp. Hit. ila (n) "ladder (the movement of the Souls (compare anc.-ind. Álaya "soul") in boats (comp. ellidi "Schiff") by sea (i.e. \* lat-" liquid "," weaving of water ") (Makovsky, 2014).

#### 3.2 Classification of Russian and German proverbs,

## verbalizing the opposition "young - old"

The Russian and German proverbs included in the opposition "young - old", were subdivided into the following thematic subgroups:

- 1. Opposing the young to the old: A young person walks around the world, and an old person feeds the family; He nurturing small, can not see the old (If you haven't nursed a young one, you won't see the old one); The old grows old, and the young grows up; Young people are with toys, old people are with cushions; The young man's mind is not strengthened; Young is green, old is rotten; The older, the wise; and the younger, the more precious, They do not die because of old age, they do not live while they are young; Old age is not joy, and youth is not lucre. The youth diligence, of the age honor; The Young Act, / The Old Council, / The Manner Mut / Are always good; The ancients to the council, The boys to action; In youth sacks, aged skirts; Youth is intoxication without wine, old wine without intoxication(25% of Russian proverbs and 7% of German proverbs).
- 2. Changes that occur with age: For the old to live only a century to last; for a small life only to be afraid; for even living to enjoy (Living with an old person is to be in a debt all the time; living with a young is to drudge; living with an age mate is to be amused); Young is thin, old is stiff and the middle age is one day only); Zehen Jahr ein Kind, Zwanzig Jahr ein Jüngling, Dreißig Jahr ein Mann, Vierzig Jahr wohlgetan, Fünfzig Jahr stille stahn, Sechzig Jahr geht's Alter an, Siebzig Jahr ein Greis, Achtzig Jahr nimmer weis, Neunzig Jahr der Kinder Spott, Hundert Jahr genade Gott; Junger Arzt, höckriger Kirchhof; Alter schadet der Torheit nicht, Jugend schadet der Weisheit nicht; Alte Leute, alte Ränke, Junge Füchse, neue Schwänke; Wie die Alten sungen, So zwitschern die Jungen; Man findet so leicht einen alten Toren als einen jungen (3% of Russian proverbs and 26% of German proverbs).
- 3. Mind and experience are important for an elderly person, but not everyone succeeds in saving them: An old person is either smarter or sillier; He is old but not wise; Old and clever-profitable combination; Shoulders of the youth are stronger, mind of the old age is wiser; He is young by his age, but old by his mind; The mind does not wait for the beard; The young grows old and becomes wiser; the old becomes sillier; Young is useful at the battle, and old is good at the thinking. Alter hilft vor Torheit nicht; Alter macht zwar immer weiß, aber nicht immer weise; Alter Mann, guter Rat; Der Alten Rat, der Jungen Stab; Jung an Jahren kann alt an Verstand sein (20 % of Russian proverbs and 8 % of German proverbs).
- 4. Elderly people do not have good health: Roosters sit down on the roost, and old people lie on the sleeping ledge; Old people do not eat nuts, but porridge; Old age will come, and weakness will come; Old age does not come with good. Infirmity falls on the old person; Old age is not joy; There is no use in the old people; When I was young I flew; and now I became old and spend my time on the sleeping ledge, The child falls down the God makes it soft, the old man falls down the devil puts the harrow; Lie down and fall asleep! A good sleep will make you younger!; He was born small, grew stupid, died old he didn't know anything.— Alte Leute sitzen gerne warm; Old people have to take their strength out of the bowl; Old people, old skins; Wine Helps the old man on the leg; Worry makes gray hair And ages without years; Who ages, who colds (15% of Russian proverbs and 7% of German proverbs).

- **5.** The minds of the young people and the elderly people: An old person is like a baby, and the baby isn't wise; The older, the sillier; old fools are sillier than the young fools; Young but clever, old but silly, I/One is silver-haired but not wise; and another is young but controls everything. Young is green; old is rotten. The ancients must teach the boys; Youthfulness rewards in old age; What one desires in youth, one has in old age; Wild in youth / brings virtue in old age; Give birth young and do as an old age; Talking to a boy is well, silence more (8% of Russian proverbs and 12% of German proverbs).
- **6. Elderly people and marriage:** If you have a bad wife you will grow old, if you have a good one she will make you younger; The girl in the evening, the young married woman at midnight, and the hostess at dawn. An old woman who marries invites death to guests; A young woman with an old man is a wife by day and a widow at night; No woman takes an old man for God's sake; Marriage of the ancients is a loading letter to the gravediggers; how the money is will be found; Well advised children, of age bar (2 % of Russian proverbs and 12 % of German proverbs)
- 7. Elderly people do not want to grow old, many of them still feel young: Do as someone did in his young days; Old bones wanted on a visit; Grandpa is silver-haired, but still alive; The old soldier tries a lot; An old man is better than seven young men; He is old, but his soul is young; Youth is not a sin, but and old age is not a laugh. No one so old, who does not want to live another year, and none so young, who can not die today; Get old young, so you stay old for a long time; Some would be young enough if he did not have such an old face (8 % of Russian proverbs and 6 % of German proverbs).
- **8. Disadvantages of a young age:** A young prince isn't wise; Oh, poppy but green; a good man but young; The unripe grapes are not tasty, and the young man is not skilful; Green grapes are not sweet and a young man is not strong; The young mind is like the spring ice; You can't have your youth back and can't forger about your old age An age looks better than a youngster in front of him; Who does not honor age, / Is not worthy of age; Too young is a mistake that improves on a daily basis (11 % of Russian proverbs and 3 % of German proverbs).
- 9. Old women are dangerous: A horny old woman is the death of carnival play; Little talking ages the women; When old women dance they make a lot of dust; When the devil sits between two old women, it is pure arrogance; When an old woman dances, she makes a royal right to death; Young whore, old coupler; Young whores, old weathermakers. Young whore, old nurse; Young whore, old coupler; Young whores, old weathermakers (0 % of Russian proverbs and 11 % of German proverbs).
- 10. You can not be wasteful in your youth, since you need to save money and health for your old age: If you flaunt during your young age, you will starve to death in your old age; Save your money when you are young, spend your money when you are old!, If you wile away your youth you won't see your old age Young blood, save your good, poverty in old age does hurt; Debt, old age and death come unannounced into the house (8 % of Russian proverbs and 2 % of German proverbs).
- 11. Disadvantages of old age: Old people are stubborn, neither to people, nor to us; The wind will blow and then calm down, but the old woman won't calm down soon. Old people are strange: when it rains, they want to hay; Old man makes young woman joy like the flea in the ear; To build on old man is awkward; What the ancients sinned often repays the young; What grows old, likes to growl (3 % of Russian proverbs and 6 % of German proverbs).
- **12. Mocking at elderly people:** There are birds in the woods, there are girls in the chamber, and there are old women near the distillers' beer— The elders are deriding the boy; The boys rarely bring anything to the elderly; It is not child's play, so an old woman dances; It is not child's play when old people ride on sticks; It comes to him like the old woman's dancing; If an old

man dances, he makes a lot of dust (1 % of Russian proverbs and 7 % of German proverbs).

- 13. Youth is given only once, it is necessary to appreciate it: You can't be young twice, you can't avoid the death; Youth escort with youth!; You will not live for 2 centuries, you will not be young twice; Youth is golden time; Young is green should spend time cheerful (8 % of Russian proverbs and 0 % of German proverbs).
- **14.** Young people do not like too much elderly people care: Old people don't let young people live; Though crooked, but young, and old is straight, but rotten; Now do not ask the old, but ask the young one; Young does not believe the old oneThe old people died out they did not wait for us, the young people were born they did not ask us (7 % of Russian proverbs and 0 % of German proverbs).

#### 4 Summary

Classification of paremiological material in the amount of 74 Russian and 89 German paremias was carried out in accordance with the orientations of both cultures. Herewith 14 thematic groups were received. The most filled groups were the first four, but in different ways. There are more Russian paroemias in groups 1 "Opposing the young to the old" (25% of Russians and 7% of German proverbs) and 3 "Mind and experience are important for an elderly person" (20% of Russians and 7% of German proverbs), and there are more German paroemias in groups 2 "Changes that occur with age" (3% of Russians and 26% of German proverbs) and 5 "The minds of the young people and the elderly people" (8% of Russians and 12% of German proverbs).

There are no Russian paroemias in group 9 "Old women are dangerous" (0% of Russians and 11% of German proverbs), and no German paroemias in groups 13 "Youth is given only once, it is necessary to appreciate it" (8% of Russians and 0% of German proverbs) and 14 "Young people do not like too much elderly people care" (7% of Russians and 0% of German proverbs. There are full equivalents in both languages, especially in the group "The minds of the young people and the elderly people". In Russian proverbs the emphasis is on old age. In German paroemias we find direct opposition in the group "Changes that occur with age" like Junge Krieger, alte Kriecher; Junge Reiter, alte Bettler..

There is a different attitude towards the idea of marriage in the Russian linguistic consciousness compared to the German group, where many paroemias are about the prohibition of the old man to marry a young woman, because this can lead to early death. The German language also traces the idea that old women are dangerous, they become witches and enchantresses.

# **5 Conclusions**

On the basis of the comparative analysis of the proverbial fragment of the linguistic picture of the world around the concepts young and old in Russian and German languages, it can be noted that there are almost no paroemias about the ritual for old people - "farewell ceremony "to kingdom come" in modern collections of proverbs, but there are more paroemias about the wisdom and ingenuity of the elderly people, which eventually began to rule the society. The conceptual image of the compared proverbial pictures of the world is based on cultural and historical traditions; the verbalization of cultural attitudes in each language is based on images using the realities of traditional life, folklore, religion, the nature of each country.

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# WHITE-TAILED LAPWING (VANELLOCHETTUSIA LEUCURA) IN LAKE SYSTEMS OF SYRDARYA RIVER'S DELTA (CARTMA LAKE)

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Abstract: This article generalizes data of authors collected in course of birds count at Cartma lake, in period of 2014-2016. Distribution, quantity, ecology of white-tailed lapwing (Vanellochettusia leucura) is considered in details. White-tailed lapwing is a medium-sized wader; body structure largely resembles black-sided lapwing but the size is slightly lesser. At present time, on territory of Kazakhstan, the white-railed lapwing is nesting at wetland stations of middle and downstream (from border with Uzbekistan to North Aral sea), system of lakes in delta of Syr-Darya river, in the north part of Caspian sea. Quantity of white-tailed lawing on studied Cartma lake is determined in limits of 30-150 specimen; this is the result of season nature of countings, area of studied water body surface. A characteristic feature of this species is a peculiar voice, descriptively translated as "chetyre, chetyre" ("four, four" in Russian), increasing at approach to nesting sites. Analysis of special literature on ornithology of eastern site of Aral sea and lakes of Syr-Darya river delta showed that for two hundred years period, white-tailed lapwing mostly adheres to constant habitats. Nesting station is located in shore zone, at sandbars and isles,

Key words: Cartma lake, wetlands, white-tailed lapwing, distribution of avifauna, food specialization of birds, E.A. Eversmann.

#### 1 Introduction

During birds counting in 2014-2016, authors recorded distribution of 67 species of avifauna in limits of lake Cartma (Sihanova and Rahimov, 2016; Sihanova and Rahimov, 2017); grouping of ornithofauna in unit of upper classification-taxonomy range at level of bird taxons is shown in fig 1 (Sihanova & Rahimov, 2017).

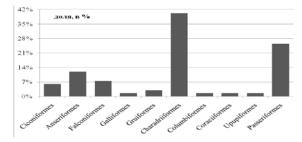


Fig 1. Proportion of avfuna taxons forming ornithocoenosis of Cartma lake (2014-2017).

According to Fig. 1, in lake system of Syr-Darya river delta, Charadriiformes represents more than 40% of avifauna population [3]. Dominating position in Charadriiformes structure is held by fauna of waders; in bird population of Aral sea and lake system in Syr-Darya river delta they represent one of major groups, both nesting and migrating and estivating. Seasonal distribution of shown classification-taxonomy range is represented by warm season, from spring to autumn. Comparatively larger species wealth among waders is characteristic for white-tailed lapwing Vanellochettusia leucura (Licht, 1823). Due to absence on information on distribution, quantity, ecology of white-tailed lapwing in contemporary period of recovering of lake system of Syr-Daryaa river delta in available literature, authors arranged scientific expeditionary visits on Cartma lake in period of 2014-2016 (Sihanova & Rahimov, 2017; Ryabitsev et al, 2014).

For Aral sea region (between Kuvan-Darya and Jana-Darya, old beds of Syr-Darya river downstream), white-tailed lapwing is mentioned for the first time in the work of E. Eversmann [4], Mediterranean endemic of Central Asia (Sihanova and Rahimov, 2017), nesting area of species lies by the border of Syr-Darya river downstream (Ryabitsev et al, 2014), rare endemic species of aquatic avant delta swamp ecosystems Asia (Sihanova & Rahimov, 2017).

White-tailed lapwing is a representative of Charadriiformes taxon, typical wader of medium size, met mostly in wetlands. Its voice is loud, screamy, reminds words "chetyre, chetyre, chetyre", may increase at approach to nesting station. Distribution of white-tailed lapwing in Kazakhstan is rather sporadic and includes limited areas of wetlands in desert zone; these are mostly the valley of middle and downstream of Syr-Darva (from state border with the Republic of Uzbekistan to North Aral sea), lake systems of Syr-Darya river delta, north shore of Caspian sea (Dolgushyn, 1962; Aye & Schwiezer, 2012). White-tailed lapwing builds its nests in shoreline, more frequently on sandbars and isles (Yudin, 1965; Mayr & Amadon, 1951; Villalobos Antúnez & Bozo, 2010). The nest itself represents a small notch or even surface paved by dry grass or branches of tamarix (Tamarix ramosissima). In general, shore zone of Cartma is a destination of choice for nesting and feeding of this species,

White-tailed lapwing can be sound at Cartma lake in warm time of year, from spring to autumn. Usually, lapwing shares the habitat with other waders; these are black-winged stilt Himantopus himantopus, collared pratincole Glareola pratincola. Shore zone of studied water body as habitat of stated three species may be divided in the following way (from shore to central part of lake): dry shore - collared pratincole, immersible shore - white-tailed lapwing, shore shelf - black-winged stilt (Sihanova and Rahimov, 2016; Sihanova and Rahimov, 2017; Eversmann, 1868; Ryabitsev et al, 2014; Dolgushyn, 1962; Okriashvili, 2017). This community is a result of trophic specialization, beak evolution and feet length. Sharpness, unrelenting attention and loudness of white-tailed lapwing are also significant; this is a signal at approach of strangers (human or animal) (Dolgushyn, 1962; Yudin, 1965; Mayr and Amadon, 1951) This property of white-tailed lapwing is especially useful for collared pratincole, a very trustful bird that may allow a man to approach for a close distance.

# 2 Object And Methods Of Study

Cartma lake is located in eastern part of North Aral sea (Aral area of Kyzylordinskaya region of the Republic of Kazakhstan); it functions in composition of coastal left-ahore lake system of Syr-Darya river delta. Water body was in drained condition from 1988 to 2009; short-term supplies of water in this period were caused by fragmentary increase of Syr-Darya river flow. Waterlevel stabilization of the water body begun in 2010. Maximum possible area of the lake is 14 km² (Sihanova & Rahimov, 2016; Sihanova & Rahimov, 2017). During bird-counting in period of 2014-2016, area of open water surface varied in limits of 5-8 km² (Sihanova & Rahimov, 2016; Sihanova & Rahimov, 2017; Eversmann, 1868).

At present time, the water-body experiences gradual reduction of open water surface due to activity of heavy reed bed (Phragmites australis), that move from eat shore in direction of central part of the lake, increasing area of growth zones every year (Sihanova and Rahimov, 2017). Withing year, leaves of hragmites australis, characterized by expressed evapotranspiration (Ryabitsev et al, 2014 Dolgushyn, 1962) serve as additional source of water mass reduction. Average depth of the lake is 1-1.5 m, maximum possible index is 2 m. Shoreline is slightly rugged due to plain type of relief, length of perimeter is 12-14 km (Sihanova & Rahimov, 2016; Sihanova & Rahimov, 2017; Eversmann, 1868; Ryabitsev et al, 2014 Dolgushyn, 1962).

Bird counts were conducted at daytime, at relatively warm and clear weather. Methodical basis of routed counts was composed of works of Yu.S. Ravkin (Ravkin, 1967), with correction for open location. Method: routed count, photographing and viewing of objects (Sihanova and Rahimov, 2016; Sihanova and Rahimov, 2017; Eversmann, 1868). It shpi;d be noted that transects were routed not only by habitual shore line; boar routes across the lake were also placed. Minimum allowable distance of

each route - 5 km, speed - 2.5 km/h, duration - 2 hours. Counter's equipment included field diary, field guide on birds of Kazakhstan. Optical means used included 8-fold binoculars and camera. At species definition were used field guides and reference books of V.K. Ryabitsev. (Ryabitsev et al, 2014). multi-volume edition "Birds of Kazakhstan" (Dolgushyn, 1962), as well as books of foreign ornithologists (Gavrilov & Gavrilov, 2005; Svensson, 2010; Wassink & Cocksdorp, 2015).

#### 3 Results And Discussion

Season dynamic of white-tailed lapwing quantity composition registered during bird counting in 2014-2016 may be traced in Table 2 below.

Table 2. Number of white-tail lapwing specimen at Cartma lake

No.	Counting season	Year of counting	Number of specimen
1.		2014	80
2.	Spring	2015	120
3.		2016	142
4.		2014	31
5.	Summer	2015	143
6.		2016	150
7.		2014	42
8.	Autumn	2015	36
9.	Autumii	2016	42

According to presented Table 2, lesser number of birds was observed in 2014, during summer counting (31 specimen) and in autumn season of 2015 (36 specimen). Maximum possible quantity of counted birds (1560 specimen) was registered in summer of 2016. IN general, increase of birds numbers in 2014-2016 was observed in spring (from 80 to 142 specimen) and summer season (from 31 to 150 specimen). Registration of autumn season birds shows quite another picture: 42 specimen recorded in 2014 and 2016, while in 2015 record shows 36 specimen. During counting is 2014-2016, this season was characterizes by general emasculating of quantity composition of white-tailed lapwing. Partial shallowing of the water body up to limits of reed growth zone, with further depletion of waders food base stocks due to drainage of shore zone soil may serve as the reason for this. This phenomenon should be studied in details. First, water body shallowing is a result of anthropogenic factor regulating of Syr-Darya river flow with increase of water pass into North Aral sea (+42 m by Baltic system) though Aklakskiy hydro-hub that provides flow of Cartma lake, as well as of natural process, evapotranspiration of Phragmites australis. Second, thick reed growths are bot included in habitat environment of Aral Sea region waders; here dominate representatives of Ciconiiformes, Passeriformes and duck hawk from Falconiformes taxon (Kovshar, 2012), Respectively, feed base of Cartma lake waders is limited by boarders of water body shore zone (littoral, sublittoral) beyond reed growth. Preparation of white-tailed lapwing to autumn migration and flying to wintering, matching terms of counting conduction is also significant.

In order to compare nesting and distribution of white-tailed lapwing in Aral sea region (Kazakhstan, east part), as well as trace changes in behavior of this species, a summary was composed on the basis of literary sources. With taking into account of the fact that E.A. Eversmann conducted counting of birds from downstream of Syr-Darya river in 1820 (Eversmann, 1868), presented summary covers an interval of approximately 200 years (Table 3).

Table 3. White-tail lapwing nesting and distribution nature in Aral sea region (Kazakhstan part)

No.	Publications	Nesting and distribution nature
1.	Eversmann (1866)	B (nesting)

2.	Bostanzhoglo (1911)	nm (mentioned in bird list in publication but not met)
3.	Zarudniy (1916)	MB (migration and nesting)
4.	Spangenberg, Feygin (1936)	M (migration)
5.	Dolgushin (1962)	B (nesting)
6.	Covshar (2012)	B (nesting)
7.	Berezovikov (2015)	B (nesting)
8.	Varshaavskiy (2015)	B (nesting)
9.	Out data (2014-2016)	B (nesting)

V.N. Bostanzhoglo, in his fundamental study, mentions white-tailed lapwing in general list of birds in region but notes that he did not meet it during counting (Bostanzhoglo, 1911). In publication of Ye.P. Spangenberg, G.A. Feygin, white-tailed lapwing in valley of Syr-Darya river and at east shore of Aral sea is marked by coding "M" - species met in location during spring and autumn migrations (Spangenberg and Feygin, 1936). Stated work is a result of lowland Kazakhstan avifauna study initiated by authors in period of 1924-1932, and it is rather possible that in that period white-tail lapwing was not nesting at studied territory.

While analyzing provided summary (Table 3) we may suggest that white-tail lapwing in general adheres to outlined tendency in distribution at east Aral sea region (Sihanova and Rahimov, 2016; Sihanova & Rahimov, 2017). We think that this circumstance may be connected with the statement that birds are extremely conservative at selection of habitat and have an extremely poor ecological adaptiveness in comparison with mammals (Sihanova & Rahimov, 2017).

#### 4 Summary

- 1. In territory of Kazakstan, white-tailed lapwing Vanellochettusia leucura is met in wetlands of desert zone, particularly in middle and downstream of Syr-Darya river valley; in lake systems of Syr-Darya river delta, including the studied object, Cartma lake; on the shore of North Aral sea and northern shore of Caspian sea.
- In period of bird counting conduction, 2014-2016, whitetailed lapwing was domination quantitatively in summer season of 2016; the lowest number is registered in summer of 2014.
- Comparative analysis of literature on ornithology of Aral sea region in Kazakhstan had shown that white-tailed lapwing maintained its nesting areal and generally adhere the distribution stated in cited sources.

# 5 Conclusion

Last regression of Aral sea starter in 60s of XX century had changes biological variety of the whole Aral sea region. Implementation of ecological project PPCCAM (regulation of Syr-Darya rver bed and North Aral sea) conducted in 2005, promoted preserving of wetlands in lake system of Syr-Darya river delta and North Aral sea. In result, gradual restoring of biological variety of Kazakstan part of Aral sea region is observed. After process of restoring started, birds were among the first to populate this territory; birds are good indicators of environment conditions. In current period, study of quantity composition dynamics and ecology of avifauna of Aral sea region is one of tasks of priority. Lake Cartma included in lake system of Syr-Darya river delta was the object of this study. It is a place of ornithfauna stops during spring and autumn migrations. Taxon Charadriiformes dominates in structure of bird fauna of the lake. Subject of study is white-tail lapwing, wader distributed in Kazakhstan territory in limits of middle and downstream and lake system of Syr-Darya river. Ecology, quantitative composition of white-tailed lapwing in region is insufficiently exposed in literature. In result of bird counting, gradual growth of white-tailed lapwing in spring and summer season in 2014-2016 wgas observed.

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# CONFLICT MANAGEMENT AS AN ELEMENT OF ACTIVITY OF THE CONSULTING ORGANIZATION

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Abstract: The work is devoted to the study of the specifics of conflict management methods application by consulting organizations in the course of rendering professional services to small business entities. The relevance of the research topic is due to the fact that in the modern society the intellectual work product is becoming more and more important, what can be applied in solving production problems, topical management tasks and providing the foundations for the functioning of an organization. At the same time, there are actively developed methods and procedures of effective management of various and negative, at first sight, social phenomena, such as conflict. One of the "conducts" for conflict management intellectual technologies is the consulting, which ensures the reproduction of qualitatively new services and products, and is the focus of practical knowledge and experience that are necessary for business and government structures. As practice of the interaction process between subjects in the business environment shows, a conflict is a socially organized process that is deliberately initiated by members of society to resolve any contradiction which complicates the implementation of the main interests. Thus, the conflict has the property of harmonizing the current social development. In view of this, the authors have carried out a comprehensive study of conflict management within the framework of implementation of consulting activities, the ultimate goal of which is to assist in identifying and overcoming negative aspects of the contradictions that have arisen, at the same time, designing and implementing a constructive scenario for the development of conflict situations among business entities.

Keywords: conflict management, conflict management methods, consulting, constructive conflict, organizational environment, entrepreneurship.

#### 1 Introduction

Conflict management as an area of activity and management tool in the organization has been developed in its practical and theoretical field relatively recently.

In the middle of the XX century, the first professional consultants in the field of conflict management, such as L. Krisberg and F. Glazl, have occurred. This situation is due to the fact that after the "great depression" of 1929-1933 conflict management or "crisis management" became a well-known tool for establishing interaction in the internal and external environment of an organization, and its strategies and tactics have helped to improve management practices.

In addition, F. Glazl insisted on the search for a mechanism for institutionalization and differentiation of conflicts in terms of "formation of constructive attitudes in the course of conflict interaction" (Glazl, 2002; Villalobos Antunez, 2018). We believe that in this thesis F. Glazl meant the process of finding a person with skills of conflictological competence. We consider that the presence of this quality among representatives of entrepreneurship will lead to a significant increase in the efficiency of the business sector.

However, on the way of professional intervention in a conflict, difficult obstacles often arise in the form of attitudes and stereotypes in conflicting subjects, such as conflict-phobia (Coser, 1968). It's no secret that some representatives of modern society find that all conflicts are equally dangerous, and that those who are inclined to be in conflict need to be isolated from the rest of society. Such an incorrect understanding of the essence of conflicts loads the situation with various speculations and saturates the negative background.

Meanwhile, conflicts occupy one of the central positions in the functioning of an organization. This is due not only to the resource costs associated with them and possible destructive consequences, but also to their high importance in terms of organizational, innovative and creative capabilities. These characteristics correspond to the concept of "constructive conflict", which L. Kozer discloses as "a conflict that positively influences the structure, dynamics and effectiveness of sociopsychological processes and serves as a source of self-

improvement and self-development of an individual" (Shane, 2008; Dashkin, 2017).

In our view, from the perspective of functional organization and settlement of conflictual relations, it is possible to address the experience and specifics of the consulting institute, namely, the services of professional consultants into the field of conflict management. At the same time, the active work of an organization in this direction can become its competitive advantage, especially in the context of the crisis and the development rates fluctuations.

#### 2 Methodology

The following approaches and methods of research were applied in the work: organizational theory and organizational behavior, structural-functional approach, institutional and interdisciplinary approaches.

The structural and functional approach allows us to consider the activity of a consulting organization in the form of an integrated structure of goals and functions on the application of conflict management capabilities to improve the efficiency of business entities.

In turn, within the framework of the theory of organization and the theory of organizational behavior, we conducted a study of internal problems of a business entity through the prism of organizational relations, which allows us to find a way to solve them through organizational and constructive team work.

The institutional approach involved in the study makes it possible to trace and note the peculiarities of the institutional development and formation of consulting activities in the sphere of conflict management in Russia and abroad for a deeper understanding of these categories due to possible features of their application in practice.

Also, taking into account the specifics of the scientific problems being solved, a comprehensive interdisciplinary approach to the study of the specifics of the consulting activities implementation in the aspect of conflict management is involved in the writing of the paper.

# 3 Results

Issues of conflict management are becoming more topical in the sphere of consulting. In our opinion, this is due to the fact that each conflict, like a person, is unique in its own way, and thus requires an individual approach of a specialist on conflicts. It should be noted that in addition to consulting companies, conflict management services are provided by business schools, training and psychological centers.

To date, consulting companies offer the following methods and techniques for managing conflicts: thematic trainings; coaching sessions with heads of organizations and units; training seminars and individual conversations, supervisions; corporate training; master classes

It should be noted that in the conflict, actors of interaction often have polar interests and goals and at the same time apply different strategies and means for their implementation. In turn, the "third" party which is not interested and not involved in the conflict, organizes the process of settling the contradiction that has arisen, preventing the destructive contradiction, and also helping to clarify the conflict situation as a whole (translates the view of the problem "from the outside").

It is also necessary to emphasize that a conflict is largely constructive and manageable when it carries a rational character, while the discretion of the participants in the relationship, the desire and ability to negotiate is important. In a conflict situation, co-ordination and joint efforts of employees and management personnel are needed, since the skillful conduct of business is inconceivable without effective interpersonal interaction, and, consequently, without conflicts. Assist in the implementation and development of interaction between the subjects of a conflict, direct joint efforts is one of the tasks of consultants working in the field of conflict management.

#### 4 Discussion

Analysis of scientific literature has shown that there are many studies on the topic of conflict management in an organizational environment, as well as the content of the concept of "consulting", on consulting activities, as these institutions are actively developed in the social sciences.

Among the theoretical works on conflict prevention and resolution, the works of the representative of positive functionalism, L. Kozer, are known for his scientific development of the social conflict theory and the concept of conflict as a starting point for strengthening consensus (Coser, 1968), and are of particular value.

L. Krisberg made a significant contribution to the development of ways to practical application of the theory of conflict in the political and economic spheres (Kriesberg, 2007; Kriesberg, 2009). Note that L. Krisberg was engaged in advising government and non-governmental organizations on conflict resolution issues. In general, in his works of the abovementioned foreign theorists, one can trace the idea that conflicts are natural and often necessary for social changes.

The American mathematician and economist of Russian descent I. Ansoff who studied modifications of the special control method for intermittent changes called "control by circumstances" (Ansoff, 2015), closely dealt with the problems of strategic management of crisis phenomena in organizations at the end of the 20th century in the United States.

Valuable source of scientific research for us was the practice of F. Glazl, who was the author of numerous publications in the field of conflict management and management consulting, engaged in the search for mechanisms of institutionalization of conflicts and formation of constructive attitudes among the conflicting parties (Glazl, 2002).

Among Soviet theoreticians of the Soviet period, we could distinguish A.I. Kravchenko, who paid much attention to the methodology and methodics of conflict research. At the same time, we could note the Russian researcher A. K. Zaitsev, the creator of the Kaluga Institute of Sociology and Counseling (KaIS-K), who studied the practical resolution experience for various kinds of conflicts, mainly in the conditions of enterprises (Kravchenko, 2005).

In the late XX - early XXI centuries, a special place in the concept of conflict management is occupied by scientific research L.N. Choi. He believed that the concept of conflict management should include not only regulation, but also regulation of the process of unleashing the conflict, as well as activities to manage it and increase the intensity (Tsoy, 2001).

The study of the consulting activity basics is presented in the works of T. I. Grable and A. V. Tolstikov, in which a scientific interest is paid to the problem of establishment of the institution of counseling and the question of its integration into other spheres of social life (Jones, 2008).

In the foreign scientific literature on the problems of counseling, we note D. Meister, who focused his field of research on the coordination of managerial processes in the organization (Rozdolskaya, 2014). In turn, M. Kipping considers consulting as a field of knowledge production requiring deep systematic studies (Grabelnykh and Tolstikova, 2012).

Thus, we determined that at the present stage of the scientific knowledge development in the scientific research, the consulting activity content as a mechanism of positive impact on conflicts is not fully disclosed. Nevertheless, regarding the problems posed by the authors in this paper, we believe that there is a need for a comprehensive review of management technologies, conflictological and psychological methods of conflict management in business entities through consulting institutions with a view to creating a positive impact on the dynamics of enterprise development in general.

At the same time, the scientific literature did not receive due coverage of the consulting as a social institution, insufficiently defined mechanisms for using conflictological knowledge in the complex of providing consulting services aimed at managing conflicts in business entities.

#### 5 Summary

We believe that conflicts often have a positive function and, having used methods and techniques of competent prevention and settlement it is possible to achieve high results in terms of qualitative and quantitative development of business. It is also necessary to take into account that the application of this or that method must be based, among other things, on the type of conflict. For example, if there is a subjective interpersonal or intergroup conflict accompanied by a high emotional background, then the application of the following methods will be appropriate: empathetic listening, questioning techniques, excluding social discrimination, sharing merit, and others. At the same time, the institutionalization of conflict relations can play an important role in stabilizing and improving the interaction between the parties. The research interest was attracted to the "open door" technique used to consolidate its position in tough negotiations, when an opponent is aggressive, expects active resistance and cannot manage the situation rationally.

This series of methods is useful for reducing emotional tension and preventing direct aggression, toughening of the struggle, and it is also applicable to maintaining and strengthening cooperation at all levels of organizational interaction in the prevention of conflicts. It is interesting that considering a conflict as a source of individual and organizational development, one can conclude about the maturity or unpreparedness of the individual, the group and the entire organization on the basis of results of the conflict settlement process analysis.

In the event of a fair conflict in an organization, that blocks normal activities and provokes a number of subjective contradictions, consultants resort to project activities within the framework of conflict management. In essence, a complete diagnosis of the customer organization is performed. Based on its results, a draft of changes is drawn up to remove the organization from the "crisis development zone". For example, if the problem initially was that there was a conflict between the supply department and the sales department at the enterprise, then, according to the diagnostic results, it turned out that there are technological problems in which solving IT specialists, logistics specialists and commodity experts are involved.

Proceeding from the fact that conflict management seems to be an effective form of rationalization of production management based on the use of effective methods and best practices, it can be assumed that the use of conflict management knowledge and technologies is one of the most effective in resolving conflict situations and increasing the competitiveness of business entities

Conflicts are unavoidable in the process of social and economic interaction, and with good governance they promote transition of an organization to a qualitatively new level, and its comprehensive development (Jones, 2008). In this regard, a consultant, being a mediator in the conflict, requires the availability of appropriate competencies and confident possession of methods for positive settlement of contradictions.

Today, consulting activities are becoming a key and most knowledge-intensive branch of economic activity. In this regard, consulting is an instrument for increasing competitiveness and transforming the element of the modern economy. Moreover, such indicator as the state of consulting, the level of its demand, the complexity of the tasks facing the consultants, as well as the level of methods of analysis, and qualification of specialists are those of the many existing indicators of economic growth (Rozdolskaya, 2014). Thus, the role and prestige of the consulting institute is unusually high in countries with developed economies.

#### 6 Conclusions

As noted in the foreign scientific literature, the joint efforts of the organization, people and goals are needed to achieve systematic business success (Shane, 2008), And this is the primary target of the consulting.

The rapidly changing conditions of the external environment, and at the same time, the intensification of competition in all sectors of the economy, impose high demands on the human resources management supporting business objectives (Kibanov, 2016). In particular, the staff with its professional qualities and experience is one of the main competitive advantages of the company in the market.

Those managers who cannot focus on a conflict situation and take an unprejudiced position, often instinctively try to prevent conflict, or delay resolution of the situation. That exacerbates the current situation and threatens virtually complete loss of control over them (Proksch, 2016). In this regard, we believe that the role of the manager in matters relating to the settlement of conflict situations in an organization should be performed by a specialist with all the necessary competencies and skills, and which, due to their practice, are purposefully perfected as a conflict manager.

At the same time, it is necessary to emphasize that the process of development of an organization should be comprehensive, integrated and uniform. Otherwise, in the era of global changes and the rapidly changing economic environment, companies that are not developed in proportion to the economic, technical, personnel effectiveness can expect serious difficulties.

Thus, it can be concluded that the competent application of skills in the field of conflict management in combination with the individual and scientific and practical approaches operated by consulting allows a quick answer to the evolving challenges of our time.

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# THE DEVELOPMENT OF THE IMAM COMPETENCE AS A FACTOR OF COUNTERACTION TO EXTREMISM

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Abstract: The mechanisms of strengthening personnel potential in Muslim community of Tatarstan creating new conditions for their socialization, professionalizing is considered. Generation of highly qualified specialists - religious attendants, the staff of the religious organizations is reached by means of creation of educational services in their retraining and professional development. Educational modules to which paramount attention when training of the acting imams is paid is described, need of increase in the competences directed to counteraction of ideology of extremism are proved. Professional activity of the imam has to be constructed taking into account tendencies and the analysis of situations in religious life of Muslims, to be equitable to interests and needs of believers, inquiries of the Muslim religious organizations. An interests and needs of benevers, inquiries of the Muslim religious organizations. An attendant of the mosque, being leaders of the Muslim communities whose activity has socially - significant character, has to be beyond execution of rituals and religious education. The imam, accumulating theological experience and heritage has to be a reference point for parishioners, act as the leader of opinion at emergence of theological contradictions in community. The importance of the religious figure in work of the religious organization, arrival, secular society on the report of qualitative information on the developed Russian theological tradition, norms of Islam, need steady to following of Professional development of imams on history, the right to a law of Islamic religion, Muslim rituals, customs and traditions is revealed to see one of the main functions of educational programs. The mosque, the religious organizations, society expects an available explanation of the standard norms of Islam, acquaintance with regional history of Islam from the imam. The work of the religious attendant with the public on explanation of activity of the modern religious organizations and movements, their interests, public danger proceeding from a row from them form complete idea at Muslims of forces operating in the Islamic world, degree of their constructability and conflictogenity. In the conditions of information society, manifestations of Islamophobia the imam has to undertake a role of the moderator of discussions of topical and debatable issues, the current problems, promote developments of the attitude towards them. Alien ideological views at parishioners it is capable will define, that attendant of the mosque who has sufficient knowledge in the field of belief, worship, hanafit religious and legal school.

Keywords: prevention of extremism, Islam, Muslim clergy, valuable conflicts, competences, professional development.

### 1 Introduction

Imams in Tatarstan are not uniform community, have the different level of secular education, religious preparation, are carriers of different sociocultural values; differ in duration and a location of stay at a position, experience of the leading work, the business reputation which developed in religious structures among ordinary parishioners.

The aspiration of the religious authorities of the region to give to employees' organizational integrity, to keep initial unity, to strengthen professionalizing of shots led to formation of the centers of retraining of imams. The identity of the imam as the person initiating ritual and social practicians is a source of knowledge of morality, acts for Muslims as the moral arbitrator. Realization of these competences is not imaginable without self-education process. Are focused on the imam: "rank-and-file members of the Muslim community in the understanding of social standards of valuable/target reference points" (Gibadullin & Nurullina, 2018).

The close attention of the religious organizations and authorities is paid to a problem of increase in competences of religious attendants, staff of the religious organizations. Obtaining profound knowledge in the field of Islam, language training, positioning of Islam in the public relations, media space are designed to increase competitiveness of imams, forming a layer of the Muslim intellectuals.

The modern imam is capable to exert impact on installations and behavior of Muslim youth. Against the background of calls of unity of the Muslim community, the role of the imam increases in educational process of youth within traditional values of Islam. Work of imams with youth audience which demands from priests of elaboration of modern approaches of involvement of youth to religion has features. Strengthening of the authority of the imam perhaps thanks to effective decisions in maintaining

and the organization of the parish life answering modern living conditions.

#### 2 Methodology

The research has cross-disciplinary character, based on research tools of conflictology, Islamic studies, sociology. For the analysis of activity of the organizations realizing preparation and retraining of religious attendants the structurally functional approach which allowed to describe functions, dysfunctions of social institutes of the imams who are carrying out socialization, parishioners was used. For studying of influence of Muslim clergy on installations and behavior of believers' sociocultural approach which allows characterizing factors, revival of Islam during the Post-Soviet period in Tatarstan and formations of leaders of the information and geopolitical transformations coming influence was used. For studying of the conditions defining need of inclusion of imams in educational space the phenomenological methodology which allowed describing substantial filling of programs of professional development was used. Empirical base of a research make the secondary analysis of results of polls of imams of the employees of the religious organizations and teachers of educational institutions who underwent professional development in Training center at the Kazan Islamic university within 2011/12 and 2012/13 academic years representing 23 of 45 mukhtasibat of the republic. The research was conducted by the Center of Islam Study researches of Academy of Sciences of the Republic of Tatarstan.

Definition of the list of the disciplines taught at advanced training courses was included into problems of the conducted research, as methods of collection of information the method of the analysis of documents - the publications placed on Islamic information portals - Islam News, by Islam-today, Ansar, the official site of the Russian Islamic institute, Spiritual management of Muslims of the Republic of Tatarstan was used (further RT THOUGHTS) that allowed to reveal dynamics, audience of listeners, teaching potential, subject, to determine inquiry of society by development and expansion of competences of imams.

# 3 Results and Discussion

The mosque and its head are the main link in the system of advance of Islamic values, it is "institute of Islamic education where the Muslim identity" begins to be formed (Mardanshin, 2016). In 2014 in Tatarstan there were 1430 mosques in which 1373 imams worked. (Gibadullin & Nurullina, 2018; Ferrer et al, 2015). During daily activity imams face various problems at the organizational, ideological, social and psychological level. Emergence in the Muslim circle of persons became the phenomenon of the last several years, "accusing of incorrectness of actions of imams, claiming that only they know the truth".

The contingent visiting mosques differs in the demographic, gender and age, national, social parameters "questions at them are born different too, it is necessary to be much grounded and to be engaged constantly in self-improvement" - the deputy mufti Rafik Mukhametshin noted.

2011 - 2013 academic years spent to the period the Center of Islam Study researches of Academy of Sciences of RT showed results of polls of 300 imams that the personnel problem "consists in the absence of highly skilled imams; which would be able to answer any arising questions; shortage of shots and young imams-mugallim; weak religious education" (Nurullina, 2014).

For the purpose of eradication of similar of the phenomenon educational platforms for obtaining exhaustive knowledge, strengthening of an image of the competent and authoritative imam capable to build reliable, confidential relationship with parishioners, representatives of village council, the city administration, business, civil society are created. An opportunity for training and retraining of imams are created in the specialized centers, Kazan Federal University, madrasah, courses at mosques of the RT regional centers. During training there is a strengthening of professional community, interpersonal communication between heads of arrivals; conditions for informal communication, exchange of experience are created.

The institutionalization of process of strengthening of personnel potential is connected with creation in 2011 in Kazan of the Center of retraining of imams, in 2013 there began the activity the Training center of imams of the Volga Federal District functioning at the Russian Islamic institute. Monthly their skills are improved by imams from all Republic; in five years (by 2016) the quantity studied came nearer to 1000 people.

According to the charter of THOUGHTS of RT imams once in four years improve the skills, and during training receive answers to questions, forming skills of interaction with carriers of different views, including representatives of nonconventional currents of Islam. Listeners of educational programs have the different level of basic religious knowledge, religious preparation, among them there are those who have no vocational religious education, received basic religious

education in madrasah, the imams who graduated abroad.

Islamic priests listen to lectures on the main Islamic disciplines, specialists of the Russian Islamic university, the highest madrasah of Mukhammadia, Spiritual management of Muslims of RT. Authoritative foreign experts "the doctor of divinity, professor Hamdalla Hafiz Mahomed Safti and professor Mahomed Nadzhi Hamid Abdulkhamid from the Al-Azhar University, the doctor of divinity, the author of works on a technique of an appeal and evangelical activity Muaz Al-Bayanuni, the leading expert of the Ministry of religious affairs of the state of Kuwait" are invited (Gilyazov and Nurullina, 2017).

Special attention in retraining of imams is paid to rules and an order of commission of the main religious practices. Need of presence of this block is explained by the fact that a part of Muslims has an incorrect representation and misunderstanding of an essence of provisions of performance religious the practician that leads to disputes and disagreements in community.

One of the sharpest problems for Muslim society is emergence in the Muslim circle of supporters not of traditional currents. In these conditions the imam has to have readiness to accept ideological distinctions which are possessed by parishioners, to interact with representatives of different religious consciousness, to build practical activities with community taking into account extent of radicalization of certain parishioners. For development of these competences of the professional development course religious attendants reinterpret the maintenance of hadis and the Koran through a prism of counteraction to religious extremism. Development of skills of the counterargument to provisions of religious fundamentalism and fanaticism, development of hostility to religious extremism and terrorism, will allow the imam to give the adequate answer to radical propagandists. Thus, expansion of knowledge in the field of the distinctions existing between sects, ways of recruitment, and the characteristic of mazkhab is directed to formation of ability to reveal existence, radicalism degree in community.

In society demand for the educated imam of the difference in a national and religious way of life of Muslims able to explain increases. I. Lapidus in 1988 characterizing the global system of Islamic societies which developed by the 18th century on Asian, African and East European space noted, uniqueness of each type of society, repeatability of forms and interrelation "in the form of political and religious contacts and to the values divided by all which created the World system of Islamic societies" (Lapidus, 1988). In this regard it is important what the imam would manage to bring to parishioners the value of regional forms of

existing of Islam, their historical conditionality, positioning of local theological tradition as parts of a world Islamic civilization. In too time maintaining balance between national identity of the Muslim and a tendency at which "Muslims of Asia and Eastern Europe identified themselves more often religion and the culture of Islam, than any ethnic or racial groups" is necessary (Zenkovsky, 1960; Nurhayati, 2018).

Development by imams of didactic heritage of Tatars - Muslims, the Tatar culture (Bustanov & Kemper 2012) will allow to disclose local Islamic specifics, to make use of historical experience during creation of system of spiritual education of modern Muslim youth, to put religious and ideological immunity to pseudo-religious doctrines, missionary activity of radical currents, sense of responsibility for ensuring religious unity, formation of interest in domestic theological heritage. The Islamic world, a civilization is founded on sources, experience, and mutual recognition of a discourse of the Muslims living in the territory of Islam (A gift ul-Islam). The imam as the mentor, the spiritual conductor has to create the culture of constructive presence and participation in discussion of the current problems existing in community, the region, the country, the Islamic world as type of discourse society, in system "differing according to the accurate list of the public and moral symbols opening the correct human relationship" (Voll, 1994).

Thus, the Muslim community of the region, the academic science form "the adapted training programs on the basis of the analysis of professional activity, requirements imposed by believers, inquiries of the Muslim religious organizations taking into account features of development of system of professional religious education in modern Russia" (Gilyazov and Nurullina, 2017).

Need of the undertaken measures in the field of increase in competences of imams it is dictated by desire to create uniform space in which requirements, the content of work of staff of the religious organizations are defined, unified and also not to allow precedents known in the history when priests "were open for various forms of radicalization" (Hroch, 1985).

#### 4 Summary

The religious figure owing to the specifics of work is called to inform of values of traditional Islam for adherents of different views, obtaining profound knowledge of history and the culture of Islam, regional forms of its existing. Data acquisition of competences will allow creating and strengthening an image of the competitive imam showing readiness to be integrated into various sociocultural environments, to become a reliable reference point for younger generation of Muslims.

In recent years to become a current social problem adaptation of the faces which were earlier consisting in destructive groups or served sentence under articles of extremist and terrorist orientation. The ability of the imam to apply individual approach to this category, search of social technologies of prevention of destructive behavior is an important practical task. To number of the perspective directions captured by the system of retraining the sphere of practical psychology is. Religious figures are interested in search of possible ways of strengthening of the institution of the family because the divorce is not the desirable and blamed phenomenon in Islam. Imams during training in the republic in 2013 obtained information on ways of the solution of the practical questions connected with psychology of Islam and Muslims, development of a responsible attitude to matrimony and forming of the child parental relations. Advisory work with Muslims has to be based taking into account a religious component, in communication with what the imam has to have psychological competence of necessary volume - to reveal specific psychological features of the personality, psychological stability, psychological wellbeing of the person.

# 5 Conclusions

Activity of the religious person mainly constructed on a theological basis, cannot but combine communication,

organizational, legal, psychological approaches. Use of a complex view of a problem of professional development of imams will allow creating professional community from which experts in Islam; modern domestic theological school will take shape.

The system attention of religious figures to increase in level of Islamic knowledge, language training, ability to cover Islamic subject, positioning of activity of arrivals in information space, search of ways of counteraction to manifestations of intolerance will work for development of feeling of respect, trust for imams the self-training which are in continuous process and improvement, building the activity taking into account calls and public inquiries.

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#### MODERN TRENDS OF DEVELOPMENT OF POLITICAL RIGHTS OF ETHNIC GROUPS

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Abstract:This paper considers the features of political rights of ethnic minorities. The research relevance is related to the fact that this institution undergoes its transformation. In this regard, the object of research in the article was the analysis of selected international documents. The emphasis on ethnic minorities in disclosing the essence of collective rights is by no means accidental. The legislative design, which means state recognition of the rights of ethnic groups, is assessed by the scientists in terms of compulsory condition for combating discrimination and simultaneous protection of such minorities. Therefore, the policy on these rights is a socially significant reality, recognized today by the international community. It is the result of an ethno-social consensus. The assertion of universally recognized rights of ethnic groups is often accompanied by the arguments based on contemporary international law. But when referring to the main international acts, this issue does not look as unambiguous as it is presented in a number of scientific studies. It does not follow from these international acts that this right belongs only to the ethnic groups. The term "people" is interpreted as a community of citizens living in both in the independent states and in the dependent territories. Thus, it is not entirely clear whether a particular state has to exercise this right in relation to an individual ethnic group, since these international documents do not directly include such an obligation.

Key words: ethnic group, ethnic minorities, ethnopolitology, ethnic politics, ethnic rights.

#### 1 Introduction

The problems of development and regulation of the inter-ethnic relations in the context of globalization are connected with such an aspect as the rights of ethnic groups. In particular, with their recognition and implementation at the state and interstate levels. These issues are currently one of the main objects of ethnonational politics in most modern countries. To a large extent, this is stimulated by the global migration processes that have generated a social demand for the expansion of the rights of ethnic minorities and for solving problems in the field of interaction between different cultures and peoples.

It is not by chance that a common European trend, including the Russian political agenda, has meant the search for a model for system integration of different ethnic groups into a single civil nation, which inevitably is accompanied by the conflicts that require their prompt resolution. It is the political and legal field that is designed to minimize the negative effect of such phenomena, as well as to prevent the emergence and growth of new social exacerbations on the ethnic grounds.

#### 2 Methodology

The methodological basis consists in a systematic and functional study of the political rights of ethnic groups. Therefore, it is common to single out several approaches to their concept.

Over the past decade, the phrase "collective political rights" is used not only in the Western (McDonald, 1998; Holder and Corntassel, 2002), but also in Russian science (Sanders, 1991; Tarbastaeva, 2016). The modern researchers interpret this concept differently in the prism of ethnic groups. Thus, according to some authors, this term refers to the aggregate of individual political rights, which acquire a collective nature in the course of their implementation, i.e. require joint implementation with other persons (Mirskaya, 2015; Villalobos Antúnez, 2015). Other scientists believe that such rights are common to any person and citizen who belong to a particular social group (Mac Dowell, 2002). This position is rejected by the adherents of the approach, according to which an emphasis should be placed on the special rather than general nature of the rights belonging to individuals within a certain social category (Peck, 2000; Thompson, 1997). The corporate element in disclosing the essence of collective rights is brought to the forefront by those specialists who consider their carrier as an organization (Ketley, 2001). On this basis, the individual authors define collective political rights in the plane of the rights of a single social community, thereby equating them with the group rights (Guelke, 1992).

#### 3 Results and Discussion

The 1992 UN Declaration on the Rights of Persons Belonging to National or Ethnic, Religious and Linguistic Minorities obliges the states to protect in their territories the very existence and identity of ethnic minorities, as well as to encourage measures aimed at creating conditions for the development of these values (clause 1 of Art. 1).

In addition to the set of cultural and religious rights, the UN Declaration of 1992 formulated certain political rights of the representatives of ethnic groups. In particular, they include the right to participate actively in the decision-making process affecting the relevant ethnic group at both the national and regional levels. However, the order of such participation should not contradict the national legislation. The ethnic groups may be based on their own associations, as well as ensure their functioning. Among other things, they retain the right to establish and maintain free and peaceful contacts with other members of their group, as well as individuals from other ethnic minorities, including contacts across the borders with the foreign nationals with whom the ethnic group is bound by national, ethnic, religious or linguistic bonds.

If the rights themselves are formulated in the UN Declaration of 1992 with respect to persons belonging to a particular ethnic group, then their implementation involves two options that do not exclude each other. Thus, Art. 3 states that the exercise of these rights is possible both individually and in conjunction with other members of the ethnic group. The main condition for this is the need for no discrimination whatsoever. It is in this form that it seems correct to speak of the rights of ethnic groups as the collective rights.

Within the development of this issue, it is worth mentioning a number of political requirements put forward by the 1992 Declaration. For example, Art. 5 refers to the need to take into account the legitimate interests of persons belonging to the ethnic groups in the planning of national policies and government programs. A similar norm obliges the states to observe this principle when building their own international relations.

The discourse developed in the legal and political science regarding the development of approaches to understanding collective rights somehow affects the decisions of the national governments and even the positions of the international organizations (Mamedov et al, 2016). This is expressed in the difference in the ethno-national policies pursued by the individual countries.

The problems of the collective rights of ethnic minorities are particularly evident precisely in the political aspect. First of all, we are talking about political rights, because any group, whose members are able to vote for certain decisions, has the opportunity to act as a single party to relationships (Napso, 2008). In other words, an ethnic group in the political dimension is a collection of conditionally "identical" individuals expressing a single position, which allows them acquiring and exercising certain rights. Therefore, this fact should receive some formal or actual recognition by the state (Yuzhanin, 2011). Since the ethnic group is often perceived as a certain type of corporate community, the latter is already legally capable of having rights and bearing legal obligations, including the possibility of incurrence of liability (Simonov, 2010). This turns any ethnic group into a specific legal entity of public law with a specific legal status.

Most of the existing rights of ethnic groups cannot be reduced to individual rights only, since they are actually realized exclusively within the collective of people. For example, such rights as the right to the public use of the mother tongue and the right to receive education in one's native language are implemented primarily by a group of persons, and not by a

separate person. Moreover, such a group should have cultural or linguistic differences. The political rights are exercised in a similar way, especially when exercising the right to participate in the political and managerial decisions affecting the interests of the ethnic group.

The rights of ethnic groups are provided with the legal guarantees.. The very fact of their recognition in the law is a guarantee of the inviolability (autonomy) of the ethnic group, primarily from the state. If we are talking about an ethnic minority with the relevant right, then such an obligation of the non-interference in its autonomy extends to the ethnic majority. Thus, the establishment of the rights of ethnic groups, such as the right to use language, autonomy, education and a number of other rights at the international level or in the legislation of the state, is a guarantee of the implementation by the national government of its commitment to the non-interference in the opportunities and resources used by the ethnic minorities.

An advocate of this approach is the Canadian philosopher Will Kimlika, who argues that the constitution of the rights of ethnic groups influences the preservation of group identity (Kimlika, 2010). Thus, the recognition of ethnic differences by the state should always be accompanied by the formalization of the corresponding rights for certain ethnic groups.

At the same time, it should be emphasized that the legislative guarantees of such rights largely depend on the policy pursued and the political regime in the country. If the principle of the rule of law is effective, no additional guarantees (especially at the international level) are required, since such a state will always fulfill its obligations, even if the rights of ethnic groups have not been formally secured. On the contrary, under autocratic and transitional regimes the state has a tendency to ignore its laws and, consequently, obligations from the considerations of political conjuncture. Then the formal establishment of the rights of any groups and the granting of any autonomy (from cultural to political) is not a guarantee, with the real possibility of the authorities to violate their own declarations.

The implementation of most of the rights of ethnic groups is used as a kind of tool for protecting ethnic identity, which, in turn, is perceived as a symbolic capital with the desire of individual members of the group to achieve an elitist position, i.e. to carry out the political representation of their people and culture (Farukshin, 2010). In such cases, it is difficult to talk about the observance of the values formulated by the international instruments with regard to the rights of ethnic minorities, since the key democratic ideals are violated and the task of ethnosocial integration is not being implemented.

Thus, the right of an ethnic group to territorial and political autonomy means in practice a situation in which a certain territory and the autonomous government institutions that have been formed in it are some kind of "property" in the hands of a particular ethnic group (Tikhonov, 2001). At the same time, no international document allows excluding those people who do not belong to this "titular" ethnos from the category of "full-fledged" groups. In such cases, the state's task is to prevent discrimination based on ethnicity, which, to a certain extent, does not fit well with the idea of political autonomy.

In addition, the formalization of the rights of ethnic groups in many ways is aimed at reducing political pressure on the part of certain ethnic communities. Thus, the state increases its authority in the eyes of the representatives of ethnic minorities, recognizing their "special" rights, including in the political field. This process is fully inherent in the legitimization of power against a particular ethnic group, especially in the context of conflict and social discontent. Therefore, the ethnic elite acquires the status of a representative government and can become more loyal to the existing political system.

However, such a result is not an axiom, and directly opposite phenomena are possible. Thus, some researchers in the field of ethnic elites emphasize that the initial inclination of leaders of the ethnic groups to destruction and their only conditional loyalty to laws does not guarantee positive changes when they acquire additional resources and new symbolic capital (Gatagova, 2016; Sulkarnaeva et al, 2018). Moreover, such trends can be accompanied by a radicalization of new requirements for the functioning state power. Therefore, the method of a kind of "social bribery" and political concessions in the form of recognition of the rights of ethnic groups does not always have the same effect, which does not allow considering it as the universal means of conflict resolution.

#### 4 Summary

The practice of establishing a certain list of ethnic groups at the constitutional level determines the situation in which other groups are excluded from the subject of the legislation aimed at ensuring their protection. Therefore, most of the states of the European Union try to mostly use the abstract legislative criteria for classifying certain people as ethnic groups, especially in the case of national minorities. Thus, the way to enumerate them in the legal acts is not effective, although it is recognized by the researchers as an instrument for the legitimacy of ethnic communities, which, in turn, cannot be considered a reliable guarantee of the protection of their rights. In general, the regulation model of the rights of ethnic groups in the Russian Federation is built on the same patterns that are observed in modern Europe. A key principle is the principle of equal treatment of all ethnic groups living on the territory of Russia, which is expressed in the absence of a separate group of rights granted to any ethnic group in the constitutional norms. Moreover, the creation of equal conditions necessary for the development of any peoples and ethnic groups is legally proclaimed. This is ensured by such constitutional guarantees as the right of whole people, and not of its individual part, to exercise its power directly and through a system of the state bodies and the local self-government bodies. It is proclaimed the equality and self-determination of the peoples of Russia, the equality in the rights and freedoms of a person and a citizen irrespective of their ethnic belonging, with the simultaneous right of everyone to freely determine their ethnicity and express this choice, as well as the right to use their native language in their communication, upbringing, creativity, as well as the right to study and develop it.

#### **5 Conclusions**

The category of political rights of ethnic groups includes a set of both collective and individual opportunities, including: the right to territorial public self-government; the right to form communities; the right to quoted representation of the Federation subjects in the legislative state bodies and in the representative local self-government bodies; the right to personal substitution of military service for an alternative civilian service.

The political rights are supplemented by the establishment of special quotas for the representation of the interests of ethnic groups in certain power structures. This is done by forming such electoral districts, which include a smaller number of voters than the usual minimum requirements for the remaining constituencies. Thus, such electoral districts can be established both within a separate national settlement and within the framework of the entire ethnic associations and tribes.

The right to create special self-government bodies also belongs to the number of political rights. Ethnic groups, which are classified as indigenous minorities, have the right to engage in the territorial self-government on the basis of their own national, historical and other traditions in order to implement their own initiatives of local significance and within the territory of compact residence of their representatives.

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#### PROBLEMS IN LEGAL REGULATION OF SAME-SEX RELATIONSHIPS IN RUSSIA

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Abstract: The purpose of this article is to formulate a comprehensive view of the legal regulation of relations between people of the same sex and an attempt to develop a common worldview, which has been formed in the scientific doctrine. The Russian doctrine ambiguously approaches the perception of relations of people of the same sex as a phenomenon that is naturally developed in the world community and its emergence and formation in Russia. A special conceptual apparatus used in the scientific research is subject to analysis. Graduation of scientific presentations is made in five groups: conservatives, liberals, extreme liberals, radicals and extreme radicals. Attention is drawn to the key factors affecting Russian science: political, social, religious. The authors' arguments on all groups are generalized and systematized. The sociological data of Russia and the USA are subject to research. The authors come to the conclusion that ideologically, Russia is characterized by heteronormativity, that is, a worldview in which heterosexuality is understood as a social norm of sexual behavior of any person. Theoretical propositions and conclusions formulated by the authors can be useful for pedagogical purposes, popularization in the mass media, in the legislative, law enforcement practice and educational process.

 $Keywords: gender \ relations, people \ with \ non-traditional \ orientation, \ LGBT, \ rights \ of sexual \ minorities, \ same-sex \ marriages, \ marriage \ registration, \ adoption.$ 

#### 1 Introduction

There is an analysis of various opinions, which is often selective and does not give a complete picture of the worldview that has been developed in the doctrine in the scientific research of such Russian scientists as lawyers, sociologists, philosophers, political scientists.

The nature of the development of scientific research is also ambiguous. Social, political, and economic conditions often influence an increase or a decrease in the number of publications in the scientific publications, reports in the Russian and international conferences and round tables.

The scientific school in the field of researches of the rights of persons entering into same-sex relations starts to be formed gradually. The main research in the field of defining sexual orientation is the paper of A.Ch. Kinsey, who determined the scale of measuring people's sexual orientation. According to the author's theory, human sexual orientation is established from zero - exclusively heterosexual orientation to six - exclusively heterosexual orientation (Kinsey et al, 1948; Mobbalegh Naseri et al, 2018). The discovery of the nature of sexual orientation made it possible to establish a classification of the discontinuity of homosexuality phenomenon, as one of their forms of a person's sexual orientation.

When generalizing the scientific works of domestic authors, one can meet an opinion that homosexuality is a disease or a deviation of physical, genetic levels, or it is one of their forms of manifestation of a person's sexuality, such as heterosexuality. However, the identification of this essence of human behavior gives us the conclusion that homosexuality does not allow a person entering into heterosexual marriage under Russian law.

Speaking about the development of relations between people of the same sex, special terminology begins to be formed. The following concepts and terms are used in the scientific articles: gender equality, rights of sexual minorities, people with nontraditional orientation, same-sex marriages, new forms of legitimate partnership, gender-family relations, LGBT.

There is often an abbreviation LGBT in the texts, which has appeared since 1990 in the USA, and which denotes the representatives of a community of lesbians, gays, bisexual and transgender people. In this case, there are varieties of this term associated with the development of a people's union on the basis of their sexual orientation and gender identity, for example,

LGBTQ, LGBTI, LGBTQI, etc (Maurice & Brown, 2013; Villalobos Antúnez, 2018).

A transgender is an umbrella term that describes people whose gender identity or gender expression is different from their gender, possibly, but not necessarily, as a result of surgery or hormone replacement therapy. Transgender people can also describe themselves as gays or lesbians.

#### 2 Methodology

On the basis of Art. 14 of the Convention for the Protection of Human Rights and Fundamental Freedoms, each citizen has equal rights regardless of gender, race, color, language, religion, political or other opinion, national or social origin, membership of a national minority, property, birth or any other signs. Similarly, Art. 12 of the Convention states that men and women of marriageable age have the right to marry and start a family in accordance with the national legislation governing the exercise of this right. The equality of citizens of the Russian Federation is guaranteed by Art. 19 of the Constitution of the Russian Federation

On the basis of clause 12 of the Family Code of the Russian Federation, only men and women of marriageable age can be married in Russia.

Therefore, these relations can be considered in two aspects. Firstly, it is the development of social relations of people of the same sex and the ban on the promotion of non-traditional sexual relations among minors. According to Art. 6.21 of the Code of Administrative Offenses of the Russian Federation, the information aimed at the formation of unconventional sexual attitudes and attractiveness, distorted view of the social equivalence of traditional and non-traditional sexual relations, or the information on non-traditional sexual relations, causing interest in such relations shall not be disseminated by any person, by any means, including the use of mass media and/or information and telecommunications networks (including the Internet) among minors, if these actions do not contain a criminal offense.

Secondly, it is the impossibility of ensuring the protection by the state of a number of rights to persons actually entering into family relations with persons of the same sex.

- Non-recognition of partners as family members and subjects of family legal relationships. Consequently, the norms of family law are not applied to this kind of relationships.
- 2. Impossibility of applying Art. 51 of the Constitution of the Russian Federation, giving the right not to testify against himself/herself, his/her spouse and close relatives, the circle of which is determined by the federal law. According to Art. 5, the spouse, parents, children, adoptive parents, adopted children, siblings and sisters, grandfather, grandmother and grandchildren are close relatives according to the Code of Criminal Procedure of the Russian Federation. The list of such persons is closed.
- 3. Refusal in adoption. According to family legislation, the adoptive parent can only be one person in a same-sex couple. Moreover, sub-clause 13 of Art. 127 of the Family Code of the Russian Federation prohibits adoption of persons who are in a marriage made between persons of the same sex, recognized as marriage and registered in accordance with the state's law, in which such marriage is permitted, as well as persons who are citizens of the said state and unmarried. It follows that the second partner in a homosexual couple cannot be recognized as a parent and has no rights and responsibilities in the child's upbringing.

We can name other consequences of the lack of legal regulation of the rights of persons who actually enter into family relations with persons of the same sex: refusal to grant custody of a minor child, emergence of the right to joint property of spouses, impossibility of inheritance by law, impossibility of obtaining medical information, or impossibility of obtaining social benefits.

There are many consequences of not recognizing the same gender family-marriage relations, which suggests the right of everyone to these rights, which shall be guaranteed and protected by the state.

## 3 Results and Discussion

Having analyzed the opinions of Russian scientists on the development of relations between people of the same sex in a particular manifestation, one can conditionally divide their opinions into five groups: conservatives, liberals, extreme liberals, radicals and extreme radicals.

The conservatives that support the traditional marital relations, deny any manifestation of both legal and social relations between people of the same sex. At the same time, they do not come out with a statement about the prohibition of this kind of relations in Russia and abroad (Fabrikant and Magun, 2014). Some of them may even admit different development of gender relations in other countries.

This group also includes scientists who hold a neutral position in this matter, recognizing the possibility of any form of relations of the same sex, but not requiring any change in the regulatory and legal regulation of Russia. For example, Ocheretko E.A. writes that domestic legislation, by forbidding same-sex marriages, consolidates patriarchal traditions in the family law. Not recognizing the same-sex marriages of foreigners, Russia preserves the ethics of legal status of the Russian family (Ocheretko, 2017).

The liberals, supporting such relations in Russia and even allowing them being recognized at the legislative level. Most of them still recognize the need for legal recognition of the right to same-sex family, but in a limited form. In particular, Marinkin D.N. notes that it is necessary to recognize same-sex marriage in the Russian law. However, the conditions for the recognition of such marital relations require, firstly, a medical report of the impossibility of relations between persons of the same sex. Secondly, the recognition of such relations as marriage in a judicial procedure. After these conditions are met, the author allows registering the same-sex marriages in the marriage registration authorities (Marinkin, 2015).

The extreme liberals unequivocally advocate the recognition of not only any rights to the same-sex relations, but also require their legislative consolidation along with the civil marriage relations and granting them equal rights.

The main right that will open the possibility of changing the Russian legislation is the child's adoption by the spouses, and the adoption of the spouse's child.

Such statements are criticized by most scientists as being subject to the excessive influence of the world ideology on the legalization of relations between people of the same sex.

Most of the authors radically deny the possibility of developing relations between people of the same sex, negatively view the maintenance of gender relations in the world space, advocate any obstacle to their manifestation in our country, and in some cases require preventing all possible ways of spreading this phenomenon in the society at the legislative level. So, Kartseva L.V. argues that the transition to same-sex marriage destroys the centuries-old and unique culture of Russia with its social health, hinders both the preservation of public foundations and their strengthening (Kartseva, 2012).

Some authors not only critically speak about same-sex marriages, but also offer extremely radical measures to eliminate such a phenomenon in the society. Dyachenko A.P. and Tsymbal E.I. consider that the administrative and legal measures are needed to prohibit the propagation of sexual deviations, namely, to fix a ban on the adoption of children by citizens of those

countries where the marriages between people of the same sex are now permitted, as well as to ban teaching activities by persons with deviant sexual behavior in the Family Code of the Russian Federation and the Labor Code of the Russian Federation (Dyachenko & Tsymbal, 2013).

#### 4 Summary

Sociological researches, regularly conducted in our country and all over the world, significantly influence the formation of the Russian doctrine about the perception of any manifestations of relations between persons of the same sex. Sociological data published by the All-Russian Center for the Study of Public Opinion (VCIOM) in 2015 state that Russian citizens are more categorical today to the marriage of gays and lesbians than 10 years ago: if in 2004 the right to formal registration of relations between persons of one gender was completely denied by 59%, today it is denied by 80% (Information Agency IA REGNUM, 2015).

If the sociological surveys conducted in Russia show that the negative attitude of our citizens about any manifestations of relations between people of the same sex is growing every year, then the world community not only recognizes the rights of such persons, but also consolidates them at the legislative level.

Although the USA does not lead in the position of legalization of the same-sex marriages in comparison with Western European countries, it is still focused on maintaining relations between people of the same sex. According to the Pew Research Center report, 63% of Americans said that homosexuality should be accepted by the society after the US Supreme Court legalized the same-sex marriages across the country in the USA in 2016 (Brown, 2017).

The doctrine often relies on the denial of the same-sex relations by the religion, reinforcing their positions in the scientific papers. Thus, K.A. Gorodnyanskaya believes that the low tolerance of Russian citizens is justified by the religious factors that do not belong to Western, Northern Europe and the USA (Gorodnyanskaya, 2016).

According to the Pew Research Center study, most Americans believe that religions that prevail in the USA (Muslim religion (84%), Mormon Church (83%), Catholic Church (79%) and Evangelical churches (73%)) are unfriendly to LGBT people. More loyal views on the relationship of people of the same sex have a Jewish religion and the main Protestant churches (Survey of LGBT Americans Attitudes, 2013).

#### **5 Conclusions**

The arguments of the opponents of the development of the "same-sex marriage" institution and the legal consolidation of any manifestations of relations of persons of the same sex can be formed as follows:

- Traditional religious values of the peoples of Russia, public morality.
- Depreciation of the "traditional" marriage institution and demographic growth.
- Extramarital sexual relations and an increase in the number of abortions.

The main arguments of the representatives of the Russian doctrine are the religious beliefs and moral foundations of the society, as well as the historical development of Russia.

Essentially, the Russian doctrine of the relations of people of the same sex is the reaction of politicians, state representatives, officials of the state and municipal authorities, public figures and leaders of the social movements and associations.

# Acknowledgements

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# ECONOMIC-TECHNOLOGICAL JUSTIFICATION OF ORE DEPOSIT COMBINED DEVELOPMENT FEASIBILITY

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Abstract: The article considers the issues of breakthrough technology development on the basis of traditional and innovative leaching technology combination within the mining and processing cluster. The scientific basis of subsoil exploitation management quality is improved with the increase of deposit development efficiency on the basis of combined technology cost parameter optimization in terms of cost factors. They proposed the model to determine the value of profit taking into account the completeness of fixed and circulating asset use. They showed the efficiency of mining by combined technology. It has been proved that metal leaching technology is a promising trend of technical and economic indicator improvement and subsoil use efficiency increase.

Keywords. Traditional technology, Innovative technology, leaching, metal, Management, Subsoil, Optimization, Profit.

#### 1 Introduction

The economic recovery in a developed state calls for production transformation, involving the development of breakthrough technologies. The development of new technologies and the integration of production, science and education in the conditions of a new type of material production, characteristic of the second generation of industrial society, imply the solution of technology convergence problem (Golik et al, 2015). A holistic and a sustainable structure is created, within which a closed cycle is carried out, including the extraction and processing of mineral resources in this case. The core of the technological structure is the complexes of technologically related industries that are transformed under the influence of breakthrough technologies (Dmytrak & Kamnev, 2016). Technological innovations are the driver of mining production reconstruction on the basis of environmental and resource saving with the creation of industrial clusters within a single enterprise or a territory to obtain an efficient industrial structure. Clustered manufacturing enterprises and other organizations occupy a stable position in volatile market conditions due to their flexible structure, synergetic effect and the savings from transaction costs (Doifode & Matani, 2015; Villalobos Antúnez, 2016). With reference to the production of metals, this driver is the combination of progressive traditional and innovative leaching technologies within the cluster - a large mining and processing enterprise (Fig. 1).

The works dedicated to breakthrough technologies of mineral deposit mining are aimed at mining profitability increase of ordinary and poor ores by mining technology parameter optimization, and combined technology development using the traditional underground method, the method of underground and heap leaching from design to operation.

The problem of full and complex utilization of minerals, waste stripping, dressing and processing is becoming more acute for the mining industry (Golik et al, 2015; Dorzhu & Ondar, 2018).

Up to 40% of investments, about a third of production resources and up to 20% of the country labor resources are spent for mineral resource exploration and production in Russia. The underground method accounts for two-thirds of non-ferrous and rare metal extraction, more than half of mining chemistry ore, about 60% of coal, 100% of potassium salts, etc. Therefore, the decisions are accompanied by enormous savings.

The problematic issues of underground work design are considered in the works by D.M. Bronnikov, E.I. Shemyakin and

others. Professor V.R. Imenitov, D.R. Kaplunov, V.A. Simakov et al. made the contribution to the problem solution (Kaplunov et al, 2016; Golik et al, 2015; N.V. Melnikov, V.V. Rzhevsky, G.G. Lomonosov and others made contribution to the theory of design, in particular, to the development of scientific fundamentals of subsoil exploitation quality management.

In connection with the increase of mining volume and the production capacity of mining enterprises, as well as in connection with the complication of development conditions, the choice of underground mining technology becomes an important problem for mining science and practice. The optimization of mining technology parameters is hampered by the complexity of mining and geological conditions, the absence of a clear boundary of mineralization in some cases and by a number of other reasons. Usually, the parameters of the mines are accepted in projects as permanent for the whole period of work. The parameters and performance indicators of a mine, including the production capacity of a mine, set in condition calculation, are often varied in 1.5-2 times. Only 40-50% of the technology options, provided for condition calculation, are applied after a mine commissioning.

The projects for the construction of new enterprises or the reconstruction of old ones provide for a broader application of environmental measures, the methods for the integrated exploration and the exploitation of deposits, resource-saving, low-waste and non-waste technology and new generation equipment. One such trend is the production of metals by leaching with the reagents from metal-bearing minerals (Fig. 2).

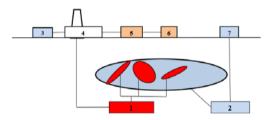


Fig 1. Combined deposit development: 1- rich ores; 2- poor ores; 3- leaching heap; 4 - ore-control station; 5 - concentrating station; 6 - backing complex; 7 - shop for reagent solution preparation

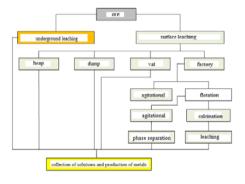


Fig 2. The scheme of metal obtaining by leaching

The works of such scientists as Agoshkov M.I., Simakov V.A., Melnikov N.N., Shestakov V.A., Kotenko E.A. et al. are devoted to deposit development efficiency increase. The issues of the criterion objectivity concerning the effectiveness of reserve mining, the influence of mine productivity and the timing of deposit mining, the influence of geological information reliability on the choice of technologies, the evaluation of capital investments, etc. prevail.

#### 3 Methodology

Many fields preserve the tendency to decrease the content of metal, therefore, in order to determine the algorithm for the development of mining operations, it is important to study the state and the prospects for the development of the entire mining complex, since the volumes of mining operations, the method and development systems, the technique and the technology of deposit lower horizon mining depend on this (Jang et al, 2015; Golik et al, 2015; Komashchenko et al, 2016; Ismailov et al. 2009).

The studies have established some relationships between PV parameters, including the dependence of extraction on leaching time and the size of ore units; the concentrations of a useful components in the productive solutions on reagent type and the intensity of irrigation, and some others.

However, the interrelation between the parameters of the combined technologies and their influence on the final result requires a comprehensive check in different mining and geological conditions for the purpose of optimization. The result of this work is the economic - mathematical model to describe optimal technological solutions during deposit mining by leaching method (Sinclair &Thompson, 2015).

The following factors are established to develop the model:

- Mining-geological: quantity and quality of stocks, the features of occurrence, physical and chemical properties of ores and rocks:
- Mining: the block dimensions, the preparation scheme, the quality of stored rock mass;
- Chemical-technological, characterizing the leaching process: irrigation regime, the composition of working solutions, reagent consumption, technological characteristics;
- Resultant indicators: extraction; reduced costs; reduced profit; the unit cost of the final product; leaching time.

The goal of deposit development technology modernization is the development and the implementation of combined technology optimal variants, first of all, the optimization of blocks and production process parameters.

During the study they use a complex method, including the analysis of scientific and technical and patent information, geological and mine surveying documentation, the technical and economic results of practice, design and analytical calculations, field experiments and physical and economic-mathematical modeling.

The goal is achieved by problem solution:

- The analysis of deposit opening and preparation schemes from the standpoint of combined technology use efficiency;
- The ranking of stocks by content suitable for combined technologies:
- The substantiation of spatial combination variants for combined technology areas;
- The optimization at structure and block technological parameters design stage;
- The justification of mining technology as the part of TES parameters;
- The development of recommendations to improve the profitability of technology in the future.

The rationale for technological scheme spatial combination concerning combined mining is based on the traditionally used development systems that allow to leach the remaining ore in blocks without metal productivity reduction. The algorithm of metal extraction preparation by leaching is shown on Fig. 3.

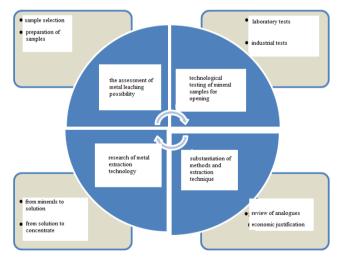


Fig 3. Algorithm of metal mining process preparation by leaching

Traditional mining systems are subject to analysis: with ore storage; with the filling of a mined space by hardening mixtures; with the collapse of the enclosing rocks.

# 4 Results

The criterion of reserve mining efficiency can be presented in the form of a sum of indicators characterizing the economics of a new technology variant as compared with the basic option in the field of metal production. It is important to keep in mind the possibility of existing production mine asset, concentrating mills, metallurgical plants and various types of transport improvement by non-traditional technologies.

Due to the specific nature of the ore deposits, the complexity of the geological structure and the uneven mineralization, the volume of ore reserves and the content of their metals is often confirmed only by 60-90%.

Many processing enterprises of non-ferrous and ferrous metallurgy are not loaded enough, especially with local raw materials. A large number of ores and concentrates are imported to concentrating factories and metallurgical plants from afar and with high transportation costs). If, under these conditions, they increase the production of ores and concentrates at operating enterprises, then the economic effect is developed through the use of existing capacities. Modernization and technical reequipment of operating enterprises is 2-3 times more efficient than the construction of new enterprises. The estimation of

design decision variants taking into account the increase of production scale and the reduction of investment and costs makes it possible to assess the effectiveness of solutions from national economic positions more objectively.

A breakthrough achievement of the second half of the last century is the development of technologies with metal leaching from chemically opened minerals.

At the same time, with the advent of underground and heap leaching technologies, it became necessary to solve a number of issues:

- The selection of a single criterion to estimate the efficiency of mining deposit development.
- The integration of methods to estimate the lost value under different technologies.
- The revision of the conditions and airborne contents during mining not only for balance, but also for off-balance reserves.
- The clarification of the mechanism combining several technologies with error risk increase during the choice of technology relationships due to a low reliability of both geological information and the information about the outlook.
- 5. The development of evaluation and stimulation system for individual workers and sites in accordance with the contribution of each to the effectiveness of the entire production according to a final product within the combination of technologies.
- The development of technological solutions, both for the development systems with PV, KV and traditional method use, and for the combination of different technologies in time and space.

The criterion of a deposit mining efficiency allows to coordinate the economic interests with the interests of the executors: enterprises, mines, plots, brigades.

The requirements for the criterion of mining effectiveness:

- accounting for bringing costs in time;
- the completeness of cost estimate for a final product obtaining:
- the accounting for damage from the value lost at the production stages.

Agoshkov M.I. proposes to take into account the mass of profit obtained depending on mineral extraction completeness as a criterion. Under such an approach, the loss of mineral resources is accounted for indirectly through the mass of recoverable value, and for the conditions when the maximum profit is provided during the extraction of less than 50% from the deposits in the areas of rich ores with a low mining cost.

Most authors believe that the damage from the loss of useful components should be compensated by the subtraction of lost reserve values at marginal prices:

$$\Pi = \sum_{1}^{t} \frac{\Pi_{A} - 3 - \Pi_{\Pi}}{(1 - E)^{t}}$$

here  $\Pi$  is profit, rub.;  $\coprod_{\Pi}$  — the extracted value, rubles; 3 — the costs for the production of a final product, rubles;  $\coprod_{\Pi}$  — lost value, rub.; E — the normative coefficient of reduction; t

- the time for the production of a final product.

The relationship between the maximum permissible costs for a final product obtaining and the recovery factor can be described by the following equation:

$$3_{\Pi \Pi} = (\coprod_{\Pi} + \coprod_{B})(2 - \frac{1}{K_{CH}})$$

where  $3_{\Pi \text{M}^-}$  the maximum allowable costs for a final product production, rubles;  $K_{\text{CM}}$  — through-rate coefficient of metal extraction into the final product.

During the combination of technologies, an active part of fixed assets is released, but there is a need for additional capital investments to construct the processing facilities for solutions, pumping stations, etc. The surplus of the funds involved in the economic circulation makes it possible to obtain additional profit.

Taking into account the completeness of fixed and circulating asset use, the profit value is the following one:

$$\Pi = \frac{3 - P_{\pi} + P_{B}}{3 - P_{p}} \left[ \Pi_{yx} - (C_{oc} + C_{o6}) E_{\pi\pi\varphi} \right]$$

where 3 — ore reserves, t;  $P_{\Pi}$  — lost ores, t;  $P_{p}$  — dirty ores, t;  $P_{B}$  — the reserves returned from losses by combined activation, t;  $\Pi_{yA}$  — specific profit per 1 ton of metal,

 $C_{\text{OC}}$ — основные средства на I main assets per 1 t of metal with the accepted variant of completion, rub.;  $C_{\text{O6}}$ — оборотные средства circulating assets per 1 t of metal with the accepted variant of completion, rub.;  $E_{\Pi\Pi\Phi}$ — the rate of deductions for productive asset use.

Economic efficiency of production by combined technology:

$$\Pi = \left[ \frac{3_{mp}}{A_{mp}} + \left( \frac{\ni_{mp+} \ni_e}{A_{mp}} \right) - \frac{3_e}{A_e} \right] A_k. \, r$$

where  $\prod$  is the profit from the combination of technologies;

 $3_{\it mp}$  - the costs per unit of metal with the base technology, mon.

un.;  $3_{e}$  - the costs per unit of metal under the new technology, mon. un.;  $3_{mp}$  - reduced operating and capital costs of the base variant, mon. un.;  $3_{e}$  - resulted operational and capital expenses

of a new variant, mon. un.;  $A_{\it mp}$  - the annual volume of metal

output by basic technology, un.;  $A_{\it mp}$  - the annual volume of

metal output by new technology, units;  $A_{\kappa}$  - the annual volume of metal output by an enterprise, units; r - the risk factor for market transactions.

For iron ore and non-ferrous metal ores, the highest production and processing costs in the region can be taken as the closing costs, taking into account the transport of marketable products to a metallurgical plant. Similarly, the closing costs of the production basin and the economic area are determined. The disadvantage of specific profit criteria and differential mining rent is that they do not take into account the quantity of produced goods and the efficiency of capital investments.

During the development of deposits, the reliability of information about the reserves varies. At the beginning of mining, reserves can be determined by the category C1 and C2 and only at the stage of purification works they are specified to the category A. At the stage of exploratory prospecting, it is impossible to estimate the distribution of reserves by contents for individual deposits, and even more so for each operational block (Rylnikova & Strukov, 2017; Wang et al, 2015).

Even with the same production technology, the maximum profit is provided with a different extraction ratio. The conditions and cog for each deposit are different, especially when you use different technologies and their combinations. The establishment of firm normative values of the cog content will lead to deposit development efficiency decrease. It is necessary to switch to either the cog content that varies depending on the reserves and applied technology, or to assess the completeness of extraction by geological reserves and recovery factor.

The solution optimization range includes mining processes from the opening of deposits to the operational management of production, including the optimization of the production system individual parts. This is explained by the uncertainty of the initial geological, as well as economic and technical and other information, as well as by long periods of the system work. The theory of optimal management by mining production includes the issues of mine construction period optimization, the choice of schemes for opening, the determination of capital investment volume, and other issues. Most often, mining is seen as a deterministic system, less commonly it is seen as a stochastic system.

The stochastic system has the feature that must be taken into account. During the initial period of the system operation, during designing, the initial information has the lowest reliability. Not only the trajectory of the system motion can be defined indistinctly, but the ultimate goal itself.

The need to take into account the uncertainty of geological information during the selection of capital investment options for deposit development queues is obvious. However, when you choose the technology options and the capacity of the production and processing facilities the following issues are important: the issue of whether the chosen option is sustainable with respect to the planned efficiency during the change of geological reserves and the issue of production efficiency provision during information clarification. During the use of several technologies, their capacities are designed depending on the ratio of the

reserves that are processed differentially. The non-confirmation of reserves is dangerous by damage for each technology, both for capital and operating costs.

The studies of limitations and specific dependencies of technologies for the purpose of development, processing and recycling technology selection that meet the requirements for efficiency, are of particular importance both for stable and for changing conditions.

When you assess technology options, it is necessary to base on the residual value of fixed assets minus depreciation. If the value of fixed assets in the current period is equal to B, then after t years it will be the following one with a uniform depreciation:

$$B_t = B - bt$$

However, the amount of initially invested fixed assets changes during deposit development due to their depreciation and additional investment for reconstruction under new technologies.

Taking into account the use of fixed and circulating assets, the current profit is determined as follows:

$$\Pi = \frac{1-n}{1-p} [\Pi_1 - (B+O)\varphi]$$
$$= K[C + (B+O)\varphi]$$

where B are the main means for 1 t of annual extraction of metal with the adopted technology, rubles;

O - circulating assets, attributed for 1 t annual extraction of metal with the adopted technology, rubles;

 $oldsymbol{arphi}$  – the rate of deductions for the use of production assets;

 $\Pi_1$  – the profit from 1 ton of extracted metal, rubles.

#### 5 Discussion Of Results

The survival of mining enterprises in the conditions of a modern volatile economy and a highly volatile market and limited financial and economic resources depends on the success of strategic development resource determinant implementation and production clusterization (Fig. 4).

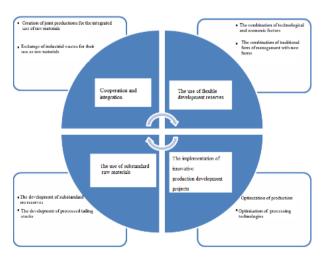


Fig 4. The trends of mining enterprise survival

Production development prospects on the deposits of chemically opened ores are reduced to the use of combined technology, when the richest areas are mined by the systems with the laying of mined space, and depleted ones by the systems with leaching. Capital costs are redistributed with the use of combined technology, the structure of fixed assets is changed, the life of an enterprise is adjusted, which changes the rate of depreciation and the cost of a final product The quantitative values of the main parameters of uranium mining are shown on Fig. 5.

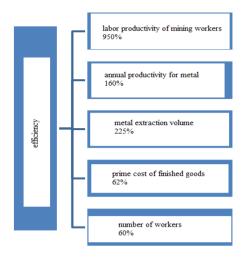


Fig 5. The efficiency of metal leaching in comparison with traditional technology

In order to ensure the same capacity of a metal mine with different mining technologies, a different number of blocks is required for the preparation, slicing and cleaning removal. The more intensive the work, the less circulating capital is involved in the production process. The value of prepared and ready-to-dredge reserves is also different for different technologies, so the amount of circulating assets differs stronger (Zhou et al, 2015; Adibi et al, 2015).

It is impossible to recognize the technical solutions, that ensure the same profit at various costs of fixed and working capital, as successful ones. At an option with a smaller size of production assets, the surplus of funds, being involved in economic circulation, brings additional profit.

With the use of combined technology, a partial release of an active part of fixed assets (mining machines) is possible. Released funds can be used on other sites. And with the use of leaching technologies, there is a need for additional capital investments for the construction of facilities: the shops for the processing of solutions, pumping stations, etc. The consensus of technologies is achieved when the participating production factors are taken into account jointly (Fig. 6).

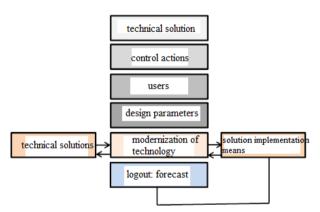


Fig 6. Structural and functional scheme of mining production management

Economic and technological justification for the expediency of ore deposit combined development is reduced to the modeling of alternative technology indicators. For the extraction of uranium ores, the indicators are characterized by the table.

Table 1. Indicators of deposit development technology effectiveness

Indicators, technologies	Traditional	Leaching	Combined
Mineral and raw material base	Rich balance	Poor balance and off	Balance, off balance and metal
Willerar and raw material base	Kich balance	balance	containing ores
Extraction of ores from deposit, %	Up to 50	100	100 and more
Mining time, years	1	2	More than 2
Prime cos, rub./un./%	100	60	40
Productivity of mining workshop worker, m³/cm	100	900	900
Metal extraction volume, t	100	200	More than 200
Number of workers	100	60	60

The results of the research may be in demand during deposit development technology modernization to improve the economic well-being of enterprises (Puchkov, 2014; Khalezov, 2013).

#### 6 Summary

The use of combined technology makes it possible to increase labor productivity by the end product 1.5 times, provided that 40% of the ore reserves are emitted to the surface, enriched and processed at a metallurgical plant.

Due to the mining and the processing of richer ores by the traditional technology the metal content is 50% more in the final product. The remaining reserves of the stored ore are leached at the site of occurrence, which allows to reduce the cost by poor ore delivery, transportation and processing. The part of the produced and sorted poor ore is processed by heap leaching, which reduces the costs of poor ore transportation and processing at a metallurgical plant. Thus, the cost of metal in a final product is reduced by 20-30% as compared to traditional technology.

The experience of metal leaching from rocky places represented by ordinary ores indicates that the use of this technology increases the metal reserves, extracted from the depths, approximately 1.3 times due to the involvement of nonconventional ores for traditional technology. The prime price of metals during the leaching of even off-balance reserves is not higher than with the traditional method of extraction. This gives grounds to consider the PV method as a promising trend of technical and economic indicator improvement and the fullness of subsoil use increase.

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#### APPLICATION OF MODERN PEDAGOGICAL TECHNOLOGIES IN TEACHING LAW STUDENTS

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Abstract: The main goals of the reforms in higher education are the quality, accessibility and effectiveness of education. To date, the issues related to the organization of the educational process, methods, forms and means of training, training of the highly qualified specialists, quality of teaching the educational disciplines, development of the cultural potential of higher education institutions is a priority for the educational platform of Russia. In this regard, the non-traditional forms of training and effectiveness control, marking the criteria for changing the educational paradigm by their emergence, receive a wide application in the domestic education. And special attention in determining the new state educational standard of the third generation is given to the competencies as a qualitative synonym for the concept of professionalism in all its manifestations and the ability to apply knowledge, skills and personal qualities for successful activities in the professional field. The article considers the issues of modern educational technologies used for the law students in the higher educational institutions of Russia. An attempt was made to give a systematic and complete image of the new field of knowledge in the system of education sciences - the technology of educating students, which is an independent branch of the education science and which has its own principles, such as subjective, theoretical and methodological.

Key words: educational process, modern educational technologies, pedagogical technology, teaching methods

#### 1 Introduction

The modern educational process requires the university teacher to have managerial qualities, management and development skills of the student's personality. The teacher today shall possess all the available tools of teaching methods. A particular attention is paid to the integrity of the student, who wants to gain knowledge and strive to maximize his/her opportunities in practice. Unlike the formalized transfer of certain knowledge and the imposition of social and ethical norms of behavior, modern technologies are aimed at achieving the above qualities by an individual through self-actualization and self-education. In this regard, the traditional educational process is based on the explanation technology, and modern didactic methods are based on understanding and mutual understanding.

The main difference between traditional and modern teaching methods is the transition from an explanation to an understanding, from a teacher's monologue to a teacher's dialogue with a student as an equal person, who shall be raised to the level of a teacher's knowledge and in whom it shall be sparked a desire to learn more than it is given to him/her at the university.

At present, the concept of "learning technology" is not generally accepted in traditional pedagogy. In the UNESCO documents, learning technology is seen as a systematic method of creating, applying and defining the whole process of teaching and learning, taking into account technical and human resources and their interaction, which aims to optimize the education forms.

On the one hand, learning technology is a set of methods and means for processing, presenting, changing and submitting the educational information; on the other hand, it is the science of how the teacher influences the pupils in the training process using the necessary technical or information means. In the teaching technology, the content, methods and tools of learning are interconnected and interdependent. The pedagogical skill of the teacher is aimed at selecting the necessary content, to apply the best methods and means of training in accordance with the program and the educational tasks posed (Mirzagitova et al, 2017)

The main task of a teacher in modern education is not to learn the discipline, but to communicate based on the mutual understanding of the teacher and the student. Creativity, research search are the basic concepts that shall form the basis of every lecture, laboratory or practical lesson.

#### 2 Methodology

The term "technology" was borrowed by pedagogy from the production field, however, like any professional activity, pedagogical activity is implemented in a number of specific actions aimed at solving the problems of personal perfection, upbringing and education of the individual.

The use of this term in the pedagogical activity presupposes that the teacher shall also perform a number of specific obligatory actions to achieve the goals established in personal improvement, upbringing and teaching of the individual. Thus, a correct use of pedagogical technologies requires careful study of all stages of the pedagogical process, it is required to implement the basic principles of the educational process, taking into account the features of the students and the conditions in which the pedagogical activity is built and implemented (Azitova, 2015).

In foreign pedagogical literature, the concept of "pedagogical technology" or " education technology" initially correlated with the idea of mechanization of the educational process, whose advocates assumed the widespread use of technical teaching means as the main way to increase the effectiveness of the educational process (Igorevna et al, 2017; Awadallah & Gamal Saad, 2018). In Russia, the concept of "pedagogical technology" was directly related to the programmed education at the initial stage, making it possible to develop clear instructions for the training of both a student and a teacher, who accompanies the knowledge acquisition process (Vonk & Schras, 1987; Villalobos Antunez, 2003).

At the stage of training in the university, the intellectual abilities of the students require further development, honing and improvement. Ultimately, the student shall be taught to cope independently with the professional tasks and life problems. The student teaching technologies in the university are based on the methods and means of traditional education and upbringing, which correspond to the individual features of each individual. A variety of technical education tools help to diversify the educational content.

To this day, the highly effective pedagogical technologies created by such well-known teachers as Y.A. Komensky, I. G. Pestalozzi, D. Locke, A. Makarenko, V. Sukhomlinsky and others have not lost their relevance in the Russian didactic school. In 1970 -1980-ies the new pedagogical technologies of Sh.A. Amonashvili, V.F. Shatalov, M.P. Shchetinin and others were created and implemented in practice.

At the stage of training in the university, the intellectual abilities of the students require further development, honing and improvement. Ultimately, the student shall be taught to cope independently with the professional tasks and life problems (Kuznetsova, 2011).

The student teaching technologies in the university are based on the methods and means of traditional education and upbringing, which correspond to the individual features of each individual. A variety of technical education tools help to diversify the educational content.

Until recently, the practice of university teaching has not included almost no educational games. Today the modern university teaching methods are focused on the activation of the entire educational process through gaming. The use of the game teaching form as a modern technology is based on the topic mastery and even the academic discipline division. The definition of the place and role of gaming technology in the university practice, the combination of elements of the game and the research doctrine largely depend on the teacher's awareness of the functions of didactic games.

The specific nature of using the gaming technology in the audience is largely determined by the game environment. The game features in the student audience include the focus on self-affirmation in the society, the desire for self-realization, the orientation to the speech activity development.

Business game is used to solve complex problems in practical classes. A business game will help students to learn new material, consolidate the material they have passed, develop their creative abilities, and form strong skills. It is possible to apply various modifications of business games for the student audience: simulation, operational, role-playing games, psychological games, sociodramas, logic games, excursion classes, puzzle games, etc.

The simulation games are characterized by simulation of the company's activity or its subdivision. The scenario of the simulation game shall contain a description and purpose of the simulated process.

The operational games help to fulfill the specific operations. The games of this type are practical and conducted with the real data.

A role-playing game helps to develop the tactics of behavior and fulfill the functional duties of a particular official.

A psychological game is based on a specific psychological situation, which students fall into. The situation is played out and the individual's behavior is analyzed in a particular situation.

Sociodramas work out the ability to feel the situation, assess the state of another person, penetrate into the essence of social drama and develop the students' ability to find a way out of the current situation.

The logical game develops the thinking and creativity of the students, helps to find non-ordinary solutions of the complicated (at first glance), but very simple tasks (Beck, 2018).

These teaching methods are systematically applied by the teachers of the Criminal Law, Criminal Procedure and Criminalistics Department of the Naberezhnye Chelny Institute. An example is the business game in the form of judicial trial.

When preparing for the lesson in the form of a business game, the students were offered the main participants in a business game in the previous classes and the students chose their roles (secretary, assistant judge, attorney, prosecutor, accused, jury, witness, psychologist and journalist). The role of the judge goes to the teacher, as he/she directs and coordinates the game. The situation that is considered in the game is planned in advance by the students, their homework is to prepare the basic words for the game. The main activity of the students in the class is the strict observance of the rules of the business game and their duties in it (Shale, 2018).

## 3 Results and discussions

Thus, problem training is a process in which the teacher creates a variety of problem situations and organizes the students' activities to address the situational learning problems. This provides an optimal combination of independent search activity of the students with the assimilation of ready-made scientific recommendations (Heidegger & Abteilung, 1988).

The purpose of applying the modern pedagogical technologies in teaching law students can be formulated as follows: to promote the formation (development) of professional competence, which is expressed in the ability to solve different classes (kinds) of professional problems arising in the real life situations based on the theoretical knowledge, available socio-cultural experience of practical solution of the problems, analysis of own experience and possibilities for this.

The application of pedagogical technologies in the teaching of legal disciplines in the educational process of the higher educational institution shall be subordinated to the goals and

objectives of the educational process. This approach assumes a dual orientation in the activity of both the individual teacher and the entire pedagogical team. The first orientation is the development of the content of legal discipline, that is, the specific direction of scientific research. The second orientation is the content embeddedness of the legal discipline in the goals and objectives of the learning process, which are determined based on the formation of the professional consciousness and abilities of a law student in the interaction with various disciplines through the teachers. If the second orientation is implemented, then we obtain the implementation of pedagogical technologies in a pure form. Such security is manifested, first of all, by writing a teaching and methodical set for the discipline.

#### 4 Conclusions

The university educational process has always paid great attention to the search for the teaching methods and techniques. The "technological" approach to the educational activity requires one more level of developing the pedagogical theory and another system of teacher training. If earlier little attention was paid to the student's practical pedagogical activity, and novice teachers had to master the teaching science in the process of direct professional activity, this area has undergone drastic changes in recent years. Two main components can be identified in the professional activity of the university teacher: research and teaching.

If the first component is more obvious (scientific publications) and dynamic (professional growth - academic degrees, titles), then the pedagogical activity is externally static and is taken into account as the everyday reality of the university life. But this is only at the first glance. It lies as follows at the heart of the "education technology": exact limited recommendation, instructions for the educational process implementation; objective interpretation of concepts, terms; technologies are always reproducible; provision of the fulfillment of training objectives; development if a clear lesson sequence. And if the "teaching methods" are aimed at solving such problems as: "What to teach? Why to study? How to teach? Then the "learning technology " answers the most important question: how to effectively learn? What does guarantee the final result and develop the future educational process? There is a contradiction between the volume of relevant, academic, special, professional information and methods of its processing, transmission and perception, that is, traditional pedagogical methods and techniques in the education system. Therefore, there is a need for such technologies, which are based on the development of a professional personality: creative and critical thinking, ability to analyze and synthesize the information received. The difficulties have arisen with the content and the conditions for the introduction of innovations in the practice of the higher education institutions carrying out the educational activities. Starting with the pedagogical activities, we consciously copy the traditional scheme of knowledge transfer by virtue of the established traditional views: as is customary, as it has been done before us, and this has given some positive results. But it is impossible to only play the role of a knowledge "interpreter" in the current conditions of the global "information boom" (Booth, 1989).

Thus, based on the research made, it is established that the pedagogical technologies allow, provided that they are qualitatively assimilated and applied, providing a decent level of educational results even for the beginner teachers. Figuratively speaking, the technology is a guiding thread in a world of diverse and very complex educational processes, which makes it possible to ensure high stability of success in the education, upbringing and development of the students.

## **5 Summary**

The theories of psychodynamics, psychology, cybernetics, management and government lies at the heart of modern pedagogical technologies. They systematically and consistently implement in practice a pre-designed pedagogical process. But in

itself, no highly effective educational technology cannot guarantee success in teaching students. The main thing is the symbiosis of educational technologies and the teacher's personality.

Today, the modern teacher of the higher educational institution is more the organizer of the independent active cognitive activity of the student, a competent consultant and an assistant. This role is much more complicated than with the traditional education and requires a higher level of professional pedagogical culture from a modern teacher (Serafimova and Zakharova, 2015).

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#### ON SOME PROBLEMS OF FORENSIC RESEARCH OF SCENT TRACES

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Abstract: In this article we are talking about the section of criminalistic technique, called the odorology. The importance of odorprints in the work of law enforcement agencies can not be overestimated. The smell of a man has two most significant properties: individuality and stability. The individual human smell easily penetrates into clothing, shoes and other objects and materials and is kept there for a long time. In the investigative practice, an odorology examination is carried out in those cases when the crime scene does not leave common traces left by the perpetrator, except for the odorprints, since it is more difficult to get rid of them than from such traces of a person as traces of hands, legs or blood. When executing the procedurally necessary rules for seizures of odorprints and professionally performed laboratory identification, the smell left at the crime scene can be used as material evidence on an equal basis with other tracks. In this article methods of detection and seizure, as well as methods for studying odorprints are considered. In addition, scientific experiments carried out with odorprints were analysed to determine the period of preservation of such traces under different conditions.

Keywords: Forensics, odorprint, identification, odorology, odorological method, physical evidence, olfactory examination.

#### 1 Introduction

As you know, the preparation and implementation of criminal intent is always accompanied by the formation of various traces. Even if the perpetrator attempts to destroy and hide the traces of the crime, there may be quite a few of them at the crime scene.

Informative, in terms of crime case solving, can be not only visible and tangible traces of the offender. It is justly noted that taking into account the current level of crimes, with the increase in the number of robberies, "ordered" murders and other serious crimes, the quality of their preparation and concealment of possible traces also increases. At the same time traditional footprints - hands, feet, shoes, etc. - are coming to light less and less. Therefore, in the investigation of crimes, the role of odorprints which can not be destroyed or masked naturally increases (Levchenkova, 2016).

Detection, fixation and investigation of odorprints are concerned with the odorology (from Latin odor - smell and Greek logos - science). Odorprints are of equal importance with traces being studied in trasology, but due to their specification, their removal and investigation must occur in a specific way.

Criminalistic odorology as a branch of scientific knowledge arose in 1965 when a group of Soviet forensic scientists (A.I. Vinberg, M.G. Mayorov, R.M. Todorov, and V.V. Bezrukov) developed techniques for collecting and preserving odorprints, as well as the possibility of identifying a person according to them. The essence of the odorology method offered by these scientists summarized by using the simplest devices, in particular plastic bags, to preserve the odorprint and store it until the moment when it becomes tactically advantageous to use police tracking dogs (Bezrukov and Vinberg, 1965). However, the overwhelming majority of forensic scientists, as well as representatives of the criminal procedure science, spoke against the method proposed by A.I. Vinberg and his colleagues. In the opinion of the method opponents, the techniques described for collecting and storing odorprints are ineffective in selecting portions of air with a low content of odoriferous substances, and storing odorprints in plastic bags is impossible, since they have a porous structure and volatile substances quickly volatilize.

In subsequent years, on the basis of deep knowledge in the field of biology, genetics, zoology, etc. scientific basis and ways of identifying a person by odorprints have been successfully developed. Today, the study of odorprints allows to establish information about participants in a criminal event, the origin of the smell from a particular person, as well as about the belonging

of certain items to the victim or others. M.V. Saltewski identifies two groups of sources of odor: 1) traces - sources of the smell of a person; 2) traces - sources of own smell. The author refers to the first group all solid and liquid substances, separated from the human body (hair, blood, sweat, etc.); objects that are in temporary contact with the human body (tools of crime, household appliances); objects that are in constant contact with the human body (clothing, shoes, etc.). To the second group M.V. Saltewski refers items and objects of organic and inorganic origin, which have their own smell (combustible and lubricating substances, drugs, plants, etc.) (Saltievsky, 1976; Villalobos Antúnez, 2001).

Depending on the methods of seizing and analysing odorprints, criminality is subdivided into cynological and instrumental. In cynological odorology, as an analyser of odorous substances, the olfactory organ of a police tracking dog is used. In instrumental odorology, as analysers of odorous substances, physicochemical methods and instruments are used.

#### 2 Methodology

To date, in the investigation and expert practice, cases of appointment of expensive examinations are quite common. The results of these examinations are successfully used as evidences on the criminal case. However, the attention of scientists and practitioners is attracted by the question of the possibility of establishing specific objects by smell. The fact that the accuracy of the conclusions which can be obtained by sampling performed by police tracking dog, is still raises some doubts. On the other hand, specific cases are known when the results of the use of a police tracking dog have been used in judicial evidence as sources of evidence and have yielded undeniable results, and therefore the further prospects of development of criminalistic odorology do not cause doubts (Kaldenbach, 1998).

Meanwhile, in modern forensic literature, very little attention has been given to questions of the study of orthodontics. This circumstance, as well as the weakness of the corresponding technical base and the lack of sufficient experience of using the canned smell in the detection of crimes, create serious difficulties for the effective implementation of the described methods in the daily practice of the law enforcement agencies (Makogon & Kosareva, 2015; Sulkarnaeva et al, 2018).

Odorprints can not be perceived with the help of sight, or special technical devices for their visual detection, but they are detected through the use of police tracking dogs, whose perception abilities are much greater than the human, being the microquantity of a specific gaseous substance. In addition, the removal and fixation of odorprints most often corresponds to a tactical-technical algorithm for microobjects collecting. Odorprints are the tiniest formations of a smelling substance that remain at the site of the accident as a result of the interaction of the odor source with the objects of the environment and individualize the subject who left this smell (Chernyshova, 2017).

If for the expert analysis of some substances, such as explosives and drugs, laboratory testing is expedient to carry out by instrumental methods (police tracking dogs are indispensable for the search of such substances in operational work at airports, railway stations, etc.), then the study of odorprints by instrumental methods at present it is not possible, because it does not decipher what substances and how to determine the individuality of a person when it is detected by a dog. Only olfactory research using police tracking dogs of an individual smell allows to identify a person by his odorprints. In addition, the undoubted advantage of the olfactory method is not so much in the high sensitivity of the nose of the dog (modern analytical instruments have detectors comparable in sensitivity to the dog), but in high selectivity, which makes it possible to identify each individual from a mixture of others' smells (Schoon and Haak, 2002). Russian criminalists have established and widely used in the practice of disclosure and investigation of crimes the socalled "phenomenon of spilled blood", when the victim's blood absorbs the smell of the offender, it only costs a moment to touch it. In this case, the blood of the victim permanently retains the smell of the offender.

The forensic olfactory examination of odorprints is made in stationary conditions by comparing olfactory samples seized at the scene of the incident and presented for comparison olfactory samples obtained from the persons inspected by the case. For this purpose, specially trained laboratory dogs and sets of externally monotonous olfactory objects are used, which, in its reactions to bio-detectors, allow one or another sign to be detected in the test smell. The bio-detector should demonstrate a stable reaction of recognition of the individual's personal smell on the object under study. The results obtained must necessarily be reproduced by another (other one) police tracking dog.

Olfactory laboratory is an isolated room where glass jars with olfactory specimens-witnesses are arranged at random on special tripods. Among them is the explored olfactory object. After it, in the course of movement of the detector dog, there is a control sample - an olfactory probe obtained from the suspect. A dog-detector at the entrance is allowed to sniff a sample from the scene. Further, the dog moves along a row of jars and sequentially sniffs the placed objects. When perceive a familiar smell, the dog gives a sign with signal posture. If no match is found, the dog takes the signal posture of the control olfactory sample.

#### 3 Results and discussion

Some scientists have expressed an opinion about the illegitimacy of using as evidence data obtained with the use of police tracking dogs. Generally, this opinion is argued by the fact that the dog identifies the person and, since the mechanism of perception and analysis of the dog's odors is unknown, it is impossible to build evidence based on the behavior of the dog.

Proponents of the use of the results of an odor sample as evidence offered several options for deciding how, in what procedural quality, in what kind of evidence, its results should be entered into the process: in the form of a certificate that will appear in the case as "another document" (Winberg A.I.); as a result of an investigative experiment (Belkin R.S.) or a kind of identification (Saltievsky M.V.) (Moiseeva, 2015).

Now the results of the use of police tracking dogs are presented in the form of an expert opinion. However, a number of questions arise here. Firstly, in the maintenance of an odor sample, neither the cynologist who organizes it, nor another forensic scientist-participant in the study of odor samples are specialists in the field of odorology. Secondly, a specialist can not indicate in his opinion, as required by Art. 191 of the Criminal Procedure Code (hereinafter referred to as the CPC), can not specify what researches he produced, can not give a motivated answer to the questions posed. In the maintenance of such an examination, it is difficult to secure the rights of the accused provided in Art. 185 of the Criminal Procedure Code. How can the investigator and the court verify the reliability of the expert's conclusion that they are obliged to do according to the law (part 3, article 70; part 3, article 80 of the Criminal Procedure Code).

The main problems, as practice shows, at various stages of work with fragrant objects are the inopportune collection of odor samples from seized objects, delay in directing odorants to the study, a violation of the method of collecting the packaging of odorants (Straus and Kloubek, 2010).

#### 4 Summary

However, the use of achievements in the field of odorology in criminology are not limited only by the use of a police tracking dogs as an operational-search facility, as well as to identify a person on canned traces of smell. The range of use of the achievements of the odorology is much wider (Schoon, 1991).

In this connection, it is expedient to distinguish the following directions of the use of the odorology method in criminology:

- 1. Use of the abilities of animals, in particular dogs: in the search and detection of drugs, potent and poisonous substances at border crossing points, at customs, airports, etc., when inspecting persons, vehicles, cargo and other objects; when inspecting the crime scene; when searching for and finding weapons, ammunition, explosives; when searching for and finding corpses and their parts, living people at crash sites, debris, accidents, disasters, in natural disasters and other accidents.
- 2. Use of instrumental (olfactory) methods: when searching for and detecting mono-products of substances that have caused or could cause accidents, disasters, crashes, mass poisonings, also prepared for use or used to commit crimes (nerve agents, psychotropic and other potent substance); in prophylactic purposes for passage through pharmaceutical, chemical and other factories associated with the production of hazardous substances

To the above, it is necessary to add the use of odor traps for the purpose of preventing or securing the detection of a crime, forming additional odorprints that facilitate a quick search and successful detection of the offender (for example, such a sufficient effective means as SP-80 used in the places where the alleged the offender) (Joynt, 2018). Each of these areas contributes to the resolution of operational and investigative tasks, the nomination and verification of versions, the search for and collection of evidence, and the identification of ways to investigate crimes.

#### 5 Conclusion

From the above, it can be concluded that the odorprints, and the items on which they are preserved, fully meet the requirements for physical evidence. It is known that the material evidence is the items that served as instruments of crime, or have retained the traces of the crime, as well as all other items that can serve as a means to detect a crime, establish the facts of the case, identify the perpetrators or to refute the charge or mitigate the responsibility. The odorprints detected at the scene, as well as items with such traces, fully correspond to the presented wording of Article 81 of the Criminal Procedure Code of the Russian Federation and allow to solve the tasks assigned to them by the criminal procedure law.

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# APPROACHES TO THE DEVELOPMENT OF THE SYSTEM OF INFORMATION AND METHODOLOGICAL SUPPORT FOR COMPLEX EVALUATION OF CUSTOMER SOLVENCY

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Abstract: The issues of assessing the risks of commercial lending are one of the main factors for the effective sales management in an organization upon economic uncertainty conditions. In the context of solving the task of building an optimal system of settlements with debtors, it seems relevant to develop approaches to the systematization of the structural elements of the integrated customer solvency assessment system and development of its information and methodological support. The methodologics for investigating the counterpart reliability includes verification procedures for determining the legal status of a buyer, conducting a retrospective assessment of its financial status and payment discipline, analyzing cash flows, studying the dynamics and structure of receivables. The fundamental importance of effective implementation of each of these directions forms the prerequisites for proper substantive interpretation of the features of their practical application. On the other hand, the isolated nature of the components of analytical tools determines the need for justification of the algorithm for passing through the stages of economic evaluation of the counterparties' reliability and the establishment of a correlation between the results of their application and the magnitude of the final rating of the organization under study. The proposed areas of analytical evaluation are aimed at forming a comprehensive view of the risks of the upcoming business interaction with the buyer and form the basis for justifying the individual conditions of its commercial lending.

Keywords: assessment of customers' solvency, sales management, cash flow analysis, debtor evaluation, debtor solvency analysis, VAR methodology.

#### 1 Introduction

Currently, there are alternative approaches in the specialized literature to assess the reliability of customers, but in spite of a significant amount of scientific and practical developments, a universal model that allows for a comprehensive assessment of the counterparty's solvency has not yet been developed. Formation of approaches to the solution of this task assumes the progressive development of the information component for the generally available standardized sources of information, among which are the data of accounting (financial) reporting. At the same time, the instant nature of the reporting indicators reduces

the ability to dynamically assess the solvency of counterparties and requires the search for alternative algorithms to solve the task.

#### 2 Methodology

Generalization of discussion results for a set of problems put forward by practitioners for examination allows us to state that the receivables management at an enterprise is a rather complex category that requires an integrated approach to solving the tasks in hand (Asselbergh, 1999; Mian & Smith, 1992; Miriago, 2018). The formation of models that allow determining the appropriate conditions for interaction with customers is now widely spread (Orgler & Yair, 1975; Mao & Sarndal, 1974; Xu & Wang, 2009). It is important for a company to strive to improve the quality of control measures for dealing with debtors, since the efficiency of the organization's management is directly related to the financial condition of its counterparties (Altman & Hotchkis, 2006; Caouette et al, 1998; Minquan & XuZhong Yingtao, 2004; Wei, 1998). Recently, scientists have paid much attention to the creation of economic and mathematical models, thanks to which one can predict the solvency of a potential or existing counterparty and assess the degree of risk of sales on credit terms (Liu et al, 2007; Villalobos Antunez, 2016).

#### 3 Results

The model for assessing the reliability of customers has been developed in the context of eliminating shortcomings of the retrospective analysis of financial statements. In the opinion of the authors, the results of applying an integrated approach to assessing the financial condition of debtors are the most important element in the development of commercial lending policies in the organization.

Figure 1 presents a list of actions according to which the buyer's solvency is assessed, which allows the algorithm for further relations with it to determine.

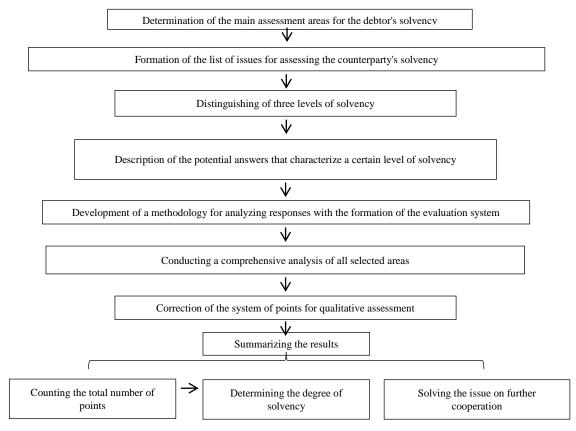


Fig. 1. Algorithm for carrying out an assessment of a buyer's solvency

At the first stage, it is necessary to determine the main areas of assessing the counterparty's solvency. The authors have built a block diagram shown in Figure 2, which describes the six key areas in the assessment, according to which the analysis is carried out.

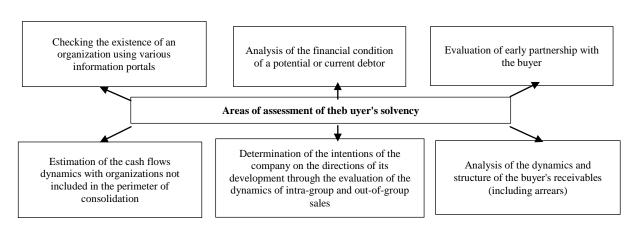


Fig. 2 .The basic directions of an estimation of the buyer's solvency

For each direction of the assessment, an analyst needs to formulate a list of questions, the answers to which will give a complete idea of the elements that directly or indirectly affect the solvency of the analyzed buyer. For example, when evaluating the company's intentions about the direction of its further development, the analyst can ask the following questions: "What is the dynamics of cash receipts from organizations that are not members of the group of companies?", "What is the ratio of cash receipts from buyers entering and not entering the perimeter of consolidation at the time of the audit?", "What is the dynamics of the number of customers who are not a member of the group of companies?", etc.

In connection with the fact that the work stipulates determining the degree of solvency of counterparty, the authors propose to distinguish three levels of assessment: high, medium, low, each of which has its own characteristics. At the next stage, an analyst should form three types of answers to each question characterizing a specific level of solvency. For example, when answering the question: "Has a check on the existence of an organization passed?", the following answers can be given: 1) Yes, the organization exists and there are no doubtful facts (high level of solvency); 2) yes, but 1-2 facts have been revealed, which testify to the doubtfulness of its existence (medium level of solvency); 3) as a result of the audit, more than 2 significant

facts were revealed, which testify to the doubtfulness of the company's existence (low level of solvency).

Before proceeding to the interpretation of the most interesting aspects of the analysis from a methodical point of view, we will examine in detail the selected areas for assessing solvency.

The first direction for evaluating a potential or active customer is to test its existence using various information portals. Such sources allow a general director to check for the fact of being on the wanted list for suspicion of committing crimes, to determine whether the company is under the enforcement proceedings, whether it has debts to its creditors, and so on. Identification of negative facts at this stage is a weighty argument for refusing to cooperate with this counterparty or establishing stringent conditions for sales.

The second direction of the evaluation assumes an analysis of the financial condition of a buyer. Existing traditional approaches to analysis call for an understanding of the financial results of the company, its financial and economic activities, and identify the development trends that have been outlined. However, the existence of a temporary lag characterized by a lack of compliance with the financial condition of the company at the time of the analysis and / or conclusion of the transaction and the situation prevailing at the last reporting date reduces the value of this analysis, since the differences can be significant. Carrying-out of an analysis within the framework of the following direction is possible in the context of the information disclosure in public reporting.

Much attention is paid to the evaluation of information about cash flow of the debtor in its dynamics. Disclosure of operational information on cash flows of buyers will allow assessment of the effectiveness of counterparty's financial and economic activities and determine the possibility of timely fulfillment of obligations to pay off receivables. The authors propose a classification of the counterparty's cash receipts, which implies separation of cash flows from sales on the basis of activities from companies that are not members of the group of organizations. It is important to monitor in the process of analysis not only the dynamics of changes in the monetary receipts of certain groups of companies, but also the dynamics of the ratio of their shares. This division allows determining the intentions of the company to reduce, or, conversely, increase the volume of off-group sales which reflects the actual financial performance of the analyzed object for a certain period of time. In addition to the listed above indicators, the authors also suggest analyzing the average indicators per buyer, namely: the volume of cash receipts, the amount of one payment, and the number of cash receipts. The results of the aggregate analysis of these indicators and estimates of dynamics for the number of buyers and payments for recent periods will form an idea on the stability of the receipt of cash proceeds, being one of the key indicators of the company's stable market positioning, as well as the intensity of revenues, which will form the basis for determining the conditions for working with the buyer.

Calculation of the change rates of the selected indicators is the basis for determining the left and right quantiles. An  $\alpha$ -quantile

(or quantile of order  $\alpha$ ) is a numerical characteristic of the distribution law for a random variable; this is a such number that a given random variable lies to the left of it with a probability not exceeding  $\alpha$ .  $\alpha$ -quantile of a random variable  $\xi$  with distribution function  $F(x) = P\{\xi < x\}$  is any number  $x_{\alpha}$  satisfying the following conditions:

$$P(\xi < \mathbf{x}_{\alpha}) \le \alpha \text{ and } P(\xi > \mathbf{x}_{\alpha}) \le 1 - \alpha$$
 (1),

Where  $\xi$  is a random value,  $\alpha$  is probability of hit of a random variable in a given interval,  $x_{\alpha}$  is a number such that a given random variable lies to the left of it with a probability not exceeding  $\alpha$ .

Calculation of quantiles for each selected indicator gives an idea of the potential change in the indicator in the future period. In addition to quantiles, authors are asked to determine the upper and lower boundaries of indicators, which will allow us to more accurately characterize the ranges of their values for the forthcoming period. The range calculations are based on the values of left and right quantiles, as well as the volatility of the exponent expressed in the form of a standard deviation.

The next direction for the evaluation is the analysis of the dynamics and structure of the counterpart's receivables. In order to conduct this evaluation, we propose to distinguish three criteria: the largest share of the largest debtor, the aggregate share of the largest 5 debtors, the direction and rate of dynamics in the share of the largest debtors in the total receivables. Such an analysis will allow you to assess the degree of concentration of sales and dependence on individual debtors. In addition, it is also important to analyze money, which is characterized by a high degree of non-return, namely, arrears. The analysis of overdue debt is carried out by two criteria: the share of aggregate overdue debt, the direction and rate of dynamics of the share of overdue accounts receivable.

If the company has previously cooperated with the counterparty, it is necessary to analyze the payment discipline based on the historical data, which will be the next direction of the evaluation. In the course of analysis of early partnerships, a comprehensive assessment is conducted to determine whether the buyer has outstanding debts at the stages of the previous cooperation, and if there is such a debt, determine its main characteristics: duration, frequency of occurrence, and share in the aggregate receivables of the counterparty.

Worthy of attention should be the methodology for calculating the weighted average duration of overdue accounts receivable, which we consider on an example. The companies "North" (buyer) and "South" (seller) cooperated with each other during the first half of 2018; for this period, according to the concluded contracts, there were 5 payments. However, the actual payment dates of the buyer differed from those established which contributed to the emergence of arrears.

Table 1 presents information on the planned and actual dates and amounts of payments made by the company "North", as well as results for the calculation of indicators serving as evaluation criteria.

Table 1. Evaluation of the payment discipline in the company "North" for the first half of 2018.

Date of payment (planned)		18.01	15.02	12.03	18.04	04.05	Average
Amount of payment (planned), USD		1256	1526	2015	4050	2015	2172
1st payment		25.01	15.02	12.03	03.05	11.05	Х
Dates and amounts of payments (actual)	amount, USD	1256	1012	745	1895	875	X
	2nd payment	X	02.03	03.05	07.05	18.05	X
	amount, USD	х	514	1270	688	315	х
	3rd payment	X	X	X	11.05	01.06	X
	amount, USD	X	X	X	1467	825	X

Arrears, YES / NO	YES	YES	YES	YES	YES	x
Weighted average duration of overdue debt, days	7.00	5.05	32.77	18.58	16.69	18.91
The average share of overdue debt	1.00	0.34	0.63	1.00	1.00	0.84

Calculation of the weighted average duration of overdue debt  $(WAD_{od\ j})$  for each planned payment j was carried out according to the following formula:

$$WAD_{od\ j} = \frac{\sum (\prod_{i=1}^{n} {}^{*}(D_{i\ act} - D_{plan}))}{\prod_{arrears\ j}}$$
(2),

where: n - the number of tranches for the j-th payment;  $\Pi_i$ - the amount of the i-th tranche of the j-th payment; i - tranche number for the j-th payment;  $D_{i\ act}$ - the actual payment date for the i-th tranche on the j-th payment;  $D_{plan}$ - planned payment date;  $\Pi_{arrears.j}$ - the aggregate amount of overdue tranches for the j-th payment.

In order to calculate the average value of this indicator  $(WAD_{od\ av})$  the following formula of the arithmetic mean weighted was used:

$$WAD_{od~av} = \frac{\sum (WAD_{od~j} \int_{j=1}^{6} {}^{*}\Pi_{arrears~j})}{\sum \Pi_{arrears~j}}$$
 (3),

Where:  $WAD_{od\ j}$ - weighted average duration of arrears for each payment j,  $\Pi_{arrears\ j}$ - the aggregate amount of overdue tranches

for the j-th payment,  $\sum \Pi_{arrears\ j^-}$  the aggregate amount of overdue tranches for all payments.

According to the analysis of the payment discipline of the company "North", the weighted average duration of overdue accounts receivable was 18.91 days, the frequency of arrears occurrence - 1, the share of overdue accounts receivable in the aggregate - 0.84.

A comprehensive analysis is proposed for all the selected areas. Within each question, it is necessary to identify several possible options for an answer, which indicate a specific type of solvency for an individual element. If several criteria of evaluation are identified in the question, then the assignment to each of the criteria of various letter symbols characterizing a certain situation could serve in the capacity of a recommendation. The combination of letters will give an idea of the object under analysis by all criteria, indicating a specific type of solvency. A certain number of points are assigned to each group of answers within a single question, and the higher the solvency level, the greater the number of points. Let's consider this approach to the evaluation using the example of the previous question. Table 2 presents the criteria for assessing the payment discipline of a debtor with the conditions for assigning each parameter to a particular group.

Table 2. Criteria for analyzing the payment discipline of a debtor

Parameter	Duration of overdue debt		Frequency of arrear occurrence			Share of overdue debt			
The letter designation of the group	A	В	С	X	Y	Z	K	L	M
The conditions for assigning to the group	exceeds 40 days	Within the range of 10 to 40 days inclusively	Does not exceed 10 days	Each payment is accompanied by a violation of the payment deadlines	Every second or fifth payment is overdue	Less than 20% of the number of payments are overdue	30% and more	from 10 to 30%	less than 10%

After assigning a letter to each parameter, a combination is obtained that characterizes the situation with a certain degree of

risk. Table 3 presents possible combinations of letters and their corresponding scores.

Table 3. Combinations of letters ABC-XYZ-KLM and their corresponding scores

Degree of risk	Combination of letters	Number of points
Low	AZM, BYM, BZL, BZM, CXM, CYM, CZK, CZL, CZM	from 6 to 8
Mean	AYM, AZK, AZL, BXM, BYL, BZK, CXL, CYK, CYL	from 3 to 5
High	AXK, AXL, AXM, AYK, AYL, BXK, BXL, BYK, CXK	from 0 to 2

For the example under consideration, a combination of the letters VCK indicating a high degree of risk, was obtained. This combination is characterized by a range of points from 0 to 2,

which is determined based on the professional judgment of an analyst.

#### 4 Summary

Receiving answers to questions involves estimation by points that form the final rating of an organization. The definition of the cumulative number of points makes it possible to identify the degree of solvency characteristic for each of counterparties and to determine an individual algorithm for building relationships with it.

#### **5 Conclusion**

The generated model of the multivariate evaluation of a buyer will provide a detailed idea of the reliability of its existence, assess the prospects for the financial condition and performance of the economic entity, and characterize the level of its financial discipline. Ultimately, these aspects reflect the company's ability to repay on its debts on a regular basis and form the basis for deciding on the conditions for conclusion of sales contracts and establishing the amount of trade receivables available to the counterparty.

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# CONFLICTOLOGICAL CLINIC AS A METHOD TO FORM CONFLICTOLOGICAL COMPETENCE

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Abstract: The theme of the formation and development of conflictological competence is quite relevant today. At the same time, it is not sufficiently investigated. This article analyses the concepts of conflictological competence and the competency, the structure of conflictological competence, its dynamics and methods of formation. An author's structure was developed, described from the point of view of elements of conflictological competence, which must be influenced in the educational process. Particular attention is paid to such a method as a conflictological clinic (it can have other names: mediation service, conflictological help service, mediation clinic, etc.). This method has an impact on most elements in the structure of conflictological competence, including practical, psychological, normative, value component. Therefore, it was taken as the basis for the study. The peculiarities of the work of conflictological clinic will be examined using the example of the Kazan Federal University and St. Petersburg State University.

Keywords: conflictological competence, mediation, mediation clinic, conflictological clinic, competence approach.

#### 1 Introduction

In today's world it is necessary to have not only a rich theoretical base, but a set of relevant professional competencies, as well as social ones, which are necessary for constructive communication, building social ties and competent conflict resolution, which guarantees a satisfactory psychological climate in a team, a family, and an educational environment. It is precisely this situation that contributes to the quality performance of labor, educational and other duties.

The urgency of this issue underscores the Council of Europe's definition of the five key competencies that "young Europeans should be equipped with" among which the competency of nonviolent conflict resolution is singled out (Walo, 1997; Villalobos Antúnez, 2016).

Therefore, at the present time, the development of ideas of the competence approach in modern education is becoming more urgent. So now the level of education is determined not by the presence of a certain amount of knowledge, but the ability on the basis of this knowledge to solve professional problems, including conflicts, of varying complexity. As a consequence, the question of the formation of the conflictological competence arises.

An important issue is the methods of formation of conflictological competence, which can not be solved without a detailed analysis of the structure of conflictological competence, dynamics and the conditions for its formation.

As one of the ways, it is precisely the conflictological clinic, which has not yet become widespread on the territory of the Russian Federation.

#### 2 Methodology

The topic of the competence approach in education is actively studied by both Russian and foreign researchers. At the same time there is no unanimity among the researchers. Including definitions of the concepts "competency" and "competence" have different aspects. So, if you turn to the experience of foreign researchers, you can see that the American and English approach to competency are distinguished (Stoof et al, 2017). Sharing these approaches, the author relies on literature on the field of education, training and HR-management. The American approach focuses attention on behavioural characteristics of competency, and the main question solved within its framework is: what personality traits determine successful actions. The English approach draws attention to the nature of the activity, it becomes important to identify the main elements of the activity

that must be met in order to consider the result achieved, satisfactory.

A new stage in understanding the competence approach was the work of J. Raven "Competence in modern society", where the author first analyses the psychological nature of competence, draws attention to the features of its dynamics at various stages of human life. The scientist makes a special emphasis on the value and motivational aspects (Raven, 2002).

In national science, there is a more or less general understanding of competency and competence. However, there is no consistency in their relationship. Thus, the analysis of this topic is carried out by Bolotov, Serikov, Ermakov, Zeer, Zimnyaya, Markova (Konyakhina, 2012; Markova, 1995).

Turning to conflictological competence, it is important to have a common basic understanding of the conflict. In this article, we will adhere to the functional approach, which is based on the theory of the American sociologist L. Koser. The scientist in his work "The Functions of Social Conflict" (1956) defines conflict not only as a problem, but also as a phenomenon having a number of constructive functions (Lewis, 2000). This is an important element in the formation of the conflictological competence of the individual.

The topic of conflictological competence is quite young in scientific circles, nevertheless, very relevant. At the moment there is no single understanding and definition of this phenomenon. Parallel with the study of conflictological competence, such concepts as conflictological readiness, conflictological culture are also touched upon. There is terminological confusion and such concepts as: conflictological competence, conflict competence, conflict capacity, mediation competence, etc. The analysis of the concepts "conflictological" and "conflict" competence is handled by Leonov, Bashkin, Samsonov and Shcherbakova pay special attention to the themes of conflictological culture, conflictological competence and their correlation (Leonov, 2018; Bashkin, 2014; Samsonova, 2002; Shcherbakova, 2010).

Such researchers as Tsoi, Teploukhov, Sherniyazova, Yakovleva, Romanov, Romanova are engaged in the topic of conflictological competence, its structure and dynamics (Tsoi L.N. (2001; Teploukhov, 2012; Sherniyazova, 2011; Yakovleva, 2015; Nosyreva, 2012).

In their works, they analyse the experience of applying mediation in the framework of the activities of legal clinic, as well as the independent work of mediation and conflict clinic.

#### 3 Results and Discussion

The process of forming and studying the competence approach has a relatively short history. I. A. Zimnyaya the doctor of psychological sciences on the basis of many works revealed the following periodization: the first stage (1960s - 1970s) - characterized by the first studies in this field and the introduction of the category of "competency"; the second stage (1970s – 1990s) characterized by the emphasis on social competence / competency, the work of the British psychologist J. Raven "Competence in modern society" appears, where the author pays special attention to the value, motivational component; the third stage (since 1990) becomes a stage of detailed study of both the competent approach itself and some kind of competencies.

Studies in the field of competence approach are quite time consuming, until now the development of basic concepts, their properties and characteristics continues. In addition, there is a phenomenon in which practice and theory develop at different rates, and to some extent in Western communities the former overtakes the latter.

In this same study, delineating the concepts of competence and competency, we will adhere to the views of the Doctor of Psychological Sciences, A.K. Markova. The scientist defines competence as a combination of mental qualities, as a mental state, thanks to which an individual can act responsibly and independently (effective competence), and is also understood as mastering a person's ability and ability to perform labor functions (Markova, 1995; Folarin & Folarin, 2018). Competency is defined as a certain range of issues that an individual has the opportunity to solve.

Under conflictological competence, according to the dictionary of the conflictologist, is meant the cognitive-regulatory subsystem of a professionally significant part of the individual, containing relevant special knowledge and skills (Antsupov, 2006). Conflictological competence, being an element of sociopsychological competence, presupposes the existence of knowledge about the laws of origin, development and completion of conflicts; skills to analyse the conflict situation, to predict scenarios of its development, and also includes the choice of the most constructive methods for its resolution.

Turning to the concretization of concepts of conflictological and conflict competence it should be noted that for the former, the importance of theoretical knowledge is primarily important; the second is literacy at everyday level, which is formed from the personal experience of the individual, so we can say that to some extent this phenomenon is accidental. In addition, a constructive conflict requires a good theoretical preparation, which includes the following basic categories: the structure of the conflict, its dynamics, interests and needs of the parties, effective communication, strategies for behaviour in the conflict, etc. This knowledge is important for an adequate understanding of the conflict situation and development of the most qualitative plan of action.

Considering the concepts of conflictological culture and conflictological competence, it should be noted that the latter is the previous level for the first. Conflict competence is an important element in the structure of social competence, that is, in the process of ordinary everyday communication and conflict resolution. Conflict culture is an element more characteristic of people professionally engaged in this field.

If we turn to the consideration of the structure of conflictological competence, we can note the following. At present, there are several models of the structure of conflictological competence, each of them emphasizes a certain element. At the same time, each of the levels is important in a holistic analysis of conflictological competence. Considering the structure from the point of view of the elements to which it is necessary to influence the formation of conflictological competence, the following levels can be distinguished:

- 1. Theoretical. Supposes system conflictological knowledge.
- Practical level includes the experience of practical activities in conflict resolution, the ability to use various strategies and tactics.
- The psychological level assumes personal characteristics of the personality, its attitudes and stereotypes, the ability of emotional regulation, as well as the reflection of its behaviour in the conflict.
- The normative level is the knowledge and understanding of the norms of law, as well as the ethical norms of the conflictologist.
- 5. The value level includes a value-motivating component, that is, those values that underlie professional activity.

If we turn to the consideration of the dynamics of the formation of conflictological competence, then this process can be considered from two points of view:

In terms of personal dynamics, the following stages are distinguished: training, professional preparedness, professional experience and professionalism (Zhmakina, 2010). In the university you can work on the first three levels. The stages of training and professional preparedness are realized within the

framework of professional experience can also be acquired in the development of various projects and participation in them. It is important to understand that conflictological competence develops and changes throughout life.

If we look at the dynamics of the formation of conflictological competence from the organizational point of view, we can distinguish three main stages: preparatory, formative and analytical.

Each phase of conflictological competence formation and each structural unit corresponds to certain methods of influence on students and interaction. One of the most effective methods in the development of conflictology competence is conflictological clinic (other names: mediation service, conflictological assistance, etc.).

Conflictology clinic (or Conflict Relief Service) is an element of the clinical approach in education. This approach assumes the inclusion of the student directly into professional activities. Clinical campaign is actively implemented in the field of legal education, where it has 2 goals: developing students' practical skills, helping low-income groups of the population.

Since the development of the clinical approach in the humanities and social disciplines has arisen in legal education, let us consider in more detail the features of legal clinics.

In study of any method, it is important to understand its effectiveness, productivity. Thus, the following points of utility are highlighted in the report of the Committee on the Future of University Clinics of the Association of American Law Institutes, a brief summary of which is given in the Manual for Lawyers and Human Rights Defenders:

- Training of the lawyer practical skills;
- Learning the specifics of the profession on personal experience;
- Solving of current ethical problems, as a stage in the development of professional ethics;
- Students are introduced to the requirements and methods of performing the functions of a lawyer;
- Joint group training on the principle of cooperation;
- Awareness of the future lawyers of their obligations to the client:
- Learning and understanding of their capabilities and limitations in the activities of a lawyer.

It is possible to draw parallels with conflictology. So the conflictological clinic contributes to the development of practical skills of the conflictologist; the student learns from his own experience, solves ethical problems, begins to understand his responsibility to the client in resolving the conflict. Thus, there is a development of conflictological competence in several areas.

It should be noted that the mediation practice in education began to develop within the framework of the legal clinic. Later in Europe and America it was formed as an independent mediation clinic or clinic of mediation. Its form of development is a bit narrower - in the aspect of mediation.

If we analyse the Western experience, then there are many advantages of this form of activity: the mediation clinic is a good start for a successful career of a mediator in a greater degree in terms of ethics; students get acquainted with limitations and opportunities for mediation, acquire understanding and experience with emotions, attitudes and values of clients. And in the future, students who have gone through a mediation clinic can more competently provide their services (Kuklo, 2007).

If we turns to Russia's experience, then much can be given to an interview with E. N. Ivanova, the head of the first national Consultative Service in the conflict and mediation in St. Petersburg, Petersburg State University. The expert notes the effectiveness of the Service's activities is high enough. Observation of real cases, participation in conflict resolution allows you to acquire the experience that is difficult to obtain in

training mediations (dramatizations of one or another case), the results obtained on real consultations, help students to realize the importance of the whole future profession. Activity within the Service affects students not only as a result of acquiring certain skills and knowledge, but personal development of students also occurs, qualities that help in professional activities are formed, such as: responsibility, tolerance, sociability, perseverance, empathy. These facts indicate the development of conflictological competence of students.

Participants in the Conflict Relief Service at the Kazan Federal University also note the benefits of this structure. In the survey, students noted the following acquired qualities: knowledge and ability to conduct mediation and negotiation procedures; ability to build conflict-free interaction with colleagues, conduct conflict prevention; the ability to form conflict-free worldview attitudes; organization skills; feedback skills; teamwork skills. These competencies are both general and narrowly professional.

#### 4 Summary

If to look more in detail, the method of conflictology clinic has an effect on the following elements of the structure of conflictological competence:

Practical. Students acquire new experience of direct work with a real conflict, develop their own style and behaviour strategies.

Psychological. Thanks to practical work, students understand the profession complexities and are aware of the problems that need to be overcome in the personal plan: such as different settings, stereotypes, clamps, etc. There is a regular reflection of their actions, which can be carried out in both individual and group order

Normative. There is a constant need to address ethical codes of the mediator and conflictologist, to study the norms of legislation in more detail.

Values. Through work with a real conflict, students begin to realize the inner motivation, the values that determine its activity. In addition, the idea of free assistance brings a strong social aspect.

If we turn now to the dynamics of the formation of conflictological competence in its personal aspect, then we can say that the stage of training is realized within the classroom, and the stages of professional preparedness and professional experience have the opportunity to be realized directly in the process of the student's participation in the activities of the conflictology clinic. This is due to the fact that in this structure there is an awareness of the importance of their future profession, the willingness to enter into it, and self-development.

# 5 Conclusions

Thus, in this article the concepts of competency and competence, conflictological competence and conflict competence, their correlation with conflictological culture were considered. So, by conflictological competence is meant the cognitive-regulatory subsystem of a professionally significant part of the personality, containing the relevant special knowledge and skills. At the same time, conflictological competence is a stage in the formation of conflictological culture, which is more characteristic for professionals in their work. The difference between the phenomenon being studied and the conflict competency lies in the fact that the latter does not presuppose the presence of deep theoretical knowledge about the conflict.

The structure of conflictological competence consists of theoretical, practical, psychological, normative and value elements.

It was noted that the conflictological clinic contributes to the development of most structural components, which indicates its effectiveness in this matter. They also determined that the method of conflictology clinic is applicable at the stages of the formation of professional preparedness and professional experience.

In addition, the results of interviews with the head of the Consultative Service in the Conflict and Mediation of St. Petersburg State University and the Conflict Relief Service of the KFU speak about the real results of the work in the clinical approach.

Thus, we can talk about the effectiveness of this method in the formation of conflictological competence. At the same time, it is important to understand that this is one of the methods that should be in the complex of a whole methodology for developing conflictological competence.

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# IMPELLENT REACTION OF THE CHOICE AS THE INDICATOR OF THE FUNCTIONAL CONDITION OF STUDENTS

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Abstract: The urgency of research on revealing overfatigue of students at an early stage is caused by care of preservation of their health and working capacity. Knowledge of the changes occurring in an organism under influence intellectual, emotional and physical activities, influencing on physical and intellectual working capacity, are important for the control over exhaustion of students, that, in turn, will allow to arrange struggle against a developing exhaustion. In given clause opportunities of use of diagnostic testing of a functional condition of the student by means of the special test by definition of time of complex impellent reaction of a choice are considered. In research some techniques of diagnosing of early exhaustion are compared. The estimation of their efficiency on the basis of the statistical analysis of the data received during experiment is given. As a result of carried out research it was possible to define the applied importance of the test for definition of time of complex impellent reaction of a choice in an opportunity of diagnosing of a condition of exhaustion at students at earlier stages. Its efficiency in comparison with a number of other techniques is revealed. Clause is intended for the experts working with students of the internal, correspondence or remote form of training.

Keywords: exhaustion, the control, a degree of exhaustion, impellent reaction, measurement of time of reaction, the computer program.

#### 1 Introduction

Undue fatiguability, especially of mental workers, which undoubtedly include students, leads to nervous overexertion. The condition that has arisen under the influence of the work done and affects the level of efficiency is called fatigue. Subjectively fatigue is felt as a feeling of fatigue, the physiological essence of which consists in signalling the body about the need to stop or reduce the intensity of the work. Fatigue is a complex and diverse phenomenon. In a number of researches (Ilyin, 2005; Leonova & Kuznetsova, 2015; Astrand, 1972; Barht, 1980). fatigue is associated with central inhibition. The intensification of inhibitory processes, which, in the opinion of these authors, under the influence of a powerful stream of proprioceptive impulses from tensely working muscles, and also as a result of biochemical changes in blood, leads to an efficiency decrement. Recognizing the exceptional role of the cerebral cortex in controlling motor and autonomic functions in the process of intense muscular activity, as well as in the development of fatigue, it is impossible to ignore the significance of local factors, i.e., changes in the functional state of the neuromuscular apparatus. The manifestation of the first signs of significant, especially severe fatigue is a biologically necessary protection from the development of exhaustion of the body, a signal to stop a work. A strong-willed effort can force the body to continue working, which will only relieve fatigue or, much more dangerous, lead to a state of overfatigue. Overfatigue can be the result of great physical and mental stress. The consequences of nervous fatigue are illnesses, and above all illnesses of the cardiovascular system.

Thus, fatigue is a consequence of the complex interaction of peripheral, hormonal and central-nervous factors with the leading significance of the latter ones. In the research of fatigue, reaction time indicators are often used. In many researches it has been proved that after prolonged stress loads a significant increase in the simple visual and motor reaction is observed, which in turn is accompanied by a decrease in the accuracy of the task (Ilyin, 2005).

The characteristics of motor reactions in researches are used, among other, to identify the typological features of higher nervous activity, and also to assess the functional state of the organism in norm and pathology (Laszlo & Livesey, 1977; Tamminga et al, 2002; Dorzhu & Ondar, 2018)

The reaction time is one of the most convenient indicators for studying the nervous processes dynamics. The reaction time is the time interval between the presentation of the stimulus (signal) and the beginning of the response of the subject to the signal conditioned by the instruction. The time of the simplest motor reaction, which fixes the fact of the appearance of a signal (the "detection reaction" SMRT [simple motor reaction time]) is in the range of 0.15-0.3 seconds. For complex reactions, the allocation of one of several possible signals (the "distinction reaction" CDRT [complex discrimination reaction time]) or the choice of one of several answers (the "selection reaction" CCRT [complex choice reaction time]) it increases.

We hypothesized that using the test of the definition of CCRT it is possible to diagnose the state of fatigue that occurs to students at earlier stages. To confirm this hypothesis, a research was conducted at the Department of Physical Education and Sports of the Naberezhnye Chelny Institute of FSAEI HPE "Kazan (Privolzhsky) Federal University".

#### 2 Methodology

The response time to the light signal was recorded with the help of the "Reaktiomer-6" program (Bolgov, 2016; Bolgov, 2018). On a computer monitor in a random place, with an asynchronous time delay of 1 to 3 seconds, a visual object is displayed in the form of a color circle. We used techniques with display of one color (SMRT [simple motor reaction time]) and three colors (complex choice reaction time). Depending on the color of the circle, certain keys are pressed on the keyboard. In the first and second tests, 8 attempts are given. It takes into account the average result and the number of errors made during testing (premature pressing of a key or selection of a key that does not match the color of the circle)

The reaction time largely depends on the complexity of the problem to be solved by the subjects. When measuring the complex choice reaction time, Hick's law is manifested (V. E. Hick, 1952) - the experimentally established dependence of the complex choice reaction time on the number of alternative signals. This dependence is expressed by a logarithmic function:

$$RT = a * log (n + 1)$$

where RT is the average value of the reaction time that averaged over all alternative signals; n is the number of equally probable alternative signals; a is the proportionality coefficient (Hick, 1948).

To track physical fatigue, we used a six-moment trial. The evaluation of the level of performance is made by summing up the six results of the pulse measurement before and after the load.

Special researches have shown that the sum of the results of all researches gives a more reliable estimate than individual researches (Muller et al, 2011). Therefore, this functional test is recommended. It includes: 1. After a 5-minute rest to count the pulse for 1 minute in prone position. 2. Quietly rise up, stand for 1 minute and count the pulse for a minute. 3. Calculate the difference between pulses in prone position and in stand position and multiply this figure by 10. 4. Make 20 full deep squats for 40 sec; during squats, the arms are vigorously lifted forward, and when standing up they are lowered down. Immediately after squats sit down and count the pulse for 1 min. 5. Calculate the pulse within the 2nd minute after the squats. 6. Calculate the pulse within 3 minutes after the squats. 7. Put all the figures together. The aggregate indicator is not constant. It varies depending on the state of health, fatigue and level of fitness. At the same time, for us it was important not the absolute aggregate indicators' value itself, but its changes for the same person. Decreasing in time indicators can mean started overwork.

To further control the students' fatigue, the A. B. Leonov and I.V. Shishkin "Degree of chronic fatigue" method was used (modification - 2003) (Nikanov & Novoztsev, 2003; Villalobos

Antúnez et al, 2013). The questionnaire "Degree of chronic fatigue" is a standardized method of questionnaire type, aimed at revealing the degrees of chronic fatigue. The technique includes 36 statements corresponding to the most typical symptomatology of chronic fatigue, affecting both sensations of physiological and psychophysiological discomfort, and disturbances in the course of various mental processes. For responses of the surveyed, the reduced scoring scale is used: "Yes" (the experience is distinctly expressed, 2 points); "Yes-No" (the experience is expressed ambiguously, 1 point); "No" (the experience is completely absent, 0 points). The qualitative description of the syndrome of chronic fatigue was characterized by the degree of expression of its main components, which is determined by the specific weight of different groups of symptoms in the general index of chronic fatigue:

- 1. symptoms of physiological discomfort;
- 2. decreased of overall well-being and cognitive discomfort;
- 3. violations in the emotional-affective sphere;
- reduction of motivation and changes in the sphere of social communication.

The main indicator of the implementation of the technique was the index of chronic fatigue (ICF).

In addition to standardized diagnostic tests, the method of individual conversations was used. This method allows the student to reflect those changes that occur in his state of health, general vitality and habitual behaviour in a more free form.

All the obtained test data were subjected to statistical processing using a statistical package for the social sciences of SPSS with the following criteria:

- verification of the normality of the distribution was carried out by the Kolmogorov-Smirnov criterion;
- to test the hypothesis of the difference of two average values, a paired two-sample Students' T-test (t<sub>Student</sub> = 2,012; when n = 48; a = 0,05) was used.

The experiment involved 48 students at the age from 17 to 20. Measurements of the reaction and a six-moment trial were made at the beginning of physical education classes in the last week of September and December (Tuesday and Friday). A of 192 measurements were made in total. The survey on the method "Degree of chronic fatigue" was conducted once in late December

#### 3 Results and Discussion

The results of the six-moment trial. At the end of December, only 6 students recorded a significant deterioration at the level of p <0.05 in the absolute total score. Thus, it can be assumed that only 12.5% of students from the total number of the experiment participants have signs of physical fatigue.

Measurement of the complex choice reaction time. The students' complex choice reaction time was differed insignificantly from the TR obtained by Hick's formula (an average of +0.03 sec). At the same time, in September the result was better for 38% of students instead of calculated one in December - only 25%.

Checking the test results with the Kolmogorov-Smirnov test showed that all the data obtained during the measurement of the reaction time correspond to the normal distribution (Z Kolmogorov-Smirnov statistics from 0.62 to 0.82 for p>0.7).

Statistical analysis of the data revealed a significant increase in the CCRT at the end of the week in September and December. At the same time, there was no significant difference between the SMRT (see Table 1). It is indicative that in December the deterioration of the CCRT on Friday, in comparison with Tuesday, was observed for 62% of the students, and in September – only for 38%. In December, along with the increase in the CCRT, the number of errors (up to 17) increased sharply (see Table 1).

Table 1. The results of the study of SMRT and CCRT for students (M  $\pm$  m), n=48

Reaction type		September	December	
	Tuesday	$0,\!290 \pm 0,\!035$	$0,298 \pm 0,044$	
SMRT (sec)	Friday	$0,287 \pm 0,037$	$0,301 \pm 0,05$	
	t <sub>Student</sub> ; p	1,158; p=0,252	1,890; p=0,065	
CCRT (sec)	Tuesday	$0,630 \pm 0,071$	$0,647 \pm 0,074$	
	Friday	$0,645 \pm 0,085$	$0,662 \pm 0,082$	
	t <sub>Student</sub> ; p	2,721; p<0,01	4,965; p<0,01	
CCRT errors (total)	Tuesday	4	6	
	Friday	7	17	

We assume that the accumulated fatigue is reflected in an increase of the speed in the complex choice reaction with a simultaneous increase in the number of errors. If during the September testing the number of errors at the end of the week increased slightly, then the error growth rate in December is significant (see Table 1). Thus, for 68% of students from the total number of the experiment participants were found signs of fatigue in CCRT terms.

In individual interviews, all students who had a deterioration of results in the December testing complained about the deterioration of well-being.

According to the results of the questionnaire "Degree of chronic fatigue", the index of chronic fatigue was calculated (ICF).

Calculation formula:

$$ICF = (\sum onDS) - (\sum onRS) + 12$$

where  $\Sigma$ onDS is the sum of points for the questionnaire - Direct statements (30 questions);  $\Sigma$ onRS is the sum of points for the questionnaire - Reverse statements (6 questions); 12 is the correction factor.

To make a diagnostic judgment about the degree of chronic fatigue, the following grades of ICF are used:

≤ 17 points - No signs of chronic fatigue

 $17 < ICF \le 26$  points - Initial degree of chronic fatigue

 $26 < ICF \! \leq \! 37$  points - Expressed degree of chronic fatigue

 $37 < ICF \! \leq \! 48$  points - Strong degree of chronic fatigue

By the results of the questionnaire analysis,  $\leq$ 17 points were scored by 37 students (77%). In the range of 17-26 points - 10 students (21%) and more than 26 points - 1 student (2%). In

other words, the fatigue was revealed in 22% of students from the total number of the experiment participant.

#### 4 Summary

The methods of fatigue diagnosing presented in the research showed different results of fatigue detection for students at the end of the semester. A six-moment trial revealed signs of physical fatigue for 12.5% of the students from the total number of the experiment participants, the "Degree of chronic fatigue" questionnaire identified fatigue for 22% of students, and 68% of students reported of fatigue by the CCRT.

#### **5 Conclusions**

We suppose that using the test of the definition of the CCRT it is possible to diagnose the state of fatigue that occurs to students at earlier stages. To combat the developing of the fatigue, it is possible to recommend a temporary decrease of the capacity of the physical and mental load.

#### Acknowledgements

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# ELECTIVE COURSE "ELEMENTS OF THE QUALITATIVE THEORY OF ORDINARY DIFFERENTIAL EQUATIONS" FOR BACHELORS OF THE PEDAGOGICAL DIRECTION OF EDUCATION

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Abstract. At present, the problems connected with the development and introduction of various elective courses in the educational process of higher educational institutions (universities), which contribute to the introduction of students to the modern achievements of science and practice, are becoming increasingly important. In the field of mathematical education, when preparing as specialists in the field of mathematics, computer technology, mechanics, and in the preparation of a future secondary school teacher, this problem becomes more acute because of the wide variety of modern scientific theories that claim to be included in curricula, as well as the greater laboriousness such courses. The purpose of this article is to substantiate a possible version of such an elective course for students of the pedagogical direction of education, as well as a description of the structure and content of the course. To develop and substantiate the results obtained in the article, we used the method of comparative analysis, as well as the method of experimental confirmation of theoretical hypotheses. In particular, scientific and methodological sources devoted to the development of elective courses were analyzed, special mathematical literature was analyzed, approbation of the course in several academic groups of students was carried out. This article presents the possible structure and content of the elective course "Elements of a qualitative theory of ordinary differential equations", the advantages of such a course in terms of developing the necessary competencies and cognitive interest of students are indicated. The proposed elective course is aimed at improving the professional and psychological-pedagogical training of future school teachers, within the framework of which their professional competencies are being improved, and progress is being made in professional development. The article is intended for teachers of mathematical disciplines in higher education, interested in the complex of questions and problems consi

Keywords: elective course, pedagogical direction of education, qualitative theory of ordinary differential equations, homogeneous equations, preparation of bachelors of pedagogical education.

#### 1 Introduction

We are talking about the course "Elements of a Qualitative Theory of Ordinary Differential Equations" for students studying at the Elabuga Institute of the Kazan (Volga) Federal University in the direction of physical and mathematical education.

The modern qualitative theory of ordinary differential equations is a series of extensive mathematical theories that require, for a study even in a minimal volume, significant time and significant mathematical erudition (Ilyashenko, 2006; Nemytskii & Stepanov, 2016; Obolensky, 2006). The purpose of this course is to study some initial information and facts of the qualitative theory of ordinary differential equations, to develop students' ability to determine the basic properties of solutions for classes of relatively simple ordinary differential equations.

As is known, the qualitative theory of ordinary differential equations studies the properties of solutions of differential equations without finding the solutions themselves. We make a quote from (Ilyashenko, 2006; González & Villalobos Antunez, 2016), which gives an idea of the origin and development of this section of mathematics.

"A. Poincare conceived a qualitative theory as an approach to the study of differential equations, not according to the formulas of their solutions - such formulas, as a rule, do not exist - but directly on their right-hand sides. There was a new discipline at the junction of geometry and analysis. As the main goal, A. Poincare called a qualitative study of the three-body problem. However, the natural geometric questions turned out to be nontrivial even for equations in the plane. With them, he began his research.

At present, the geometric theory of differential equations has strongly branched out. Hamiltonian mechanics separated from it, together with a new branch - the KAM theory; a multidimensional theory of dynamical systems, also called differential dynamics; bifurcation theory; holomorphic

dynamics, which studies iterations of rational mappings of the Riemann sphere onto itself; equations on surfaces; theory of relaxation oscillations; a qualitative theory of differential equations on the plane, real and complex.

For the most part, these theories study similar questions:

- What is the local behaviour of solutions (near a singular point)?
- What are the global properties of solutions (in the entire phase space and in infinite time)?
- How do these properties get rearranged (bifurcated) in systems that depend on the parameter, when does this parameter change?

These questions are much better studied in the theory of differential equations on the real plane than in other sections; some of them have been studied with almost full completeness".

The foundations of the qualitative theory of ordinary differential equations were laid at the end of the 19th century by outstanding mathematicians A. Poincaré and A. M. Lyapunov. It seems that the special course (elective course), connected with the study of differential equations, can be very useful for bachelor students in the pedagogical direction of education (specialty "Mathematics and Physics", "Mathematics, Computer Science and Computer Science").

The choice of the concrete content of such a course is connected with certain difficulties, first of all, due to the extraordinary variety of various important and interesting sections of the theory of differential equations. As a possible version of such a course, we proposed the course "Elements of the qualitative theory of ordinary differential equations". However, the small amount of lecture hours devoted to the study of educational material puts rather strict requirements for the selection of material. Indeed, the course should be fairly compact (read for one semester), but at the same time have a complete logical structure.

# 2 Methodology

# 1. Methods of research.

During the research, the following research methods were used: analysis of normative documents and sources in the field of pedagogy, teaching methods and mathematics (the theory of differential equations), comparative analysis of sources and pedagogical concepts, systematization and generalization of facts and concepts, method of peer reviews, analysis of student performance listeners of elective courses, pedagogical experiment.

# 2. Experimental research base.

The experiment on the introduction of the elective course "Elements of a qualitative theory of ordinary differential equations" was conducted on the basis of the Elabuga Institute of the Kazan (Volga) Federal University.

# 3. Stages of research.

The study was conducted in four stages. At the first stage, scientific literature was studied, the present state of the problem under investigation was analyzed in theory and practice; a study plan was developed. At the second stage, the concept of an elective course was developed, its structure was developed, a selection of theoretical (lecture) material and tasks for solving at seminar sessions was conducted, and a fund of evaluation tools was developed.

At the third stage, the course was tested in the academic groups of the Physics and Mathematics Faculty of the Elabuga Institute of the Kazan (Volga) Federal University. At the fourth (final) stage, the results of the study were processed and formalized.

#### 3 Results

We now turn to the description of the structure and content of the variant of the elective course on the theory of ordinary differential equations.

In our opinion, as a source of initial theoretical information and non-standard problems for seminars, one can take the book of Academician I.G. Petrovsky (Petrovskiy, 1984; Nikolaev, 2018). In it (Chapter II "Simplest Differential Equations"), the methods for constructing integral curves and other questions of the qualitative theory for equations with separating variables, homogeneous equations, first-order linear equations, and equations in complete differentials are considered successively. The solution of problems posed in (Petrovskiy, 1984) helps students to see the theory of differential equations in a new perspective, to make sure that even for externally simple equations, non-trivial problems can be posed. The material of the book (Petrovskiy, 1984) is the first part of the course.

For a deeper understanding of the material, a sufficiently informative (but at the same time familiar and simple) object of study is required. We consider that as such an object we can propose a homogeneous equation of general form

$$y' = f\left(\frac{y}{x}\right).$$

An effective method for constructing integral curves (and phase portraits) of equations of the form (1) was proposed in (Shilov, 1950; Lyagina, 1951). In Lyagina, an exhaustive analysis of the behaviour of the integral curves of equation

$$y' = \frac{ax^2 + bxy + cy^2}{dx^2 + exy + fy^2}.$$

For this equation, a detailed classification of possible types of behaviour of integral curves is given. The study of this method and the solution of the corresponding problems constitute the second part of the special course.

In addition, students must learn to solve additionally a number of problems characterizing the properties of homogeneous differential equations and illustrating methods for constructing integral curves.

We believe that the variety of problems arising in the theory of ordinary differential equations, as well as the effectiveness of methods of qualitative theory in solving these problems, are demonstrated using the example of homogeneous differential equations studied on a special course. Familiarization of students with such a course causes the students cognitive interest in various aspects of the modern theory of ordinary differential equations.

Let's give examples of mathematical problems solved within the elective course.

#### Task 1

Prove that the integral curves of equation

$$x^{2} \frac{dy}{dx} = \frac{y^{2}}{2} - \sqrt{5x^{2} + y^{2} + x^{2}y^{2}}$$

cross the line y = 2x at an  $\frac{\pi}{4}$  angle (Samoilenko et al, 2006).

#### Solution

For a homogeneous equation  $\frac{dy}{dx} = f\left(\frac{y}{x}\right)$ , it is easy to calculate

the tangent of the angle at which the integral curves intersect the ray y=kx. Let M be the point of intersection of some integral curve with the straight line y=kx and  $\beta$  is the value of the angle between the tangent drawn to the integral curve at the M point and the axis of abscissae. Then the angle  $\varphi$  between the tangent to the integral curve and the straight line y=kx equals  $\beta-\alpha$ ; thus

$$tg\varphi = tg(\beta - \alpha) = \frac{tg\beta - tg\alpha}{1 + tg\beta \cdot tg\alpha}$$

The  $M\left(x_{0}y_{0}\right)$  point lies on a straight line y=kx; consequently,

$$tg\beta = \frac{dy}{dx}\Big|_{M} = f\left(\frac{y_0}{x_0}\right) = f(k)$$

Thus,  $tg\varphi = \frac{f(k) - k}{1 + kf(k)}$ . We write the initial equation in the

form

$$\frac{dy}{dx} = \frac{y^2}{2x^2} - \sqrt{5 + \left(\frac{y}{x}\right)^4 + \left(\frac{y}{x}\right)^2}$$

For this equation

$$f\left(\frac{y}{x}\right) = \frac{1}{2}\left(\frac{y}{x}\right)^2 - \sqrt{5 + \left(\frac{y}{x}\right)^4 + \left(\frac{y}{x}\right)^2}$$

So,  $f(k) = \frac{k^2}{2} - \sqrt{5 + k^4 + k^2}$ . The tangent of the angle of

intersection of the integral curves of the original equation with the straight line y = 2x is calculated by the derived formula:

$$tg\varphi = \frac{f(k) - k}{1 + kf(k)} = \frac{f(2) - 2}{1 + 2f(2)} = \frac{-3 - 2}{1 + 2(-3)} = 1$$

Thus,  $\varphi = \pi / 4$ , QED.

# Task 2

Construct approximately the integral curves of equation (Samoilenko et al, 2006)

$$xy\frac{dy}{dx} + x^2 = 2y^2$$

not solving it.

# Solution

In solving the previous problem, a formula was derived for determining the tangent of the angle between the ray y=kx and the integral curve of the homogeneous equation  $\frac{dy}{dx}=f\left(\frac{y}{x}\right)$  that intersects it. This formula is used to

ray y = kx is given by

approximate the construction of integral curves of a homogeneous equation.

Since the integral curves of the homogeneous equation intersect the ray y = kx at the same angle, then, by examining the sign of the equation  $\frac{f(k)-k}{1+kf(k)}$  as a function of k, one can

approximately determine the behaviour of the integral curves of the equation  $\frac{dy}{dx} = f\left(\frac{y}{x}\right)$ .

We write down the exercise equation in the form  $\frac{dy}{dx} = \frac{2y}{x} - \frac{x}{y}; \text{ receive } f\left(\frac{y}{x}\right) = 2\frac{y}{x} - \frac{x}{y}. \text{ The tangent of the angle of intersection of the integral curve with the}$ 

$$tg\varphi = \frac{f(k) - k}{1 + kf(k)} = \frac{k - \frac{1}{k}}{1 + k\left(2k - \frac{1}{k}\right)} = \frac{k^2 - 1}{2k^3}$$

The original equation does not change if  $\mathcal{X}$  is replaced by (-x) or (-y). Thus, the integral curves must be located symmetrically with respect to the abscissa and ordinate axes. Therefore, it is sufficient to construct them in the first quadrant of the coordinate system, i.e. to investigate formula (7) only for k>0. For the indicated values k  $tg\varphi>0$  if k>1 and  $tg\varphi<0$  if 0< k<1, and when  $k\to 0$   $tg\varphi\to -\infty$ ; then the integral curves intersect the abscissa axis at a right angle.



Fig. 1. Several more integral curves, Fig. 2. The integral curves of the initial equation

If k = 1, then  $tg\varphi = 0$ ; so the ray y = x, x > 0 is an integral curve. Having considered several more k values, we obtain sufficient information for an approximate construction of the integral curves of the original equation (Fig. 1).

#### Task 3

Construct approximately the integral curves of equation (Samoilenko et al, 2006)

$$x\frac{dy}{dx} = y + \sqrt{y^2 + \frac{y^3}{x}}$$

not solving it.

#### **Solution**

This equation is determined by  $\frac{y}{y} + 1 \ge 0$ 

Consider this equation when x > 0, rewriting it in the form

$$\frac{dy}{dx} = \frac{y}{x} + \sqrt{\frac{y^2}{x^2} + \frac{y^3}{x^3}}.$$

In this case

$$f\left(\frac{y}{x}\right) = \frac{y}{x} + \sqrt{\frac{y^2}{x^2} + \frac{y^3}{x^3}}, \ f(k) = k + \sqrt{k^2 + k^3}.$$

Therefore, the integral curves intersect the ray  $y=kx,\ x>0$ , at an angle  $\varphi$  for which

$$tg\,\varphi = \frac{|k|\sqrt{1+k}}{1+k^2 + k\sqrt{k^2 + k^3}}$$

It can be seen from this formula that the rays y=0 and y=-x, x>0 (when k=0 and k=-1) are integral curves of the initial equation. Investigating the function

$$g(k) = \frac{|k|\sqrt{1+k}}{1+k^2+k\sqrt{k^2+k^3}}$$

on the intervals (-1,0) and  $(0, + \infty)$ ), it is not difficult to construct other integral curves of the initial equation (Fig. 2).

Let x < 0, ther

$$f\left(\frac{y}{x}\right) = \frac{y}{x} - \sqrt{\frac{y^2}{x^2} + \frac{y^3}{x^3}}, \ f(k) = k - \sqrt{k^2 + k^3},$$

and the integral curves intersect the ray y=kx, x<0 , at an angle  $\omega$  such that

$$tg\,\varphi = \frac{-|k|\sqrt{1+k}}{1+k^2 - k\sqrt{k^2 + k^3}}$$

The rays y=0 and y=-x, (x<0) are the integral curves of the original equation. We construct the remaining integral curves by investigating the function

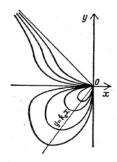
$$g(k) = \frac{-|k|\sqrt{1+k}}{1+k^2-k\sqrt{1+k}}$$

on the intervals (-1, 0) and  $(0, + \infty)$ .

Note that the expression in the denominator of the g(k) function can vanish when k > 0:

$$1 + k^2 = k^2 \sqrt{1 + k}$$
,  $1 + 2k^2 + k^4 = k^4 + k^5$ ,  $k^5 - 2k^2 - 1 = 0$ .

Investigating the function  $z=k^5-2k^2-1$  (or graphically), it is easy to establish that the equation  $k^5-2k^2-1=0$  has one positive root  $k=k_0$ . Consequently, the ray  $y=k_0x$ , x<0 the integral curves of the original equation intersect at a right angle. Calculating the value of the function g(k) at several points  $k\in (-1,0)\cup (0,+\infty)$  if necessary, we obtain sufficient information for approximate construction of the integral curves of the original equation for x<0 (Fig. 3). The behaviour of the integral curves on the entire plane is shown in Fig. 4.



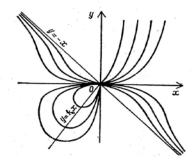


Fig. 3. information to make an approximate integral curve of the original equation, Fig. 4. The behavior of the integral curve in the whole plane

#### 4 Discussion

Recently, issues related to interactive methods of teaching mathematics to university students (Rodionov et al, 2017; Zeytun et al, 2017; Ohly et al, 2017; Lü et al, 2011) have been actively studied. It should be noted that the work directly related to the development of mathematical elective courses is rare. In most works devoted to the problems of modern higher education, the problems of constructing the structure of the course and the selection of a specific material that would significantly increase students' cognitive interest and motivation to improve mathematical competencies are not touched at all.

#### **5 Summary**

It is established that the course developed by us corresponds to the level of mathematical culture and theoretical preparation of senior students of the university, it allows successfully to teach students a new section of mathematics for them - a qualitative theory of ordinary differential equations, as well as new methods for solving mathematical problems. It is shown that students are shown and fixed subsequently stable cognitive interest in the theory of differential equations, many students begin to address the search and research problems in this field.

# 6 Conclusions

The authors believe that the information contained in the article presented by them can be useful both theoretically and in practice for teachers of mathematical disciplines at universities and technical higher educational institutions.

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# STATISTICAL AND COMPARATIVE ANALYSIS OF THE PHOTOGRAPHERS ENGLISH LANGUAGE LEXEMES USED BY PHOTOGRAPHERS

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Abstract: The paper presents the results of the complex analysis conducted to describe corpus research in the process of analyzing the semantics of codified and non-codified English lexemes of photographers and to identify the quantity and frequency of photographers' terms and professionalism in Corpus of Contemporary American English (COCA). The illustrative and practical parts of the study introduce the method of removing homonymy of lexemes in corpus and a fragment of the statistical study of codified and non-codified lexemes of photographers in photographer's professional corpus of English language and national corpus of English language. In this study, a method for solving the lexical-semantic ambiguity of a lexeme in Corpus of the COCA is presented. Statistical analysis of the material in the COCA was carried out using the empirical concept called "corpus-driven approach"; quantitative method, including a method of calculating the normalized frequency of occurrence of a lexeme in the corpus; method of identifying the meaning of a word. The relevance and novelty of the conducted research consists of the systematic application of the corpus approach in the field of cognitive semantics and sociolinguistics.

Key words: linguistic corpus, statistical analysis, comparative analysis, professional language of photographers, codified lexemes, non-codified lexemes.

# 1 Introduction

Photography as a specific area of human activity corresponds to a specific type of language, defined by us as the professional language of photographers. "The discourse of a professional community always functions as a normalizer of professional and social values since it has a great impact on the community and the society as a whole" (Mihailova & Solnyshkina 2017). The language of photographers is "a functional variety of the national language, used by a limited group of its bearers in the conditions of both formal and informal communication" (Solnyshkina & Mikhailova, 2017). The professional language uses two groups of units: 1) terms and nomenclature in formal communication conditions (codified lexemes), 2) professionalisms and jargons in informal communication conditions (non-codified lexemes).

# 2 Sources of the material and data collection

Sources of terms and professionalism of English photographers' lexemes were text materials from the English photo site "Digital Grin Photography Forum" (DGPF).

A photo site is a special software tool (platform, format) where amateur photographers and professional photographers can post their photos, as well as communicate with each other within the framework of a forum, discussion, voting. From a technical point of view, the photo-site is a kind of thematic portal, which is a large web resource that provides exhaustive information on a certain topic.

The subject of the study was the codified and non-codified lexemes of English language of photographers. Analysis of the text data of photo forums allowed selecting the experimental corpus of 622 lexical units of English photographers: 281 collocations and 341 single-word lexemes. The majority of single-word photographers' lexemes is explained by the desire to save, caused by the need to update and reduce the material form and aimed at creating a compact duplicating replacement. "In practice, the key to solving this problem is to create short versions of cumbersome terms" (Teneneva 2013; Villalobos Antunez, 2001) and professionalisms.

When the units were included in the experimental research corpus, the following principles for the selection of terms and professionalism of photographers were the priority: 1) the thematic identity principle, which in our study is applied to the terms and professionalism of photographers, i.e. select units nominating objects, objects and participants in the photo gallery; 2) the chronological principle is directed to the selection of the

photographers' terms, corresponding to the modern level of the photo gallery development; 3) the principle of the "frequency of occurrence" of a lexeme, consisting in the study of terms that occur in the discourse of photographers 2 or more times. This principle helps to exclude the occasionalism of photographers.

Exclusively to the professionalism of the language of photographers, the following criteria were applied:

- a new, non-existing lexeme. E.g. a new verb de-fish 'to eliminate the effect of wide panoramic or hemispherical image'.
- 2. a new meaning of existing word . E.g. a lexeme gun, according to CED means 1) a weapon that bullets or shells are fired from; 2) in sport, a device that makes a very loud sudden noise as a signal to start a race B CΠΟΡΤΕ,; 3) a device that you hold in your hand and use for sending out a liquid; 4) to make an engine operate at a higher speed (CED). The dictionary does not represent the meaning of gun in photographers' professional discourse 'photographic flash'.

## 3 Methodology

In this study, the empirical and inductive approach of the "corpus-driven approach" to data processing, proposed by Tognini-Bonelli E (Tognini-Bonelli, 2001) was practiced. "The corpus-driven approach <...> aims to derive linguistic categories systematically from the recurrent patterns and the frequency distributions that emerge from language in context" (Tognini-Bonelli, 2001). The study used the quantitative method proposed by Biber D., Reppen R. (Biber 2004), which allows to take into account the frequency characteristics of the lexemes under study. The method is aimed at extracting accurate quantitative data on the use of the lexemes, which leads to objective and relevant research results.

Identification of codified and non-codified lexemes of photographers was carried out using a method developed by Kast-Aigner J. (Kast-Aigner 2009), which makes it possible to isolate lexemes nominating photographic equipment, photo processes and participants in photography at the professional corpus of English (DGPH) language.

# 4 Results and discussion

In this study COCA, founded in 1990, acts as the corpus of national English.

Text material, placed at the photo forums DGPF, and the software of the photo forums are considered by us as professional corpus of the language of photographers. Professional photographers' corpus includes comments of beginner/ professional photographers and amateurs. The professional corpus of the English language of photographers is 74 415 521 words.

However, despite the merit of the DGPF photographers' forums, which is the provision of text material in the professional photographic sphere, we are faced with a problem that was earlier pointed out by Biber D.:«in some cases the interface blocks access to more than a certain number of hits and it will not show the total number, as in the case of words with a frequency of 990–999 in Lexis-Nexis» (Biber & Reppen 2015).

Biber D. argues that 1000 words usages are sufficient for reliable results, because the frequency of lexical categories is manifested in a lesser regression in the corpus of 1000 words: «1,000-word samples reliably represent the distribution of features in a text, as indicated by very high correlations among the feature counts in the samples from each text» (Biber & Reppen, 2015), if the lexeme occurs in the corpus of 1000 words, then it will occur naturally in large texts.

The interface of the English Photographers' (DGPF) language forums provides information on the frequency and use of the word along with the context, with a limit of up to 1,000 uses per unit. E.g., point and shoot lexeme in COCA occurs 40 times, in DGPF the lexeme occurs ≤1000 times, i.e. the software of the photo forum does not provide an opportunity to learn the frequency of professionalism in absolute (exact) numbers, if it occurs in the corpus more than 1000 times.

Thus, DGPF software does not provide all the functions and capabilities that the linguistic software of COCA demonstrates, but is sufficient for statistical analysis, which allowed obtaining data on the frequency of English lexemes of photographers.

Comparison of the frequency of the photographers' lexemes in professional (DGPF) and national (COCA) corpuses was conducted on the basis of the normalized frequency of the photographers' lexemes in the corpuses. Following Biber D., Reppen R. (Biber & Reppen, 2015), we introduce the concept of "normalized frequency".

In this study, the normalized frequencies are calculated by converting the number of occurrences of a lexeme in terms of 1 million word-usages. With the help of the formulas developed by us, all absolute numbers were recalculated into a normalized frequency. The formula is the following calculation:  $\mathbf{x} = (A * 1 000\ 000) \ / \ B$ , where  $\mathbf{x}$  is the normalized frequency,  $\mathbf{A}$  is the absolute frequency,  $\mathbf{B}$  is the corpus volume (see Table 1).

In the statistical analysis of the English photographers' lexemes in COCA, we are faced with problem of polysemy of words. Search in the corpus allows seeing a list of all the uses of the requested lexeme in context, but not the word's sememe that we are interested in, because at this stage of corpus linguistics, the enclosure software does not provide the ability to automatically filter word values. Accordingly, the corpus demonstrates the statistics of the use of all forms of the word, but not statistics of a certain meaning of the word, which is extremely important for the study of the role of photographers' lexemes in the system of the national language (Kolesnikova & Kamasheva, 2017).

Biber and Reppen note the problem of polysemy as one of the most acute problems for resolution in corpus linguistics (Biber & Reppen, 2015).

Following Biber, we note that differences in significance are manifested in collocations. "In language comprehension and production, collocation plays an important role in disambiguating a polysemous word" (Biber, 2004).

When determining the meaning of a polysemous word, we rely on the method allows us to remove the lexical-semantic ambiguity of the word in the corpus. The method is based on the study of collocates (surroundings) of units of photographers in texts, placed in professional photographers' corpus (DGPF).

We distinguish the following stages in the implementation of the method for resolving lexical-semantic polysemy:

- 1. Compiling a vocabulary collocation of lexical units of photographers, which includes a constant and / or frequent encirclement of the professionalism of photographers. The collocation dictionary was compiled on the basis of illustrations recorded in the DGPF. F.g. the codified lexeme AF 'the object detection system, in which the lens itself focuses on the induced object' build following collocations AF with, AF within, use AF, AF system, AF on, Nikon AF, AF focus, Canon AF, AF error, Nikkor AF.
- 2. Entering collocations into the search system of the national language corpus in order to identify the frequency of lexeme of photographers in the COCA. If the collocation is fixed in the COCA, the illustrations, which include the collocation of the language of photographers, are read by the researcher manually in order to exclude coincidences with phrases meanings of which are not realized in the professional language of photographers. F.g. the frequency of collocations with lexeme AF are following; AF within (1),

- AF system (4), Nikon AF (1), AF focus (2), Canon AF (3), Nikkor AF (4). The AF does not demonstrate the meaning 'the object detection system, in which the lens itself focuses on the induced object' in collocations AF with, use AF, AF on, AF error.
- 3. Addition of the frequency of recorded collocations. The frequency of AF 'the object detection system, in which the lens itself focuses on the induced object' in COCA is 15.

Table 1 represents the absolute frequency of lexeme (AFL) in the national language corpus, the absolute frequency of occurrence of the lexeme in the meaning of professional photographers' discourse (AF) and the normalized frequency (NF) of the lexical units of English photographers' lexemes in national and professional corpuses.

Table 1. Statistics of absolute and normalized frequency of English photographers' lexemes in national (COCA) and professional (DGPF) corpuses

English photograp	Corpu	s of nationa COCA		Corpus of professional language DGPF		
hers' lexemes	AFL	AF	NF (1 million word- usages)	AF	NF (1 million word- usages)	
diaphragm	872	11	0,019643	123	1,652881	
infinity	176	41	0,073214	702	9,433516	
grip and grin	5	5	0,008929	25	0,335951	
bigma	=	=	0	761	10,22636	
body	14712 5	273	0,4875	≤1000	13,5	

Non-codify lexeme grip and grin 'photo on which a group of people is standing, embracing, and all the photographed are smiling' fixed in COCA 5 times, in DGPF 25 times. The normalized frequency of professionalism grip and grin in COCA is 0.008929 (5), in DGPF - 0.335951 (25).

Comparative analysis of the normalized frequency of occurrence of professional English lexemes in COCA and DGPF shows: allows to make the following conclusions:

- 1. 418 (67%) photographers' lexemes of English professional language are homonymous to the lexemes of the national language. 166 (39%) of these lexemes are recorded in the professional meaning in COCA, the remaining 252 (61%) photographers' lexemes are not found in COCA.
- 348 photographers' lexemes of English professional language (57%) recorded in the English national corpus (COCA). E.g., the professionalism of photographers photo op 'a specially equipped area for a photo session and autograph session with famous personalities' can be met 303 times in COCA, in DGPF - 996 times.
- 3. 270 photographers' lexemes (43%) are absent in COCA. E.g., the professionalisms B&G 'newlyweds (bride and groom)', digivangelist 'the one who always uploads photos, videos, posts in electronic form', pentaxian 'adherent of the Pentax cameras' are absent in the COCA.
- 4. The normalized frequency of 364 photographers' lexemes that are found in COCA is lower in the corpus of English national language than in the professional one. E.g., the normalized frequency of the term parallax error 'the difference between what the lens sees and what the person sees through the viewfinder of the camera (color difference, volume, etc.)' is higher in the professional corpus of photographers 0.215009 (12) than in the national one 0.001786 (1).
- 5. 4 professionalisms of the language of photographers are met in the national corpus more often than in the professional English language corpus of photographers. The normalized frequency of professionalism cameraman 'photographer who

always takes a camera with him' equals 2,210,714 (1238), in the professional language of photographers the normalized frequency of cameraman is significantly lower - 0.631589 (47).

Comparative analysis of the normalized frequency of occurrence of professional English lexemes in COCA and DGPF shows:

- 418 (67%) photographers' lexemes of English professional language are homonymous to the lexemes of the national language. 166 (39%) of these lexemes are recorded in the professional meaning in COCA, the remaining 252 (61%) photographers' lexemes are not found in COCA.
- 348 photographers' lexemes of English professional language (57%) recorded in the English national corpus (COCA). E.g., the professionalism of photographers photo op 'a specially equipped area for a photo session and autograph session with famous personalities' can be met 303 times in COCA, in DGPF - 996 times.
- 270 photographers' lexemes (33%) are absent in COCA.
   E.g., digivangelist 'the one who always uploads photos, videos, posts in electronic form', pentaxian 'adherent of the Pentax cameras' are absent in the COCA.
- 4. The normalized frequency of 364 photographers' lexemes that are found in COCA is lower in the corpus of English national language than in the professional one. E.g., the normalized frequency of the term parallax error 'the difference between what the lens sees and what the person sees through the viewfinder of the camera (color difference, volume, etc.)' is higher in the professional corpus of photographers 0.215009 (12) than in the national one 0,001786 (1).
- 5. 4 professionalisms of the language of photographers are met in the national corpus more often than in the professional English language corpus of photographers. The normalized frequency of professionalism cameraman 'photographer who always takes a camera with him' equals 2,210,714 (1238), in the professional language of photographers the normalized frequency of cameraman is significantly lower - 0.631589 (47)

# 5 Conclusion

The proposed method for resolving the lexical-semantic ambiguity allowed in a short time and with minimal errors to search for the contexts of the necessary lexeme in a certain meaning in English national textual corpus (COCA). Comparative analysis of the normalized frequency of occurrence of professional English lexemes in COCA allows to make the following conclusions: 1) the majority of exemplified lexemes of photographers (418 (67%)) are homonymous to the lexemes of the national language; 2) the minority of photographers' lexemes (270 (33%)) photographers' lexemes are absent in national English language corpus; 3) the normalized frequency of 364 (61%) photographers' lexemes demonstrated in COCA is lower in national corpus than in photographers' professional corpus. Thus, the low frequency of use or absence of photographers' lexemes in the national language corpus testifies that the language of photographers is the language, to a certain extent, of at isolated group of people. The concepts and phenomena of the professional language are specific and narrow.

The methods, algorithms and tools developed and applied by the authors may be used to describe structural, semantic and functional parameters of any limited group of vocabulary.

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# PROPORTIONALITY OF COUNTERMEASURES AS A CONDITION OF THEIR LEGITIMACY

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Abstract: Under current international law, the use of countermeasures by a state is permissible if their application is carried out in response to a violation by another international legal entity of its obligations according to the law. However, despite their importance for the maintenance of the international legal order, international legal acts of a binding and recommendatory nature do not give an accurate answer to the question of what should be considered countermeasures, and therefore, in which case they can be considered legitimate. The paper considers one of the most controversial conditions for the legality of countermeasures taken by a state in response to a violation by another entity of international law of its obligations. It is argued that it is necessary in assessing the proportionality of countermeasures to be guided by criteria that allow an objective assessment of the nature of actions of the injured state in order to establish the legitimacy of the response measures. Bearing in mind that proportionality is an evaluation legal category, and the measurement of countermeasures taken by a state with a committed offense is a rather difficult task, when deciding on the legitimacy of countermeasures, it should be based on the criteria common to all. This is especially important, since countermeasures are taken decentralized, not by an international organization on behalf of the injured State or the international community as a whole, but by the victim itself. Therefore, the rules for the commission of such actions should be specified. Such criteria should be considered as the scope of the damage caused by the offense, the nature of the internationally wrongful act and the type of rights violated.

 $Keywords: \quad countermeasures, \quad sanctions, \quad international \quad legal \quad responsibility, internationally wrongful act, state.$ 

#### 1 Introduction

Modern international law allows the possibility of the use of countermeasures by a state in response to a violation by another entity under international law of its obligations. It should be noted that at present any actions of entities under international law related to the introduction of any restrictions on states and their citizens are called sanctions, what is completely unfounded. This term has become more widespread than other related legal categories despite the fact that the sanctions have the grounds and conditions for their introduction that are clearly stipulated by international legal acts. Nevertheless, the countermeasures of states that, like sanctions, can be quite legitimate in the presence of certain pre-existing circumstances, are in most cases used either by inadequate subjects of international law or are beyond the response restrictive measures at all. In this regard, the formation of a clear understanding of the nature and essence of countermeasures is of great theoretical and practical importance, since their uniform understanding contributes to the strengthening of the international legal order.

# 2 Methodology

The study of such a complex institution of international law as countermeasures is impossible without paying due attention not only to the current international law norms of binding nature, but also to documents of a recommendatory nature, which are often regarded by theorists as ordinary norms of international law.

We believe this, first of all, should include the documents developed by the UN International Law Commission and recommended by the UN General Assembly, as well as open to signing by states the Articles on Responsibility of States for Internationally Wrongful Acts (hereinafter referred to as the "Articles on State Responsibility"), and the Articles on the Responsibility of International Organizations for Internationally Wrongful Acts ("Articles on the Responsibility of International Organizations").

Their significance cannot be overemphasized, especially from the point of view of the methodology of scientific cognition, since an exact definition of countermeasures is not contained in any international legal instrument. Indeed, the term "countermeasures" is used very rarely by international legal instruments. For example, in Article 9 of the United Nations Convention against Illicit Traffic in Narcotic Drugs and

Psychotropic Substances of 1988, only mention is made of the fact that the contracting states are implementing, developing or improving specific training programs for law enforcement and other bodies that deal in particular with routes and means used by suspects to participate in relevant offenses, particularly in transit states, and countermeasures. But the term is used in this international legal act in a different context that goes beyond interstate relations, although the definitions of countermeasures in the document are not consolidated.

However, the above Articles on Responsibility of States and the Articles on the Responsibility of International Organizations do not give an accurate answer to the question of what should be considered countermeasures. As a result, various definitions of this legal category can be found in the scientific literature. In particular, this term is defined as a reaction to a wrongful act of an international organization or a state, or the way the victim takes to respond to a wrongful act of an offender (Mirka, 2012).

# 3 Results and Discussion

Proceeding from the provisions of Article 22 of the Laws on Responsibility of States, as well as the Chapter Two of Part Three of this document, the most correct is the definition of a countermeasure as an act that would be considered as unlawful in accordance with international law, if is executed not in response to a violation by another entity of international law of their obligations.

In the course of work on the draft Articles on Responsibility of States, the UN International Law Commission used the term "sanctions" for a long time to refer to all the response measures of the injured international legal entities. However, at the final stage of work on the draft Articles on State responsibility, it was decided to replace the term with a more appropriate by its nature term "countermeasures", which is entirely justified, since there is a significant difference between sanctions and countermeasures. Countermeasures are taken directly by the state affected in response to a wrongful act of another state, while international sanctions are a measure of collective impact, taken by an international organization in order to compel an offender to fulfill its obligations with regard to its legal liability. Countermeasures in the literature are also called "unilateral" (Denis, 2010) and "horizontal" response actions, since this relationship is formed directly between the injured state and the offender (Kurdyukov, 1998). As is emphasized by M.V. Keschner, countermeasures constitute an element of a decentralized mechanism of coercion of an offending state and are seen as an instrument of implementation of responsibility that is not punitive (Keshner, 2015). Nevertheless, there is a theory in the literature about "individual sanctions" or targeted measures of influence (Volker, 2012).

In order to ensure the use of countermeasures within the legal framework, and also in order to limit the abuse of the right of states to take countermeasures, the conditions and grounds for their application have been enshrined in the Articles on responsibility of states. We believe, the greatest interest is caused by provisions on such a condition of the lawfulness of countermeasures as proportionality. This is due to the fact that, despite the indisputable recognition, both in scientific literature and in the practice of international judicial bodies, the proportionality is one of the main conditions for the use of countermeasures, and the procedure for its determining remains a debatable issue.

The provision on proportionality of countermeasures appeared in the articles on the responsibility of states (Article 51), including due to the practice of international judicial bodies. In particular, within the framework of the international arbitration of 1978 on the dispute between France and the United States on air transport, the question of the proportionality of the US prohibitive measures was considered in some detail (Villalobos Antúnez, 2016). However, in its decision on the case, the

arbitration stressed that determining the proportionality of countermeasures is a rather complex task and therefore can only be approximate. According to I.I. Lukashuk, such a conclusion of arbitration is not surprising, since much depends on the circumstances of a particular case, but such approximations may give rise to the abuse of countermeasures (Lukashuk, 2004).

Bearing in mind that proportionality is an evaluation legal category, and the comparison of the countermeasures taken by the state with the committed offense is quite a difficult task, then the decision-making on the validity of countermeasures should be based on the criteria common to all. This is especially important, since countermeasures are taken decentralized, not by an international organization on behalf of the injured state or the international community as a whole, but by the victim himself. Therefore, the rules for commissioning such actions should be specified.

Earlier in the scientific literature, the need to use equivalent response measures was emphasized, meaning that equivalence is the quantitative measure of the actions of the offender and the victim. E. Kannizaro rightly emphasized that by establishing equivalence as a link between the committed offense and the response, the principle of proportionality reduces the unnecessarily wide choice of ways on responding to the actions of the offender, thereby minimizing the possibility of abuse of the law. However, countermeasure thereby converted into personal revenge (Enzo, 2001).

## 4 Summary

Undoubtedly, transformation of a countermeasure into medieval retribution based on the principle "an eye for an eye" is absolutely unacceptable at the present stage of the development of international relations. However, the complete exclusion of reciprocity between a harm-doer and its victim appears to be incorrect. Reciprocity in both international public and private international law plays an indisputable role in the construction of interstate relations. And the application of this principle in determining the proportionality of countermeasures may be effective when, for example, there is a breach of a bilateral obligation. Such a view is found, in particular, in the practice of international judicial bodies. Thus, in the case of application of the interim Agreement dated 13.09.1995 (the Former Yugoslav Republic of Macedonia v. Greece), the Judge Zimma expressed his separate opinion on the decision adopted on 05.12.2011 by The International Court of Justice of the United Nations. He pointed out that in international law the principle of reciprocity is still afloat and, when applying various methods of selfdefense, it is the main means by which states can seek to assert their rights. This principle, in his opinion, is especially evident in the functioning of international legal mechanisms for the application of sanctions, including, among other things, countermeasures and mutual refusal to fulfill the treaty (Mamedov, 2017).

However, when deciding on the proportionality of countermeasures, the application of the reciprocity principle is not always acceptable, in particular, in cases where there is a violation of human rights, violation of peremptory norms of international law, and norms of international law governing multilateral relations. Violation of these norms is carried out in relation to not one state, but a group of states, or the international community as a whole. Consequently, the uses of a mirrored response by the injured state will not only cause damage to the wrongdoing state, but also other states that are part of this group.

In foreign literature, attention is also drawn to the fact that the criterion of reciprocity can be used in deciding the proportionality of countermeasures, but it directly contradicts another criterion "means-goal" which seems more adequate to the nature of these legal relationships, since the legality of countermeasures depends directly on the purposes of their application. And there can be only two goals of applying the retaliatory measures: either to induce (violate) the offender to

begin to fulfill the international obligation that it has violated, or, if it is impossible to restore the previous situation, to induce (compel) compensation for the damage caused.

The need to commensurate the countermeasures used with their purposes (cessation of the wrongful act and the provision of appropriate reparation) is also specified in the domestic literature (Keshner, 2012). In essence, the criterion "means-goal" is based on determining the acceptability of means to achieve the goal of countermeasures. Consequently, the question of proportionality depends directly on the legitimacy of the set goal of the countermeasure, which it is entirely permissible to resort to if its purpose is legitimate (Kretzmer, 2013).

We believe that this approach is the most correct, since countermeasures should not be punitive. They should not be used to punish the offender, but to encourage it to fulfill its international obligations. The aggrieved party should not be guided by the desire to implement retaliation, and the measures taken by it should not damage international peace and security. Therefore, under no circumstances, countermeasures should be reduced to the use of force, as explicitly stated in the Articles on State Responsibility, and in numerous comments of states on the Articles

#### 5 Conclusion

From the analysis of the provisions of the Articles on the Responsibility of States, as well as the practice of the international judicial authorities, we can conclude that in determining proportionality of countermeasures it is advisable to base on the amount of damage inflicted on the injured state, as well as on the nature of the violated rights and the type of international offense. Such a conclusion can be drawn, in particular, from an analysis of the decision of the International Court of Justice in the case of the Gabčíkovo-Nagymaros project, in which the Court pointed out the disproportionate measures taken by Czechoslovakia in relation to Hungary [12].

Thus, in determining the proportionality of state countermeasures against the offender, it is necessary to be guided by criteria that allow an objective assessment of the nature of the actions on the part of the injured State in order to establish the legitimacy of countermeasures. First of all, it is necessary to be guided by the criterion of the size of the damage caused by the offense. In addition to this criterion, one should also take into account the nature of the internationally wrongful act (its degree deed) and the rights affected by the offense.

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# INTERNATIONAL REGULATION OF COMMERCIAL CONCESSIONS (FRANCHISING) IN RUSSIA

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Abstract: The purpose of this paper is to define the system of international regulation of commercial concessions (franchising) in Russian practice. The problems of unification and harmonization of Russian legislation on the basis of international law are identified. Ways to eliminate the discrepancy between norms of Russian legislation and requirements of the world community at the present stage are studied. The general methodological basis was formed by the general scientific (dialectical) method of cognition, comparative legal and logical methods that allowed us to consider the problems on the development of international regulation of commercial franchising in Russia. By analyzing the norms of international law, the directions of its development and improvement in the sphere of commercial concession are revealed. The basic international acts regulating commercial concession (franchising) are investigated, and their efficiency is estimated. Particular attention is paid to the issues of unification and harmonization of national legislation on the basis of universally recognized principles and norms of international law and international treaties of the Russian Federation. The development of the model law "On Franchising" is substantiated taking into account national legislations on a global scale. The measures to protect intellectual property and the problems of their implementation in the Russian legislation are argued. The position on the need to develop a Model Agreement on Commercial Concession (franchising) based on the current legislation in the Russian Federation, norms of international law, including the European Code of Ethics for Franchising, has been scientifically formulated. The theoretical provisions formulated in the paper can be useful for determining the effectiveness of civil legislation that consolidates the contractual regulation of commercial concession can be used in law enforcement practice, as well as in the training course "Civil Law".

Keywords: commercial concession, franchising, intellectual property, private international law; model law.

# 1 Introduction

Commercial concession in Russia is mainly international in its nature. This is explained by the fact that the subject composition of one of the parties is represented by a foreign legal entity or an individual possessing the status of an individual entrepreneur.

In accordance with paragraph 4, Article 15 of the Constitution of the Russian Federation, the generally recognized principles and norms of international law and international treaties of the Russian Federation are an integral part of its legal system. If an international treaty of the Russian Federation establishes other rules than prescribed by domestic law, then the rules of the international treaty are applied.

A similar rule is also contained in Article 7 of the Civil Code of the Russian Federation, which also stipulates that the international treaties of the Russian Federation are applied to property and personal non-property relations that are directly regulated by civil law, unless an international treaty requires that a publication of an internal act be required for its application.

Clarifying by the Plenum of the Supreme Court of the Russian Federation of October 10, 2003, No. 5, according to which they directly operate within the jurisdiction of the Russian Federation, determine the meaning, content and application of laws, the activities of the legislative and executive authority, the local self-government and are provided with justice, are significant in implementation of the common principles, norms and international treaties of the Russian Federation.

The Russian Federation international treaties that directly regulate a commercial concession are not adopted. However, at the international level uniform rules are being developed in this area. In particular, UNIDROIT have been developed: there are the "Guide to international master franchise arrangements" (2007) which has a recommendatory nature and its application can be agreed by the parties to the relevant treaty and the Model franchise disclosure law (2002) which establishes the

franchisor's duty to disclose information, its volume, restore the violated rights of a franchisee and the responsibility of a franchisor in the event of failure to perform their duties.

Issues affecting certain aspects of commercial concession are regulated by a whole block of international agreements in the field of intellectual property. For example, the Paris Convention for the Protection of Industrial Property (1883), the Universal Copyright Convention (1952), the Convention on the Prohibiting and Preventing of Illicit Import, Export and Transfer of Ownership of Cultural Property (1970), Berne Convention for the Protection of Literature and Artistic Works (1886), the Agreement "On Measures to Prevent and Suppress the Use of False Trademarks and Geographical Indications", 1999, the Agreement on Cooperation in the Protection of Copyright and Related Rights (1993), the Nice Agreement Concerning the International Classification of Goods and Services for the Purposes of the Registration of Marks (1957) and others (Tuan, 2017; Skvortsov, 2015; Afanasev et al, 2007; Afanasev & Breeva, 2016; Afanasev, 2015).

In the global economy conditions, the commercial use of intellectual property as an effective mechanism to promote international trade in goods and services plays a significant role for the successful development of franchising. Protection of intellectual property objects is one of the main objectives of their legal circulation not only in Rho from these, but also abroad. International acts are mainly directed to this sphere of legal regulation and, in accordance with international obligations assumed, Russia should strive to include its general principles and norms in national legislation (González & Villalobos Antúnez, 2016).

# 2 Methodology

It seems relevant that universally recognized principles and norms of international law and international treaties of the Russian Federation are reflected in Russian civil legislation on the commercial concession, what will allow our country to establish foreign economic relations faster and more efficiently, attract foreign investments, develop certain branches of the market economy, etc.

The international treaties under consideration provide for convergence of national legislation by unifying and harmonizing the law on their basis. Thus, Article 25 of the Paris Convention for the Protection of Industrial Property states that each country which is party to this Convention undertakes to take the necessary measures in accordance with its Constitution to ensure its application. It is understood that each country at the time of the depositing of an instrument on ratification or accession, must be able, in accordance with its domestic law, to implement the provisions of this Convention. A similar rule is contained in Art. X of the World Convention on Copyright and Art. 36 of the Berne Convention for the Protection of Literary and Artistic Works.

There is often a need for joint solution of common tasks and concerted actions in the legal sphere of cooperating states and interstate associations. Hence, this is a basis for the need to bring together national legislation. The convergence process implies formation of a single direction for the development of law, the implementation of stages on carrying out actions on removal of the legal differences and the development and adoption of uniform rules of law.

# 3 Results and Discussion

The positions on solving this problem in the scientific world are different. Repeatedly, the authors raised the issue of unifying the norms in the field of commercial concession (franchising) by adopting the International Convention on Franchising (Moon & Sharma, 2014).

The adoption of such an act may cause considerable difficulties in many countries as to legal harmonization of the norms of national law with it, and as a consequence of the impossibility of accession. This is due either to the peculiarities of the legal regulation of franchising (commercial concession) in each individual state or the absence of any such norms at all.

With this development of international regulation of franchising legal relations, two models for the development of national legislation in this sphere are seen. The first model is based on the reception of norms of international law and their inclusion in their own civil legislation. In this situation, it is necessary to take into account the development of national legislation, franchising business relations, and the ability to perceive the norms of international legislation (Duissembayev & Ibrayeva, 2014). Introduction of the norms of civil legislation taking into account international norms should be implemented in stages, taking into account the economic stability and legal status of a state, the need for protection of business entities, private and intellectual property.

The second model is oriented towards the exclusive adherence to the norms of international law and the reform of the domestic legislation with a view to adapting it to world practice. With such a view on the development of legislation, accession to international rules will require harmonization and unification of the national law.

For more effective development of national legislations, it is possible to form common norms in the form of a model act. Such a separate law is a balanced document and the formulation of specific articles.

The Model franchise disclosure law (2002) being currently in force, is not capable of settling all aspects of the franchising relationships. It basically regulates the franchisor's responsibilities in disclosing information, its volume, restoring the violated rights of the franchisee and the responsibility of the franchisor in the event of failure to perform its duties.

International integration and the development of the international market require new approaches to the development of states. The improvement of national legislation should not be isolated from international norms, especially those to which they are attached. Eliminating disagreements among the legislations or their contradiction is one of the necessary requirements at the present stage of the world community. Therefore, the drafting of the Model Law "On Franchising" will provide an opportunity for states to approach uniformly the problem of harmonization of national legislations on a global scale. Firstly, the use of the model law by states - parties to the agreement in the field of individual property is only possible when the states deem it necessary. Moreover, it is possible to change the very shape of the model law, and its individual positions. Secondly, a uniform understanding of the legal nature of franchising will facilitate the relations of entrepreneurs, eliminate different interpretations by the parties of the norms of international and national laws, and conflicts in law will be eliminated. Thirdly, the employers will not need to know all the subtleties of the national legislation where the dispute will be considered, what will significantly reduce legal costs, and also legal aid and representation costs.

A significant role in the legal regulation of franchising is assigned to two acts: Agreement on Trade-Related Aspects of Intellectual Property Rights (1994) which forms the basis of the global trading system, intellectual property protection, to which Russia joined on August 22, 2012, and Washington Treaty on Intellectual Property in Respect of Integrated Circuits (1989). These acts stipulate development of uniform norms and principles with regard to the availability, scope and use of intellectual property rights related to trade (Leiderman & Lipovetsky, 2001; Orlitsky, 2002).

Measures to protect intellectual property are multifaceted, and their strengthening or weakening can have different effects on the country's economic stability. With the strengthening of intellectual property protection measures, it is necessary to take into account that they lead to a decrease in technological production and the monopolistic behavior of foreign producers.

On the other hand, the franchising method of doing business with a foreign element is increasingly being used in Russia. It seems necessary to seek compromise solutions in the field of the regime on protection of intellectual property rights, what can provide a balance between the interests of different states in the development of relevant conventions, agreements and treaties. It is necessary to pay attention not only to the legal side of the problem issue, but also to market mechanisms that can create conditions for the growth of the entire economy of the country.

Ratification of absolutely all norms of international law for Russia is not possible. The reasons for such incomplete implementation of the norms of international law are immaturity of national legislation, as well as the absence of market mechanisms in some areas.

Improvement of Russian legislation within the framework of international integration and globalization, creation of a single market for ensuring full and real freedom of production of goods, services and intellectual property is a long and laborious process capable of bringing the country to a qualitatively new level in the world.

## 4 Summary

To date, international franchise relations are characterized by contractual regulation, which is supplemented by the requirements of the law applicable in the event that the relationship is not settled or fully regulated by a treaty. When developing franchising agreements the parties should be guided by the national law. This has its drawbacks. Firstly, they do not take into account the specific requirements of international trade. Secondly, the norms of the national law of different countries can differ significantly, since they are directed, first of all, to the regulation of internal relations.

These shortcomings can have adverse consequences: difficulty in resolving emerging conflicts, infringement and violation of rights, inhibition in the development of international franchising, etc.

With the aim of developing international franchising, the International Chamber of Commerce has developed a Model Contract for International Franchising, which is recommendatory and minimizes the application of the national law of a country, and assumes great importance due to the lack of an appropriate international settlement through the harmonization and unification of the norms of foreign legislation.

However, the Model Contract of International Franchising under consideration does not reflect the current Russian legislation on commercial concession, what significantly complicates its application in practice.

# 5 Conclusions

In order to regulate franchising relationships and due to the lack of proper federal legislation, it is advisable to develop a Model Agreement on Commercial Concession (franchising). It is reasonable to formulate in it the standard rules necessary for registration of contractual relations by contractors and reflecting national and international law. The said Model Agreement should be of a recommendatory nature, that is, its individual provisions can be changed at the discretion of the parties.

The expediency of developing this Model Contract is seen in the following. First, due to its development by the relevant state bodies, it will show the existing economic relations typical for franchising in Russia. Second, it will clarify the situation with respect to legal contractual arrangements in this area. Third, the uniform rules recommended to the participants of these legal relations and providing them with an opportunity to agree main rights and responsibilities, will allow the search for the relevant rules of national and international law and the costs of legal

advice to minimize. Fourth, the model rules will promote development of international economic interaction between domestic and foreign economic entities.

Thus, it is necessary to develop a Model Agreement for commercial concession (franchising), taking into account both the current legislation of the Russian Federation and the norms of international law, including The European Code of Ethics for Franchising.

# Acknowledgements

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# UNIVERSITY SPACE ORGANIZATION IN REGIONAL SPACE SYSTEM: METHODOLOGY OF ANALYSIS AND EFFECTIVENESS EVALUATION OF THE VOLGA FEDERAL DISTRICT

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Abstract: The emerging challenges, expressed in the accelerated development of reproductive processes, require the adaptation of the institutional space that ensures the solution of strategically important and priority tasks. Among them is the technological breakthrough in the sectors of economy, which is practically impossible to implement without an effective organization of scientific and educational environment. In this regard, an extremely topical issue at the current time is the search for the ways and the mechanisms that make it possible not only to understand the current situation in the sphere of regional and, accordingly, national organization of the university space, its relevance to current and future needs in RF labor market, but also to identify the main trends that facilitate the speedy transformation of functional processes in the considered sector of social and economic sphere. The purpose of this study is a comprehensive analysis and the evaluation of the training system development effectiveness for highly qualified personnel in the regional context and the development of the trends on this basis for the adaptation of the university space within regional economic systems in accordance with the personnel needs of the economy. The subject of the study is the organization of higher education in the region within the context of higher education institution profile orientation analysis within the area of educational training program implementation. In the course of the assessments, the clustering of the Volga Federal District regions was carried out depending on the functional orientation of a high school, its market orientation, and qualitative characteristics for the purpose of regional higher education system typology development, which can serve as the basis for higher education management model development in the regional context.

Key words: regional higher education system, staffing needs, labor market, the clustering of higher education space, the quality of higher education development, educational programs, region competitiveness.

# 1 Introduction

At the current time, the issues concerning the prospects and the opportunities for the transition of Russian economic system to the so-called channel of the fourth industrial revolution, which is called Russia 4.0 conventionally. This type of economic development is based on absolutely new principles of human development, which is based on almost complete absolutization of cooperation process in human, biological and digital technologies. It is sufficient to note that according to the estimates of a number of leading experts and expert agencies, it is expected that by the end of 2035 the number of robotic and automated workplaces will reach about 95%, about half of the current jobs will be unclaimed (Kalinina, 2017).

It should be noted that Russian economy has significant potential not only in terms of synchronization, global trends, the process of entering the fourth industrial revolution, actively absorbing the global economic system, but also the signs of a fast-moving transition to a new type of economic order. At the same time, despite an active role of the state in this issue, expressed in particular by the development and the implementation of the state program "National Technological Initiative" (Ferrer et al, 2015), the most important factor that justifies or, on the contrary, refutes the theses on the possibilities of Russian economy transition to a new reality, is the degree of economic entity readiness for such transformations and changes, as well as the level of institutional infrastructure that provides this process. Undoubtedly, this measure of preparedness in a natural evolutionary way, combined with the measures of state influence, will reach its apogee, and Russian economy will be integrated into global trends that provide for the replacement of a new technological order. The only questions are the following: when will this happen and what are the key factors that will contribute to this and what is the quality of such a transformation?

#### 2 Methodology

One of the key factors in the process of the national economy and its regions effective development is traditionally the level and the quality of higher education development. A particularly topical issue in the context of this problem is the analysis of the structure quality and the functional organization of the higher education system. This is conditioned by a number of reasons, the most significant of which are determined by the need to create an adapted system of qualified personnel training in accordance with current and future needs for labor resources in the national and regional markets.

It should be noted that under the conditions of the administrative-command economy, especially in the era of its industrialism, this issue was given a very significant and close attention, somewhat reduced during the transformation of the institutional reforms of the 1990-ies. It is enough to draw attention to the fact that the state policy of the USSR clearly defined the corresponding priorities for the development of higher education system in accordance with the emerging needs in the labor market. In accordance with them, as the result of the efforts concerning the "connection" and the adaptation of higher education system to the staffing needs of economy (and partly to the development needs), three main types of higher education institutions were developed (Kuzminov et al, 2017; Gafurov et al, 2011).

- Universities created by the territorial-production principle.
   Their functions consisted in the staffing of the regional socio-economic system specific sector.
- Sectoral universities, focused on staff provision for a specific economy sector on a national scale.
- Classical universities, training staff for science and other universities.

Unfortunately, it is worth noting that despite a significant recent progress in an effective development of higher education, its functional content still requires institutional reforms.

Thus, taking into account the foregoing, the issue of synchronizing the process of the training system with the emerging demand for labor, which is corrected in accordance with global trends, is an acute one in Russian economy at the current moment. The solution of this issue is a very difficult task and requires an integrated, systematic approach.

One of the methodological approaches contributing to the solution of the raised issue on the conformity of the higher education system to the generating needs in the labor market can be the tool which allows to determine the share of universities grouped in accordance with the above classification, in their total number within the higher education system.

In accordance with the indicated approach, and also guided by the group of universities, which is relevant for the industrial economy of the USSR, the systematization of the higher educational institutions of the Privolzhsky Federal District is implemented in the context of its separate regions. At the same time, the approach was chosen as an essential tool for the implementation of this stage of the study, according to which an institution membership in the corresponding category was determined on the basis of concentration coefficient value calculation concerning applied training trends (Herfindahl-Hirschman index).

$$HHI = S_1^2 + S_1^2 \dots + S_n^2$$
 (1)

where

 $S_1,\ ...,\ S_n$  — the distribution of the reduced contingent of students by the branches of science in their total volume.

This index characterizes the level of university specialization in the areas of training determined in accordance with the traditional classification.

The logic of higher education institutions distribution into conditional groups (multidisciplinary (classical in accordance with the graduation of the USSR universities) and monoprofile) is formed on the basis of the current value comparison of university HHI coefficient to the average value in the area (HHI $^{\text{ospyr}}$   $_{\text{cp.}}$ ) – the general range of values of the analyzed sample (Formulas 2, 3).

$$HHI_{BY3a} > HHI^{okpyr}_{cp.} \rightarrow versatile university$$
(2)

$$HHI_{BY3a} < HHI^{okpyr}_{cp.} \rightarrow versatile university$$
(3)

In a concentrated form, the procedure of university distribution into two conditional groups is shown on Fig  $\,1.$ 

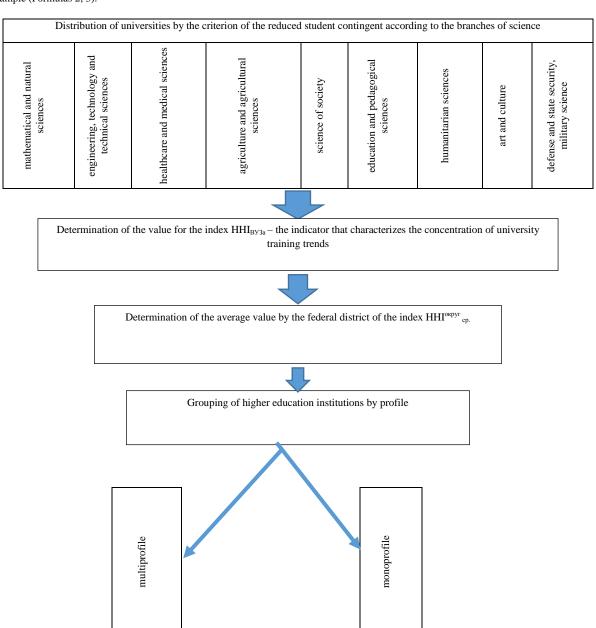
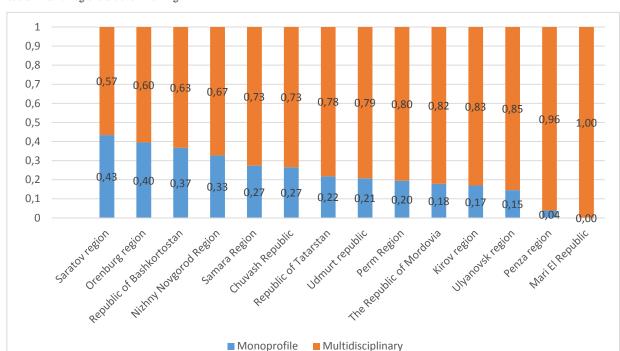


Fig 1. The procedure for the distribution of universities into two conditional groups in accordance with the orientation toward a monomultidisciplinary approach to educational program implementation



The results of the assessments in the context of the Volga Federal District regions are shown on Fig 2.

Fig 2. The ratio of mono-profile universities to multi-profile ones in the regions of the Volga Federal District (in order of single-profile university decrease) was developed by the authors

## 3 Results and Discussion

In accordance with the received estimates, the system of higher education in modern Russia has a significant imbalance between mono-and multi-profile higher education institutions. On the average, the share of single-profile universities in the district is about 23% of the total number of educational institutions (Zimmerman, 2008; Timofeeva et al, 2017).

According to the implemented evaluations obtained within the framework of a comprehensive analysis of higher education regional system competitiveness, in accordance with the previously proposed methodological approach, the main characteristic features of the current state of affairs in the sphere of the university space organization are determined by the example of the Volga Federal District.

In accordance with them, it was established that the regions of the Volga Federal District, such as the Saratov Region, the Orenburg Region, the Republic of Bashkortostan, the Nizhny Novgorod Region, the Samara Region, the Chuvash Republic and the Republic of Tatarstan (Fig 3) have the highest level of efficiency of training system organization efficiency for the training of highly qualified personnel, from the point of view of the following ratio: mono-profile universities to multi-profile

ones. This is due to the fact that the share of multidisciplinary universities makes 20 - 40%, in the structure of the university space of the regional systems under consideration which is significantly higher than for the district on the average.

An important element to analyze the competitiveness of higher education system development in the regions is not only the assessment of the regional university space efficiency, but also the study of additional parameters characterizing the quality of highly qualified personnel training system developed in the region. These include the quality of the reception, as well as the presence of university national status.

In accordance with this approach, and also using the received estimates for the grouping of regional universities in relation to their status to mono-, multiprofile university category, the cluster analysis has been implemented that makes it possible to assess the qualitative characteristics of higher education development in the regions of the Volga Federal District and to allocate regions with similar characteristics on this basis.

The results of the cluster analysis are presented in Table 1, Fig 3.

Table 1. Cluster analysis of the higher education system development efficiency in the regions of the Volga Federal District of Russian Federation (calculated by the authors on the basis of monitoring data concerning the effectiveness of higher education institutions activities in 2017) (Zimmerman, 2008).

Region	Number of stude	Belonging to a			
	Multiprofile	Monoprofile	Research	Universities for mass education	cluster
Kirov region	0,70	0,14	0,00	0,16	3
Perm Region	0,32	0,14	0,47	0,06	2
Bashkortostan	0,50	0,22	0,00	0,28	3

Mari El	1,00	0,00	0,00	0,00	4
Mordovia	0,78	0,06	0,00	0,16	3
Nizhny Novgorod Region	0,34	0,29	0,29	0,07	2
Orenburg region	0,60	0,38	0,01	0,00	1
Penza region	0,88	0,01	0,00	0,11	4
Samara Region	0,52	0,27	0,15	0,05	1
Saratov region	0,41	0,39	0,00	0,21	1
Tatarstan	0,35	0,11	0,42	0,12	2
Udmurt republic	0,61	0,15	0,00	0,24	3
Ulyanovsk region	0,71	0,13	0,00	0,17	3
Chuvashia	0,64	0,15	0,00	0,20	3

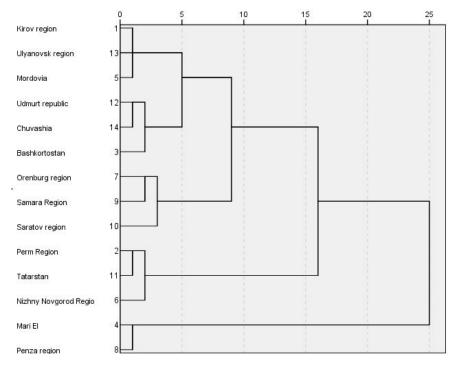


Fig 3. Cluster analysis of higher education development effectiveness in the regions of the Volga Federal District

According to the results of the comprehensive analysis, it is necessary to state that four types of regional university space were formed in the VFD (Figure 6):

Type 1: the high school space of the region is characterized by a high proportion of mono-profile universities, the quality of reception of which is at a high level, and the regions of this group are also characterized by a low level of higher educational institutions with a national university status and which are the members of TOP 5-100 project. The regions of this cluster are Orenburg, Samara and Saratov regions.

Type 2: The regions of this group are characterized by a moderate level of universities with the status "multidisciplinary", a high level of higher educational institution number with the status of higher education national institution and enter the project TOP 5-100. The reception quality is low. The regions of

the 2nd type: the Perm Region, the Nizhny Novgorod Region and the Republic of Tatarstan.

Type 3: The regions with an elevated level of multidisciplinary universities that do not have the status of a national institution and are not included in the TOP 5-100 project. The reception quality is low in relation to the regions of other clusters. The regions of Type 3 are represented by the Kirov Region, the Republic of Bashkortostan, the Udmurt Republic, the Ulyanovsk Region and the Republic of Chuvashia.

Type 4: the higher education space of the regions is characterized by multi-profile nature, with a moderate level of quality of incoming contingent, the higher education institutions of this cluster do not have the status of a national one and are not included in the project TOP 5-100.

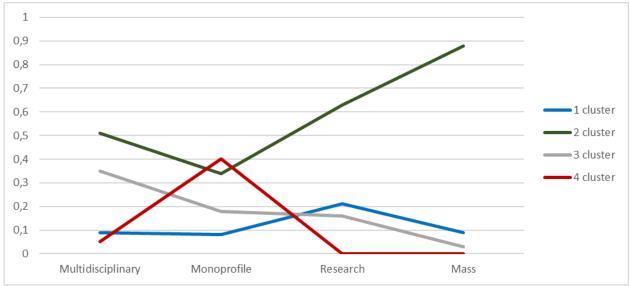


Fig 4. Cluster profiles

# 4 Conclusions

The greatest potential and competitiveness are characterized by the regions belonging to group 1 and 2, since they are characterized by leading indicators on the share of single-profile universities. The regions of the group 2 have an additional competitive advantage, expressed in the presence of a larger number of universities with the national status and entering the project TOP 5-100. Besides, it is necessary to state that the universities of the considered group of regions have a high level of incoming contingent quality.

Regions 3 and 4 of the cluster have lower competitive advantages in the context of the higher education system development effectiveness, since they are characterized by a much lower level of effectiveness in the context of the problems posed in this study.

On the whole, it should be noted that at the present stage of development, despite the obvious breakthroughs that have taken place in the last few years, higher education does not fully meet the expected challenges of future transformations in the system of global reproduction processes based, among other things, on the digitization of the economy, which determines a new type of labor market organization and development, the new trends in labor productivity development and the new creative potential of society. Meanwhile, a new type of economic growth requires new forms of higher school system organization aimed at the development of such activities and the types of labor organization that would contribute and organically meet new labor market needs in 15-20 years.

In many ways, the current state of affairs is conditioned by the lack of attention to the higher education sector in the 1990-ies (Altbach & Salmi, 2011; Buckingham, 2003; Safiullin et al, 2017). However, despite the significant intensification of development activation processes concerning higher education system since the 2000-ies, the problems acquired in the era of "perestroika" still remain. The most important of them are an ineffective structure of higher education system functional organization in the regions and, accordingly, in the national economy as a whole (Jonassen et al, 1999). Using the example of the Volga Federal District regions it was established that the share of higher educational institutions with the status "multidisciplinary" reaches 60 and more percent on the average in the general "field" of the university system of the region.

# 5 Summary

Thus, it can be stated that the key problem of Russian universities is the "isolation" from the real economy sector and

from the modern achievements in science and technology. In this regard, it is required to implement targeted measures aimed at the harmonization of these phenomena and processes as the result of network relation development with the external and internal environment of universities, as well as an effective organization of a regional university space. The inertial development of higher education system in Russia under the current conditions, apparently will not allow the Russian economy to move to the trajectory of an accelerated technological development.

The system of higher education is the link that can and must ensure a qualitative transition of the Russian economy to the channel of the fourth industrial revolution and forms a stable basis for economic growth. However, in order to implement this process, they need a significant reassessment of higher education values and development formats for university and the entire education system as a whole. And first of all, they require the institutionalization of new functional processes and results and new principles for higher education organization (Eisenstadt & Roniger, 1999).

The elimination of the identified problems in the sphere of higher education will create the basis that promotes more progressive and accelerated development of the national economy during the next long-term economic cycle, at the beginning of which the national economic system is placed now.

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# HARDWARE MEMORY BUFFER MODULE FOR MULTIPROCESSOR SYSTEM

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Abstract: The article deals with the problem of so-called bottlenecks in high-performance multiprocessor systems, namely the conflicts for the access to a common system bus shared by all processors. They showed and described the possibility of implementation between the processors and the memory of the hardware-implemented memory buffer module necessary for quick access to memory (the associative memory on fast registers is used in a buffer device) of the multiprocessor system with a widely used "common bus" interface. The buffer is implemented on the register memory and consists of two parts, one of which is responsible for data record, the other one is used for reading. In the course of the research, the functional organization of the module has been determined, the algorithms for its operation have been developed and implemented, the VHDL file describing the operation of the device has been created and debugged, and simulation was performed in ISE Web Pack software. Due to the capabilities of the applied modern element base (programmable logic integrated circuits (PLIC)), the buffer device described in the article is reconfigurable and crossplatform. Due to the application of the described module, it is possible to solve partially the problem of the multiprocessor system "bottleneck" with the "common bus" interface. After the practical use of the described device, the throughput of the subsystem "processor-nemory" and, accordingly, the performance of the entire multiprocessor system as a whole, will be increased.

Keywords: multiprocessor system, hardware memory buffer, structural organization, functional organization, operation algorithm, transaction splitting mode, PLIC, VHDL.

# 1 Introduction

The whole life of a modern man is literally imbued with computer technology: computers and the computer systems (CS) created on their basis. They penetrated everywhere: in household appliances, devices, communication devices, etc. The list can be continued for a long time. Among all the CS multiprocessor systems (MPS) stand apart, which are actively used for laborious calculations, for example, to model complex processes and other

scientific calculations, which require a huge performance and well-coordinated work of the subsystem "processor-memory."

The device developed and described in the article is intended for fast access to memory and processor load reduction. The result of this module use is a significant reduction of memory loading, the bandwidth of the "processor-memory" subsystem is increased and the speed of the MPS in general is also increased.

# 2 Problem formulation

The presented article is of a research nature in general. A number of literature sources (Biktashev & Knyazkov, 2004; Haemacher et al, 2003; Tsilker & Orlov, 2011) was analyzed to find unaffected issues and unresolved problems during the subject area study. A number of problematic issues related to the possibility of the memory buffer hardware implementation for multiprocessor systems to unload the processor-memory subsystem has not been adequately reflected in existing publications, the problematic issues were analyzed partially in (Martyshkin, 2014; Martyshkin, 2015; Timofeeva et al, 2017).

The purpose of the paper is to describe the consideration of possible algorithms for buffer memory device (BMD) operation of MPS memory with a common bus (CB) interface, which includes 4 processors (Figure 1). This issue is topical today due to global informatization and almost universal operation of huge amounts of data. In order achieve this goal, the article solves the problems of the device structure determination and the principles and the algorithms of its functioning. In existing MPS, several devices may apply for CB loading simultaneously, however, only one of them is possible to do it at any moment. In order to avoid possible conflicts, the CB must choose the mechanisms for request arbitration and the rules for a bus granting to a particular device among all those which requested it (Suvorova & Sheinin, 2003; Villalobos Antúnez, 2001).

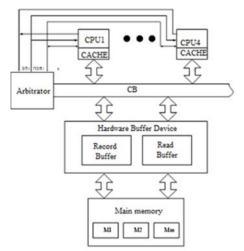


Fig 1. Block diagram of a four-processor system with a hardware memory buffer

The CB is presented in accordance with AMBA (Advanced Microcontroller Bus Architecture) specification (13), developed as a communication standard for high-performance systems-on-chip (Martyshkin & Yasarevskaya, 2015; Martyshkin & 2016; Salnikov et al, 2016).

The AMBA standard, the bus protocol and organization are in a good agreement with the design of synthesizable, parametrizable modules and the systems-on-chip based on them. The AMBA bus standard includes three bus specifications:

- AHB Advanced High-performance Bus.
- ASB Advanced System Bus.

APB - Advanced Peripheral Bus.

Currently, AMBA-based communication systems are widely used in aerospace systems-on-a-chip. For example, AMBA buses are used to organize the system of communications in systems-on-chip on LEON processor core, organized in accordance with the SPARC V8 architecture .The AMVA AHB bus is also used in the developed domestic systems-on-the-chip, for example, within the framework of the "Multicore" project .

The AMBA standard is designed to develop high-performance systems. In accordance with this standard the data exchange is carried out in synchronous mode. The standard provides the

support for packet transfers and split transactions. The system must have no more than 16 master devices, the number of slaves is unlimited. The organization of communications by bus is carried out under the management of an arbitrator.

In order to implement the HBD, the AMBA AHB bus is used, acting as an intermediary between the processor and the memory. When the operation (transaction) of memory record or reading is performed continuously, the CB handles one of the system processors exclusively until the operation is completed. Thus, the bus and the processor are in the standby mode until the memory performs a physical reading or writing procedure. Thus, bus cycles are lost that could be used by other processors. In order to reduce the time losses and increase the bandwidth of the CB, it is necessary that it supports the modes of reading transaction splitting and record transaction buffering.

The memory read operation is subjected to splitting, and it is divided into an address transaction and a data transaction. When memory is required the processor sets an address to a CB, which is stored in HBD, after which the CB is released and the

processor goes into the standby mode. The physical reading procedure takes place in the memory itself under HBD control, which at the end of the physical read procedure should signal the requesting processor about data readiness. In response, the processor requests CB again and reads the data word from HBD.

The buffering of record transactions is that the processor puts the address of the memory cell and the data to be written to the bus. They are stored in HBD registers, after which the processor releases the CB, since there is no reverse memory reaction in this case. The procedure of physical record in memory is performed under HBD control.

It follows from the stated above that a developed unit should be equipped with two buffer devices to store read and record transactions (Figure 2). In its turn, the read buffer has two parts. The first contains the registers to store the memory cell address into which a request is made, the second contains the registers to store the data selected from the memory data. The record buffer also consists of two parts. The first stores the memory cell addresses, which is required, the second stores the recorded data.

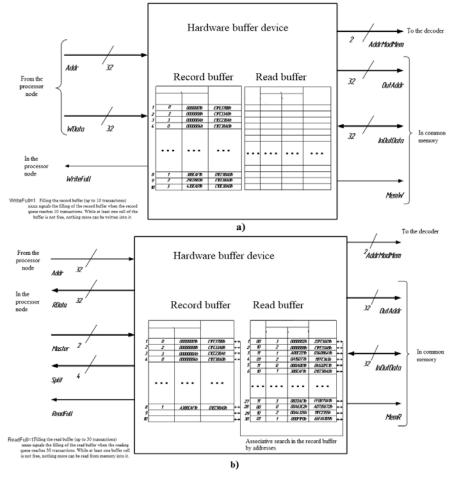


Fig 2. Block diagram of the hardware memory buffer in the record (a) and reading (b) mode

The work uses MPC architecture with the Unified Memory Access (UMA). In order to increase the memory bandwidth, it is divided into a number of independent modules, each of which has its own addressing and data buffering schemes. If a bus with a transaction splitting is used, it is possible to access the memory of several processors simultaneously. The access time to the data from memory does not depend on a processor accessing the memory, and on a memory chip containing the necessary data. At that each processor unit can use its own cache.

The principle of the device operation is the following one. Suppose that one or more processors generated a record transaction simultaneously. In order to implement it

successfully, you need to access the CB, for which the processors send the request signals to the arbitrator, which in its turn checks whether the CB is currently available and, according to some rule, selects one of the processors to perform the operation. If the CB is free, then the processor captures it. Further, a check is made for record buffer filling, and if it is full, the processor is put into the standby mode. If there is at least one free register in the record buffer, the processor places the data word there. The further work of the processors does not depend on the record result, i.e. it makes no sense to wait until the end of the record, so it releases the bus.

A lot of requests can be accumulated in the record buffer, and it

is possible that the read request will refer to data already in HBD, and not in memory, so they can be read directly from HBD, not from the memory, which is much faster, than a request to memory. The addressable record buffer is performed in the form of associative memory for a fast implementation of this function (Martyshkin, 2017).

The reading procedure with transaction splitting allows a simultaneous execution of several transactions generated by different processors. At the beginning of the read operation, the requesting processor occupies the bus, places the address and read signal on it, which are fixed in the reading buffer. This transaction is executed quickly because buffers are implemented on hardware registers. After this procedure, the processor disconnects from the bus. The buffer device carries out the process of data physical reading itself from the memory module and the process of result storing in one of the read buffer registers. At an appropriate moment, when the bus is idle, the data is returned to the processor.

In the systems with shared memory, all processors have equal capabilities for a single address space access. A single memory can be built as single-block one or by modular principle, but usually there is a second option in practice. In order to improve performance, it makes sense to apply a memory split to addresses into 4 modules.

A possible structure and the principles of HBD functioning are shown in Here we will dwell in detail on the functional organization and the algorithms of HBD operation.

The circuit implementation does not work in VHDL code if you

do not adhere to the description of a specific element for VHDL (for example, the description of a register, a counter, a decoder operation, etc.). But still, let's highlight some functional units (Figure 3):

- the unit of a transaction adding to the read queue;
- the unit of a transaction adding to the record queue;
- the unit of a pointer increase by the head of the read buffer and read queue increase;
- the unit of a pointer increase by the head of the record buffer and record queue increase;
- the unit for data search in the record buffer when the addresses coincide with the read buffer;
- the reading unit from memory according to the specified address;
- the unit of pointer increase to the tail of processed message queue;
- the unit of record to memory according to the specified address;
- the unit of pointer increase by record buffer tail;
- the unit of data output to the processor initiating the read request.

On Figure 3, all units are shown in a general view.

The unit of a transaction adding to the read queue works as follows. The internal register RGA1 receives a 32-bit address from the processor, by which data should be found. The RGMID register is supplied with a 2-bit processor identifier (takes the value from 0 to 3 according to the number of processors in a system). The enabling signal for the operation of these registers is the following combination of signals  $\overline{TypeTrans} \& W \& R \& Sel$ 

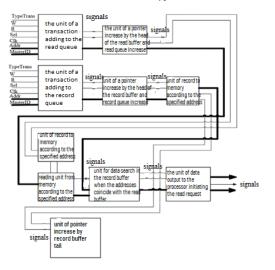


Fig 3. Functional units of a hardware memory buffer

The unit of a transaction adding to the record queue works as follows. The internal register RGA2 receives a 32-bit address from the processor, on which data should be written. The RGD register is supplied with 32-bit data from the processor. The enabling signal for the operation of these registers is the combination of signals  $TypeTrans \& W \& \overline{R} \& Sel$ .

- The unit of the pointer increase by the head of the read buffer and read queue increase operates as follows. The entire queue of requests is represented as consisting of the "queue head", the "queue tail" and the cell pointer at this moment. When you add the following request to the read queue, the "head" is incremented by one, and at the same time, the read queue increases. This unit can be represented in the form of counters.
- The unit of data search in the record buffer when addresses coincide with the read buffer can be implemented on a 32bit comparator. One input of which is supplied by the

address set by the processor in the read buffer, the other is supplied with addresses from the record buffer sequentially. When the addresses match, the data from the record buffer are returned to the processor. If the addresses do not match, i.e. the associative search has not provided results, it is necessary to access the memory according to the correct address. This action is produced by the following unit.

The unit of reading from memory according to the specified address works as follows. From the 32-bit register in which the address is stored this address is sent to HBD output, to address memory inputs. Two most significant bits of the address are used to select the memory module from which you need to read the data according to the specified address. A read signal is sent from MemR memory, which will be held in the unit for 50 ns the time of data search in memory according to the specified address and the reading into the buffer. The data is stored in the data register of the read buffer, and when the processor that set the address for reading is reconnected to the CB to receive the

data, it will read the necessary data from the read buffer. A Split signal (processor number) is provided.

The unit of the pointer to the queue tail of processed messages works as follows. When a read operation from memory occurred, the data is not provided to the processor immediately. First, a so-called "queue of processed messages" is created. The message queue increases with each new processed transaction. The unit can be implemented on the counter.

The record unit into memory according to the specified address operates as follows. Among 32-bit registers in which the address and the data are stored in the record buffer, the record to memory is performed. Here, two most significant bits of the address are used to select a memory module where the data will be recorded. A record signal is sent to the MemW memory, which will be held for 10 ns - the time of data record into memory.

The unit of the pointer increase by the tail of the record buffer works as follows. During the record to memory, the pointer to the buffer tail is incremented by one with each processed transaction. After that, one cell is freed in the record buffer.

The data issue unit to the processor initiating the read request operates as follows. As soon as the queue of ready-made orders is formed, i.e. all requests of the queue are processed, the data from the memory is placed in the read buffer, then the processors can pick up the applications intended for them. The data from the registers is fed to the DataRead output and the processor reads the data.

Now we will show the variant of HBD algorithm functioning. Let's imagine the subsystem "processor-memory" as two subsystems: "processor-HBD" and "HBD-memory". Let's describe the algorithm of the subsystem "processor-HBD" operation. First, the processor checks the blocking line and determines whether the CB is free or busy at this moment. Suppose a high potential on the block line corresponds to a state in which the CB is free. If the processors interrogating the blocking line detect a high potential there, they send requests to the bus arbitrator. The processor with the highest priority will receive a signal confirming the request. After the processor captures the CB, an operation type is selected: read or record. In the case of a record operation, the record buffer is checked for free space and, if it is full, the processor is put into the standby mode until a free cell appears. If there is some place, an address

and data are recorded, after which the processor releases the CB. If you select a read operation, the read buffer is first checked for free space and if it is absent, the processor is put into standby mode until a free cell appears. If there is an available cell, an address is recorded, according to which the data must be provided for reading. After the procedure of physical reading from memory, or the search in the associative memory of the record buffer the data is read into the read buffer according to a set address. The HBD notifies the processor, which has prepared the read data, about the readiness and it takes them from the HBD

Let's describe the possible algorithm of the subsystem "HBDmemory". First, you select an operation type: read or write. When the record operation is selected, the request for the j-th memory module is made, where the data will be recorded sent to HBD from the processor. Next, the j-th memory module is checked for loading and, if it is full, the subsystem goes into the standby mode, and if it is free, the data is recorded to a desired address. Then the memory module, like one cell of the write buffer, is released: CчБ3: = CчБ3-1, where CчБ3 is the record buffer (semaphore) (in this paper it is assumed that C4E3=10, that is, the capacity of the record buffer makes 10 cells). When you perform a read operation, the k-th memory module is requested, from where the data will be read into HBD, for their further transmission to a corresponding processor. After that, the k-th memory module is checked for loading and, if it is full, the subsystem goes into the standby mode, if it is free, the data is read according the desired address: C4E4T: = C4E4T+1, where СчБЧт is the read buffer counter (semaphore). It is accepted in the article that  $C_{4}E_{4}T = 30$ , i.e. the capacity of the read buffer makes 30 cells). After that, the read data is written to the cell of the read buffer. Then the memory module is released, and the HBD notifies the requested processor about the operation.

## 3 Experiment results

Based on these algorithms, the VHDL file describing HBD operation was created in ISE WebPack program, and the element was synthesized, and its debugging and modeling was performed, and operation time-series diagrams were obtained. The results of HBD operation modeling are shown on Figure 4. According to the obtained time diagrams, we can judge the correctness of a device according to the developed algorithms, by which it is possible to speak about the correct functioning of the device according to the algorithms described above.

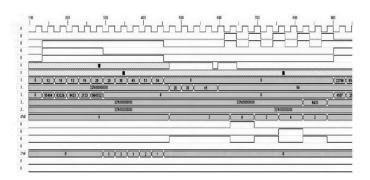


Fig 4. Time diagrams for HBD memory operation

The diagram has the following signals: clk - clock signal, R - reading signal, TypeTrans - operation selection signal (1 - record, 0 - read), W - record signal, MemR - memory read signal, MemW - memory record signal, Addr (31: 0) - 32-bit address, OutAddr (31: 0) - the address at the device output, DataRead (31: 0) - 32-bit data for recording, DataWrite (31: 0) - 32-bit data for reading, OutData (31: 0) - 32-bit record data to memory (reading from memory), Split (3: 0) - the signal "1" indicates the readiness of buffering device to the split transaction completion from a corresponding processor, MID - processor

node identifier, WriteFull - recording buffer overflow signal, ReadFull - read buffer overflow signal, queuesizeread - the size of the read queue, headread - the «head» of the read queue, tailread - the «tail» of the read queue, queuesizewrite - the size of record queue, headwrite is the "head" of the write queue, tailwrite is the "tail" of the write queue, buftail is the "tail" of the buffer queue, tailcpl is the "tail" of the processed read request queue. Suppose, the signal "1" appears on the lines Sel, TypeTrans, W at the moment of 127 ns. It holds for 5 cycles on these lines, i.e. there are 5 requests according to the

corresponding addresses in the decimal system (12, 10, 13, 19, 20). Data is also set on the data line for the record to memory according to the specified addresses. At this time, the length of the record queue and the pointer to the "head" of the record buffer increases. Then the TypeTrans signal takes the value "0", which corresponds to the read operation. Now the signal "Sel" and "W" are only in "1". The reading queue is developed for 5 cycles. Addresses are set on the address line, and processor node identifiers are set on the MID line. Then the signals Sel, TypeTrans, W take the values of "0". The processing of the transaction queue begins. The priority for the reading process is chosen as the highest one. First, the read queue is processed, followed by the record queue. If the address in the read buffer matches the address in the record buffer, the data is taken directly from the record buffer without accessing the memory. This process is monitored on the time diagram. Address 13 is present both the record buffer and the read buffer. If you trace along the diagram lines, you can notice that the data is immediately selected from the record buffer at this address. If the addresses do not match, the buffer device accesses the memory. At the time of access to the memory, the signal "1" is set on the MemR line. When the queue of processed messages is generated, the buffer device signals the requesting processor node that it is ready by setting the Split signal (processor number) to "1", at this point the processor takes its data. After the processing the read queue, the write queue is processed. Then the actions are repeated upon the receipt of requests for reading or writing.

## 4 Conclusions

The paper touches upon the issues of the hardware buffer device functional organization and its work algorithms. The device in question differs from earlier ones by the following: previously the task in MPS was solved using the memory with NUMA or UMA architecture with alternating addresses, which made it impossible to use the mode of transaction splitting on a CB.

The result of this development use, implemented on the modern element base - PLIC, is memory loading reduction, the bandwidth of the subsystem "processor-memory" and the performance of the entire MPS are increased.

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# STUDY OF DISTRIBUTED TASK MANAGER MATHEMATICAL MODELS FOR MULTIPROCESSOR SYSTEMS BASED ON OPEN NETWORKS OF MASS SERVICING

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Abstract: The article performs mathematical modeling and the study of the multiprocessor system characteristics involving distributed task managers (with a spatial separation, with a homogeneous and heterogeneous incoming order flow and a limited queue length). The methods of the study are based on the use of analytical modeling theory provisions, the theory of systems, mass service networks and probability theory. The technique of multiprocessor system study is described with the specified types of task managers. We offer refined models to estimate the main temporal characteristics of dispatchers, taking into account the redistribution of task flows in order to equalize the processor load. The results of the study are analytical expressions to estimate the response time in the multiprocessor system under consideration. The adequacy of analytical calculations is verified by simulation modeling, The conclusions are presented in the end.

Keywords: analytical modeling, planning, dispatching, distributed task manager, division in space, service method, multiprocessor system.

#### 1 Introduction

The basic ways of task manager development in multiprocessor systems (MPS) are widely known: with time-sharing (general task manager) (Tanenbaum E., Bos H. 2015, Martyshkin A.I., Yasarevskaya O.N. 2015) and the division in space (distributed task manager) (Tanenbaum E., Bos H. 2015, Martyshkin A.I. 2016). There is a lack of its organization in MPS with a single task manager, thus, the performance index of the entire MPS falls. The main "stumbling block" is manifested in the conflicts that arise when a task manager requests that only a certain processor communicates with the global queue of tasks ready for maintenance, which takes time. Moreover, in order to get a new task, it is necessary to enter into interaction with the task manager, which takes time again. At a certain point, the waiting tasks are not processed with free processors in MPS, because the task manager does not have time to serve them all. The way out of this situation is its another organization - with individual task queues for processors, as will be discussed in this work.

There are many planning disciplines in real-time systems (Tanenbaum E., Bos H. 2015), according to which the queue of tasks pending processing is developed. Considering modern real-

time systems, they noticed that the tasks coming into service, represent a heterogeneous flow of different priority applications. High-priority applications are serviced faster, because a rapid reaction to them and a result delivery are necessary. The problems with a lower priority behave differently. An interrupted task is put into a "sleep" mode and awaits processing. When a received task has a relative priority in comparison with a performed task, it waits the end of the current work. The paper deals with MPS with the task manager, which is based on the spatial separation strategy, as a system with a homogeneous and heterogeneous flow of incoming service requests.

## 2 Problem Formulation

The mathematical model of the distributed task manager (Tanenbaum E., Bos H. 2015, Martyshkin A.I. 2016, A.I. Martyshkin. 2016, Martyshkin A.I., Vorontsov A.A., Valova O.O. 2015) consists of n single-channel mass service systems

(MSS) (  $S_1, ..., S_n$  ) (Figure 1), where each MSS simulates the maintenance in the "task manager-processor" subsystem. A more detailed description of a similar model was given in (4, 5). A specific MSS simulates the maintenance by the task manager and the processor  $(S_1,\,S_2,\,...,\,S_m).$  From the  $S_0$  source the flows of service requirements  $\lambda_0$  are received, and it also absorbs the serviced tasks. In the article, the distribution of tasks is chosen equiprobable for an approximate estimation of the real MSS behavior, in order to avoid its overloading, when all tasks will tend to be serviced on one or a number of processors, and some of them will be idle. Task managers form the final queues. At that, task managers not only organize queues for MSS processors, but also balance the load according to a certain system algorithm set by designers. In accordance with this, the tasks waiting to be processed can be selected from any i-th queue of a more loaded processor and to be placed in the queue of the less-loaded jprocessor at the moment with a certain specific probability. Let us dwell in more detail on the expressions and the calculations, using which it is possible to estimate the probabilistic and the temporal characteristics of these types of task managers, and in the second half of the article, based on the results of the computational experiments that confirm the adequacy of the proposed models.

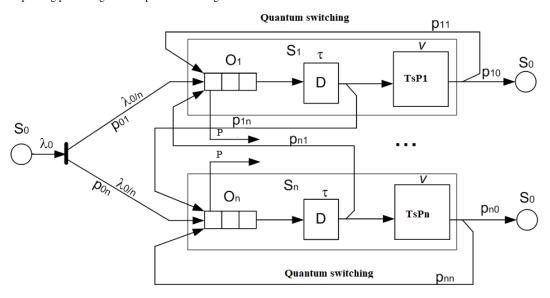


Fig 1. MPS model scheme with distributed task manager

The considered MPS is represented by an open network of mass service (ONMS), as a set of single-channel MSS

$$(S_1,S_3,...,\,S_{n-3},S_{n-1\,).}$$
 The intensity of maintenance

by the "task manager-processor" subsystem of the requirement flow is equal to  $(\tau_{DZ} + \nu_{TsP})^{-1}$ , where  $\tau DZ$  is the time of the task manager operation,  $\nu Tsp$  – the processor operation time. The task, arrived at the moment when the subsystem is

busy, is set in the queue and awaits maintenance. Let's assume that no matter how many tasks are queued, it can not accommodate more than k tasks, of which one is serviced, and k-1 is expected. The applications that do not fall into the  $\rm O_i$  queue are serviced elsewhere, routed to a different queue of the "task manager-processor" subsystem with a redistribution probability

$$p = \rho_i^{k+1} (1 - \rho_i) / 1 - \rho_i^{k+2}, \tag{1}$$

where  $\rho_i = \lambda_i \cdot (\tau_{DZ} + \nu_{T_{SP}})$ .

The transmission coefficient for a particular problem is

determined by the expression (A.I. Martyshkin. 2016)

$$\alpha_{i} = \left(\lambda_{i} + \sum_{\forall n(n \neq i)} p_{ij} \cdot \lambda_{i}\right) / \lambda_{0}, \quad i, j = \overline{1, n}$$
(2)

In (Martyshkin A.I. 2016, A.I. Martyshkin. 2016, Martyshkin A.I., Vorontsov A.A., Valova O.O. 2015), the mean waiting times of the task in queues and the response time of the system were determined.

Let's obtain mathematical calculations to determine the average number of tasks (S), both waiting in line, and serviced. We can solve this problem in this way: let's take the total number of problems in the system S as the sum of the tasks in the queue B and the tasks directly serviced by  $\Omega$ . Then S = B +  $\Omega$ . In accordance with (A.I. Martyshkin. 2016), we obtain the following:

$$S = M[S] = M[Z] + M[\Omega] = Lod_{cp} + \overline{\omega}$$
(3)

 $Loch_{cp}$  where is the average number of waiting tasks in a queue;

 $\varpi$  - the average number of tasks being served.

The value  $\mathcal{\overline{U}}$  is defined in (4), let's find the value  $\mathcal{\overline{U}}$  .

Due to the fact that the task manager in the considered part of the network model is one, the value  $\Omega$  can be either 0 or 1. The value is equal to 0 if the task manager is free. The probability of

this will be  $P_0 = \frac{1-\psi}{1-\psi^{m+2}}$ . It takes the value 1 in the

case when the task manager is busy with maintenance. This

probability makes 
$$P_0 = rac{\psi - \psi^{m+2}}{1 - \psi^{m+2}}$$
 . Taking into account

the expressions obtained in (4) and given in the article, we have the mathematical expectation of served task number

$$\varpi = 0 \cdot P_0 + 1 \cdot (1 - P_0) = \frac{\omega - \omega^{m+2}}{1 - \omega^{m+2}}$$

So, the average value of the number of tasks waiting and serviced by the task manager will be the following one:

$$Z = Loc_{\mathbf{p}} + \frac{\omega - \omega^{m+2}}{1 - \omega^{m+2}}$$
(4)

Let's calculate the average time value of a task waiting arriving at MPS at any time in the queue for the task manager  ${}^{t_{_{\scriptstyle o}\,z}}$  . With a certain probability  $P_0$  the task manager is not busy and the task immediately goes to processing. With a certain probability  $P_1$  the incoming task will fall into the MSS and waits for service during the period of time  $1/\mu_D$ . With the

probability  $P_2$  there will be one more task will be in a queue

prior to our task and the average waiting time will be  $2/\mu_D$ , and so on. At  $\kappa$ =r+1 a new task will find the task manager already busy with processing and another r tasks in the queue. In this case, the waiting time will also be zero, because a task does not fit into the given queue, but goes to the other. According to (A.I. Martyshkin. 2016), the average latency of the task is

$$\bar{t}_{\alpha z} = \frac{1}{\psi \cdot \mu_D} \cdot Lo \operatorname{ch}_{zp} = \frac{Lo \operatorname{ch}_{zp}}{\lambda_{00}}$$

(5)

From this we find, taking account the calculations in (A.I.

Martyshkin. 2016)

Now let's estimate the time of finding the task in the subsystem "queue - task manager - processor". Let's define  $W_{CMO}$  as the time of finding the task in the MSS. This time is found from the sum of a number of

$$W_{CMO} = T_{o2} + T_{oDP} + T_{o,TsP}$$

parameters

 $$T_{\rm oz}$$  where  $$^{\rm oz}$$  is the waiting time in the queue before the task

manager; — the time for a task processing by a task

 $T_{oTsP}$ 

manager, - task processing time by the processor.

According to the theorem of mathematical expectation addition

$$t_o = M[W_{\rm CMO}] = M[T_{\rm oz}] + M[T_{\rm o\,DP}] + M[T_{\rm o\,TsP}]$$

$$M[T_{oz}] = \bar{t}_{oz}$$

(4). For this work

$$M[T_o \, \mathrm{DP} \ ] = Q_o \quad \bar{t}_o \, \mathrm{DP} \quad = \frac{Q_o}{\mu_D}$$

$$M[T_{o \text{ TsP}}] = \mu_{\text{TsP}}$$

$$W_{\rm CMO} = T_{\rm o.z.} + T_{\rm o.DP} + T_{\rm o.Tsp.} = \frac{Loc{\bf h}_p}{\lambda_{\rm co.}} + \frac{Q_{\rm o.}}{\mu_{\rm D.}} + \mu_{\rm TsP}$$

(6

# 3 Computational Experiment

According to the received expressions and using the developed programs (The certificate of state registration of the computer program №2015610322, The certificate of state registration of the computer program №2015610325), the MPS study was carried out, which includes distributed task managers. The results showed that the task managers under consideration can be used up to "soft" real time systems at the worst load conditions, since latency does not exceed 15 mcs, which correlates with many existing real-time systems, for example, LinuxRT (Mikhalev V. 2012).

The obtained results of analytical modeling are verified by simulation modeling, which confirms the adequacy of the developed methodology to conduct the study of distributed task managers. However, there is a serious lack of distributed task manager organization as compared to the task managers with a common queue. A task manager with a single queue ensures that a task is invariably serviced on one of the system processors since it completely provides this process itself. In the case when a number of processors can not provide the processing of tasks, "fail", the task manager will not take them into account during task assignment; these processors will stop to support the interaction interface. In the MPS, which includes distributed task managers, a manager does not control the process of task retrieval from the queues for processor servicing. Therefore, if a number of processors "fail", their queue will receive tasks for a certain time until their number becomes large

enough. In such a situation, it becomes necessary to implement an additional mechanism to monitor the processor functioning by the manager in order to detect faulty processors in time, as well as the ability to re-write the tasks from the queue of a non-working processor to other queues or to switch queues between processors. Such mechanisms increase the system resources used during a task manager organization. But this is justified by a significant increase of MPS speed in general.

The MPS with 4 processors and, accordingly, with 4 task managers was taken for computational experience. It has been obtained experimentally that the probability that a task will be redistributed for other queues after a dispatch is the following one: 0.05 at long tasks. The probability of a task result provision to a user makes 0.05 for long tasks; 0.3 for medium tasks; 0.7 for short tasks. The probability of a long task additional serving makes 0.9; average - 0.65; short - 0.35

In the software package (The certificate of state registration of the computer program №2015610322), in accordance with the type of a system task being solved, we enter the necessary data so that it can calculate the values of the task flow transition intensities between network MSS. The values of the communication ratios between the devices are also calculated. The expression is determined from (Martyshkin A.I. 2016) to find the response time of such a system

$$U = \left(\sum_{i=1}^{n} \lambda_0^{-1} \cdot \lambda_i + \sum_{\forall n(n \neq i)} p_{ji} \cdot \lambda_i\right) \cdot \left(w_i + k \cdot \left(t_k + \delta + \tau + \varsigma\right)\right). \tag{7}$$

The processing time of each task is selected during the generation exponentially by input flow intensity. An average processing time of a task is chosen exponentially according to the product of one quantum time by the number of quanta necessary to complete a task. The model takes into account the phenomenon of restarting the processor cache when a new task enters it. The cache reset is selected as a static value and occurs with a specified probability. When the queue is full before the "task manager - processor", the task is redistributed to other queues with the probability  $p_{\mbox{\tiny nepepacnpi}}.$  The task is processed in the processor for a whole quantum. At the end of processing, the processing time is deducted from the internal variable of the task - the time of one quantum in the processor. Then the completeness check is performed by comparing the internal task variable that is responsible for the remaining time required to complete the processing with zero. If the task is completely processed, then it leaves the system.

In the course of the computational experiment, the complexity of the tasks changed (low for the tasks requiring a high reactivity, medium and high - for the tasks requiring a low reactivity). The load of processors was at the level of 65%, which corresponds to an average load of the system. The number of processors varied from 2 to 20. The complexity of the tasks was taken as follows: for highly reactive tasks - 0.1 ms, for the tasks with an average laboriousness - 0.5 ms, and finally for the most laborious tasks -1.0 ms. The time of the quantum for the conducted experiments is assumed to be constant and equal to 0.1 ms. The task manager operation time during task context switching is 5 mcs (obtained by measuring on the prototype system using the program (The certificate of state registration of the computer program №2015610325 )); the cache reset time is assumed equal to 5 mcs (the score is obtained in the RightMark Memory Analyzer program).

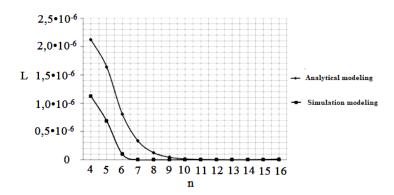


Fig2. Dependence of an average queue length before the subsystem "task manager-processor" on the number of processors in a system

Figure 2 shows the dependence of an average queue length before the subsystem "task manager-processor" (L) on the number of processors (n). The calculations were carried out in the program (The certificate of state registration of the computer program №2015610322). The graph shows that the queue tends to zero as the number of processors increases. Hence it follows that when you solve the problems with a high labor input, which corresponds to a low reactivity of the system and the mode of hard real time, it is minimal for any number of processors and decreases with labor input increase.

Suppose that the system in question is not exponential, then it can be represented as MSS M/G/1, then the characteristics of the system will be obtained, which are close to the real ones. In this paper, we consider the system with n processors and a heterogeneous flow of tasks arriving at the i-th MSS, and with relative priorities of task selection from a queue. According to (Zakharikova E.B. 2012.), we can replace a system of type M/G/1 with a finite queue by a similar system with an unbounded queue. It is easier to analyze and determine the main characteristics of SeMO, consisting of MSS with unlimited task queues, than consisting of MSS with a queue length limitation. If a queue contains a large number of places (at least 16 for real-time tasks), then the calculation error will be less than 2.5%

(Zakharikova E.B. 2012.), which is quite acceptable. In work (Martyshkin A.I. 2016), the average waiting time of all priority tasks was calculated in all queues of the considered system, as well as the response time of the system with distributed task managers at a heterogeneous incoming task flow with relative and absolute priorities.

Let's consider the technique to estimate the MPS bandwidth by the example of two-stream processing, with one stream of the highest priority over another stream. The calculations of the characteristics for similar MPS were carried out in (Martyshkin A.I., Biktashev R.A., Vostokov N.G. 2013.). First, let's estimate the calculation error obtained by the numerical method. Figure 3 demonstrates the graphs showing the dependence of service suspension probability ( $P_{\mbox{\tiny NPBOCT}}$ ) on the value of the reduced

density of task streams (P), arriving in the processors and calculated by the expression (Martyshkin A.I. 2016- A.I. Martyshkin. 2016) for a different number of processors in the system. According to the assumption made in (Martyshkin A.I. 2016- A.I. Martyshkin. 2016), the reduced densities of the first and the second priority task flows are equal to each other. All calculations were carried out in the program (The certificate of state registration of the computer program  $\mathfrak{N} 2015610322$ ).

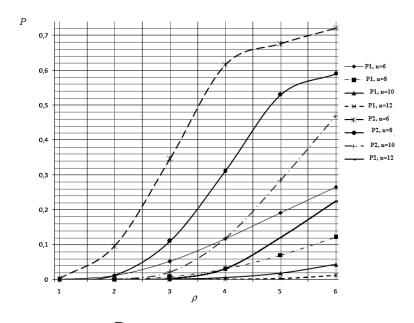


Fig 3. Probability dependence on task stream density, calculated for different number of CP

According to the accepted assumption that the tasks of the first priority have an absolute priority in relation to the tasks of the second priority, it is possible to determine the bandwidth for

each type of priority. An absolute bandwidth of the system with the tasks of two priority streams will be determined according to the following expressions:

$$A_1 = \lambda_1 \cdot (1 - P_{n1})$$
  
 $A_2 = \lambda_2 \cdot (1 - P_{n2})$ 
(8)

where  $\lambda_1$  – the intensity of the first priority task flow,  $\lambda_2$  –

 $\lambda_2 = 12 \, \text{m/s}$ intensity of the second stream makes

Let's calculate the bandwidth with the number of processors

equal to 6, 8, 10, 12. The reduced density of the first and the

second flow is equal to each other. The probability of first

priority task suspension is for the indicated number of

processors, 0,1172, 0,03, 0,005, 0,0006, respectively. The probability of the second priority task service suspension for

similar characteristics makes 0.6154, 0.31, 0.111 and 0.03,

respectively. Hence, we find an absolute bandwidth with the

number of processors equal to 6:

the intensity of the second priority task flow, probability of second priority task service suspension due to the loading of the processors by the first priority task servicing,

P<sub>npuocm1</sub> - the probability of the first priority task suspension

due to the processor loading by the same priority task servicing. For example, let the intensity of the input stream of tasks of the

most priority flow be equal to , the

 $A_1 = 10 \cdot (1 - 0.1172) = 8.828 \text{ z/ms};$  $A_2 = 12 \cdot (1 - 0.6154) = 4.6152$  z/ms

When the number of processors is 8:

$$A_1 = 10 \cdot (1 - 0.03) = 9.7 \text{ z/ms}$$
 ;  $A_2 = 12 \cdot (1 - 0.31) = 8.28 \text{ z/ms}$ 

When the number of processors is 10:

$$A_1 = 10 \cdot (1 - 0.005) = 9.95 \text{ z/ms};$$
  $A_2 = 12 \cdot (1 - 0.117) = 10.596 \text{ z/ms}$ 

When the number of processors is 12:

$$A_1 = 10 \cdot (1 - 0.0006) = 9.994 \text{ z/ms};$$
  $A_2 = 12 \cdot (1 - 0.03) = 11.64 \text{ z/ms}$ 

## 4 Conclusions

The expressions were obtained to evaluate the latency of distributed task managers and the processor.

The adequacy of the proposed mathematical model of the task manager is confirmed by the available reference data (Zakharikova E.B. 2012.) and the results obtained on the proposed simulation model. The error in the results does not exceed 20%, which is quite satisfactory to evaluate possible ways of task manager implementation in a multiprocessor system during the draft design phase.

Based on the abovementioned, we note that it is advisable to use task managers with the division in space for hard real-time MPS with a large number of processors, with a small of processors it is advisable to use the task manager with time separation.

The simulation results confirm the fact that the developed model of the spatially separated task manager shows better characteristics closer to real systems than classical exponential models based on MSS M/M/1. The considered models of task managers can be used in the development of new operating systems, including real-time operating systems.

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# POSSIBLE OPTION OF ASSOCIATIVE COOPROCESSOR ORGANIZATION AT FUNCTIONAL LEVEL ON PLIC BASIS FOR SPECIALIZED COMPUTER SYSTEMS

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Abstract: The possibility of associative coprocessor practical module realization on the modern element base for specialized computer systems is considered in the article. The purpose of the article is the development and the study of possible ways for an associative coprocessor block development based on PLICs that perform associative functions and data storage functions for computer systems. In this paper, an associative coprocessor is proposed that is connected to the PCI bus of the computer system, providing search and "more - less" comparison operations for 32 words simultaneously preloaded into the associative memory. The final conclusions are drawn in the article. The simulation of the associative coprocessor operation was carried out in CAD Web pack ISE of Xilinx company. The results obtained in this article may be applied in the search engines of various purposes: in database servers, search engines, and for the rapid implementation of search tasks in operating systems.

Keywords: associative memory, addressing, coprocessor, computing system, memory cell, multiple coincidence analyzer, memory addressing, bus interface.

## 1 Introduction

The main area of computer application today is the work with large amounts of data, in which the most laborious operations are all sorts of data searches and sorting. Existing computing systems (CS) use the address memory architecture, i.e. in order to search for data in memory, it is necessary to read each memory module address and compare it with the search argument. Thus, it takes a lot of computer time to search for information in memory. This circumstance has a very negative effect on CS speed as a whole. It is much faster to access information by the association (content). The essence of addressing principle by content is the following one (Figure 1). There is an array of data with the capacity of N words, it requires you to find all the words beginning with the "A" character and ending with the "H" symbol. The search argument here is the word A \*\*\* H, where the \* mark denotes the digits that do not affect the search result. The memory array on the hardware level is structured in such a way that the signal of the coincidence appears on the output of memory cells (MC), the contents of which coincide with the value of the arrived search argument. Further, the sampling of MC is performed according to the produced coincidence signals.

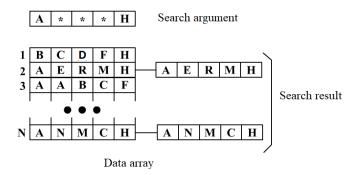


Fig 1. The essence of addressing principle by content

# 2 Theoretical part

This article as a whole is of a research nature. In the course of the subject area study, the literature (Kohonen, 1982) was analyzed in order to search for unaffected and unresolved problems. A number of issues related to the possibility of hardware implementation of an associative coprocessor for fast data search has not been reflected in publications adequately, but some of the problematic issues were considered in (Tanenbaum & Bos, 2015; Martyshkin, 2011 Villalobos Antúnez et al, 2013).

The purpose of this article is to develop and to study an associative coprocessor module based on PLIC for specialized computing, for example, multiprocessor systems. This issue is topical today due to global informatization and an almost universal operation with colossal volumes of various data. In order to achieve this goal, the article solves device structure determination problems and the principles of its functioning.

The proposed hardware coprocessor has the ability of address and associative access to the data stored in memory. Addressable access is required to work with a specific record and to use test libraries developed for address memory (Martyshkin, 2015; Martyshkin & Yasarevskaya, 2015; Kolesnikova & Kamasheva, 2017).

The device consists of two parts: the main part that realizes the functions of the asocial co-processor, namely: the usual (address) record in the associative storage device (ASD); associative recording in ASD; ordinary reading from ASD; associative reading from ASD; the search for coincidences and a part of the interface with the CS on which the function of signal conversion is assigned. These signals coming from the central processor (CPU) are converted to the signals

with which the coprocessor will operate, i.e. this part of the device organizes the interface with the CPU.

Today, associative access to data is realized in two ways: software way based on the distribution of memory, depending on the content of data and implemented by software, and hardware way, based on the use of special hardware designed for data storage and associative search. It can be implemented in the form of parallel ASD, where the search argument enters all the MS in parallel. Thus, the mass comparison operation is performed, and the search is performed in one clock cycle. Another variant of the hardware method implementation of associative data access is the consecutive-bit ASD, where the search occurs bit by bit. In this case, the search time directly depends on the number of data bus bits (Martyshkin, 2016a; Martyshkin, 2016b)

The processes similar to the biological mechanisms of data remembering and processing can be represented using various models of associative memory (AM), which allow to display the relations (associations) of arbitrary complexity between information objects. However, all these relations can be implemented in the form of simple constructions - the triples of components: an ordered pair of information objects O and V and the relation type A:  $O \leftarrow \stackrel{A}{\longrightarrow} V$  (Ognev & Borisov, 2000). One of the simplest AP models for mapping such relationships is shown in Figure 2, a. The model consists of an associative storage medium associated with two input channels and one data output channel.

During the record stage, the input information is fed to the input K from the first input channel, and the characteristic information C, representing the context in which the input information is written into the memory, is fed via the second channel.

At the associative sampling stage, when the key K appears, the response R is formed on memory output, associated with the K key. Thus, the information written in the memory can be selected using any of its fragments applied as search engines. Specifying different context C, you can specify the information to be sampled more precisely.

In the context of introduced  $\Phi 3$  definition, there is the issue of structured data accumulation and retrieval organization in such a way that access to them is possible on the basis of an associative sampling. Figure 2b shows the AP model, which allows to answer the following questions: in what you can you organize and record the elements of structured information, and also perform the search process cycling, in which a selected information element becomes the key for new information search.

The sets of values can be entered on the three input channels simultaneously. An output channel is used for information sampling. The address information K(t) is fed by first channel at the time t, and the second one is used to transfer the sign C(t). The response R(t) is also fed through the feedback channel to the input of the associative medium. During the operation of such an AP, the keys K(t) and the signs C(t) are fed through time intervals corresponding to the feedback channel delay.

The memory process will be considered under the assumption that the triple  $(K(t), C(t), R(t-\Delta))$  is a single static image, given at time t. At that, its simultaneous record into memory is possible by one operation. Suppose also that at the stage of recording R(t) and K(t) are the same.

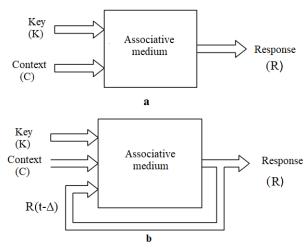


Fig 2. A model of associative memory without feedback (a) and with feedback (b)

During the record stage, K(t) and C(t) are fed to the AP inputs, and R(t) is developed at output, identical to K(t). After this,  $R(t-\Delta)$  is formed with the delay  $\Delta$  at the input. Each new triple, appearing at the entrances, is recorded in memory.

At the sampling stage from AP, the K key connected with the context information C, is fed to the input, after which K can be removed from the input. Thus, the copy of K appears at the output as a response. When the delayed signal  $R(t-\Delta)$  appears at the memory input, the pair (C,R) becomes a new key sign, leading to an associative sample of the next image R(t), etc. Thus, the entire recorded sequence of images is selected together with the context information. The considered model implements the memory suitable for structured knowledge record and retrieval.

The connection of the described device to CS is possible in several ways (Zilker & Orlov 2011): direct connection to the processor bus, at that, the coprocessor is included in the mother-board; the connection to the serial interface (USB), with this method of connection the coprocessor is implemented as a separate housing and is provided with a separate power supply unit; the connection to the computer expansion bus (PCI), in this case the coprocessor is executed in the form of an expansion board (Martyshkin, 2018).

According to the mentioned possible ways of a developed device connection to the CS, let's determine the architectural and the structural features of the associative coprocessor, having previously compared them with existing analogues.

As was mentioned above, the device will have to be included in the motherboard, with the direct connection to the processor bus which will lead to the coprocessor cost and its universality increase. The speed of such a system is high. The coprocessor, connected via the USB interface, will look like a separate external module, but it will work in sequence, which leads to performance decrease. But such a block is comparatively cheaper than the previous one. The connection of the coprocessor to the PCI

bus will allow to implement it in the form of an expansion board, which is relatively inexpensive to implement, in contrast to the mentioned analogues. At that, the work with the module will be carried out on a parallel interface, which will allow to achieve maximum performance in comparison with analogues.

Having analyzed the advantages and the disadvantages of known and practiced method organization for the main part of the device and the part of interface with the CS, it was decided to perform the main part in the form of parallel AMU, since this method has the maximum capacity. The connection to the special CS is realized via the PCI bus, since it has a sufficiently high throughput. Moreover, the associative coprocessor will be located in the address space of CS input/output.

# 3 Determination of associative coprocessor module structure

The simplified block diagram of the coprocessor can be represented as two blocks (Figure 3, a): the coprocessor (main part) and the PCI bus interface (the part of the interface with the system).

Having analyzed the chosen method of the main part implementation in the coprocessor structure, it was decided that the main block is the memory module of AMU, which is a MC array and performs the functions of data storage and association search with an argument. A MC consists of a storage element that performs data storage functions and a comparison scheme that performs the search, i.e. generating the signals indicating the equality or inequality of a cell content with an argument (Figure 3, b).

In order to implement the functions of data record and reading from a MC, it is necessary to add a multiplexer and address decoder block in the co-processor in order to generate the "Cell Select" signal for a particular MC. Also, you need to include a memory block for reaction record in the coprocessor module to store the values of the responding cells. In order to calculate the

number of responding cells, a block of coincidence counting has been added to the coprocessor. The block of multiple coincidence analyzer (MCA) is necessary for priority selection. The results of its operation generate the signals for an encoder block necessary to convert the binary sequence into an address, with the associative address reading or writing arriving at the inputs of the address selector. There is an argument register in a module to store a search argument. The command decryption unit

controls the coprocessor operation and generates control signals. The register of the mask is excluded from the composition of the coprocessor, since the comparison circuit generates three signals ("EQUAL", "MORE" and "LESS") and there is no need to mask the search argument bits (Figure 3, c).

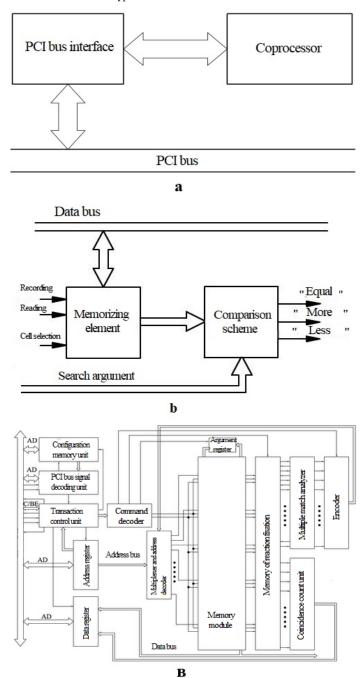


Fig 3. Simplified block diagram of the associative coprocessor module (a); block diagram of memory cell (b); a detailed block diagram of the associative coprocessor module (c)

# 4 Associative coprocessor module description at the functional level

The basis of the associative coprocessor is the memory module, which is an array of MC. The memory element of a MC is implemented on a parallel register, which is an array of D-triggers, providing the maximum performance and minimum logic necessary to ensure the storage of information. The main signals for

the register are the following ones: a 32-bit D signal, which receives data, CE signal and a 32-bit Q signal, from which the data is read stored in the register. The comparison scheme is implemented on the basis of a comparator. The main signals for it are the following ones: 32-bit signals A and B, to which the arguments are fed for comparison, the signals =, <and>, from which the results of comparison are read. A buffer element is included in a memory cell to disconnect the output data bus of

MC from the common output bus. The main signals of the buffer element are the following ones: 32-bit signal D, 32-bit signal Q and signal T. The functional diagram of the MC is shown on Fig. 4, a. The principle of MC operation is the following one. The ArgI input is supplied with the search argument. The data falls into the MC through the DataI input. From the DataO output, the data is read from a MC. The Write and CS inputs are used to

control MC operation. MC is selected by CS signal, i.e. the buffer element BUFT passes the signals from the output of the register RG to the output bus DataO. On a single Write signal, the data from the DataI input is written to the RG. Equal, More and Less outputs form the signals "Equal", "More" and "Less" respectively.

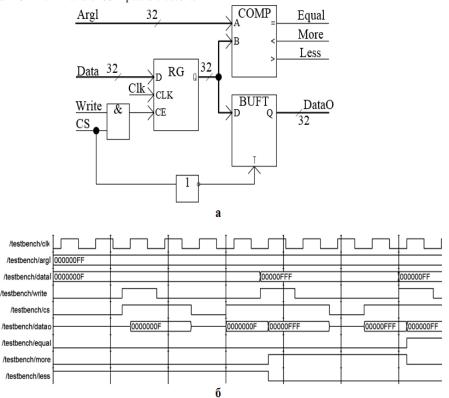


Fig 4. The functional diagram of the memory cell (a); time diagrams of memory cell operation (b)

The time diagrams of MC operation, confirming its efficiency, are shown in Fig. 4, b. Here the record of a number of values is shown: "F", "FFF" and "FF". The search argument is "F". It is seen from the obtained time diagrams, while the signal CS is equal to logical zero, the output bus (DataO) is in the third state, i.e. it is disabled. When a logical unit is fed to the CS input, the values stored in RG can be read from the output data bus (DataO). The record to the cell is performed by sending a logical unit to the Write input. Figure 4, b shows that as soon as a new value is recorded in a MC, the results of the search are set on the output Equal, More and Less.

AMS can be implemented on the basis of the shift register (Figure 5, a) and on the basis of the priority analyzer (Figure 5, b). The main elements of AMS based on the shift register are the looped shift register and the address counter. The result of all MC search is written to the looped shift register (reaction fixation memory). Then a sequence of clock pulses is fed to the register and to the counter. The contents of the register are shifted toward the upper bits until the first one has a logical "1". At this point, the clock signal is blocked automatically. If in the initial state only zeros were written in the counter, then at the end of the calculation, its contents directly indicate the address of the first matched word. This code is put in the address register, after which the word is read. Then the unit in the first digit of the register is reset and the clock pulses are resumed automat-

ically. Again, the contents of the register shift up until the next unit appears in its first digit. After that, the next matched word is read, etc., until the whole queue is serviced. It should be noted that with such a sampling organization, there is no need for an address coder.

The AMS based on the priority analyzer consists of D-triggers that perform the memory functions of reaction fixation and combinational logic. This circuit operates on the front of Clk signal. The search results in a MC are entered into the inputs M0 ... M31, by Fix signal they are fixed on the D triggers. The Work signal permits AMS operation. The priority analyzer is a logical circuit that allows you to select the line with the smallest number among your inputs set to "1". It is built according to the principle of bit consecutive connection. Each single input of this circuit blocks the action of lines with large numbers, thus, only the output corresponding to the first active line is set in the unit. A single signal corresponding to the first active line goes to the output automatically, and the function of the reset signal is the reset of the first of the "responding" triggers.

The memory for reaction and AMS fixation is implemented on the basis of a prioritized analyzer scheme, since this circuit has a faster response time than a scheme based on shift register. The resulting time diagrams of the scheme operation are shown on Figure 5, c.

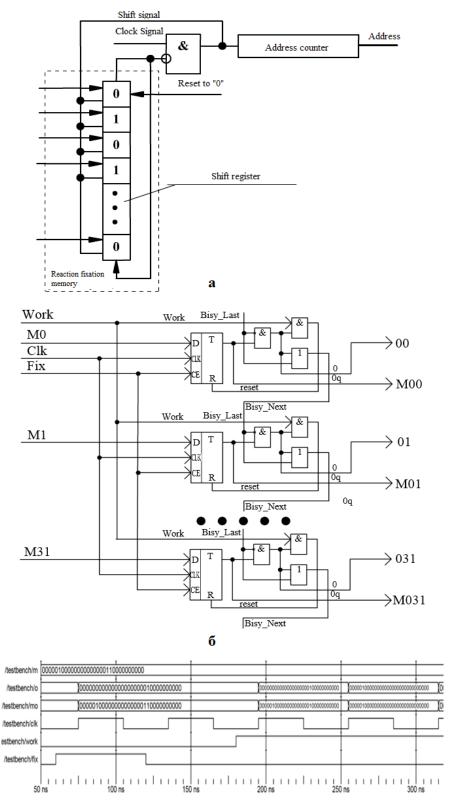


Fig 5. Multiple coincidence analyzer based on the shift register (a) and on the basis of the priority analyzer (b); time diagrams of memory operation for reaction fixation and the analyzer of multiple coincidence (c)

The unit of coincidence calculation can be implemented in several ways: on the basis of the shift register and the counter and on the basis of adder cascades.

The scheme of the coincidence counting unit based on the shift register and the counter (Figure 6, a) consists of a shift register into which the sequence of ones and zeros is loaded, corresponding to the responded and non-responded cells, the counter that counts the quantity, and the element "Logical AND," which controls the counting process. A clock signal is supplied to a circuit. The contents of the shift register are shifted one bit up and depending on the value, the counter value is increased or not

on the shift register output, i.e. all the digits of the register equal to one are calculated. The number of clock pulses required to count all the cells is equal to the number of all memory cells (in our case it makes 32 pulses). In addition, this scheme requires an additional step for a shift register loading.

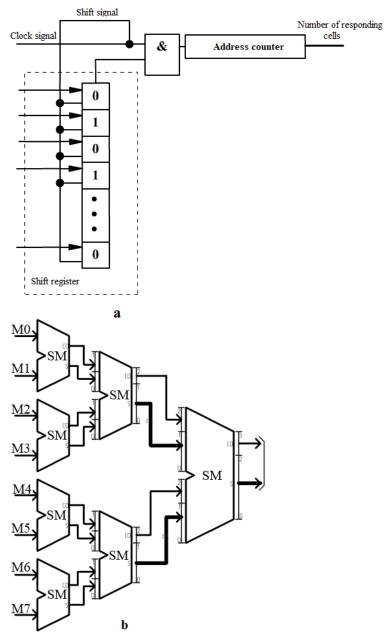


Fig 6. The unit of coincidence calculation on the basis of the shift register and the counter (a) and on the basis of adder cascades

The circuit based on the cascades of the adders (Figure 6, b) is the cascade of adders of different digits, i.e. the input binary sequence is divided into groups of two and these groups are fed to the inputs of single-bit adders. Intermediate results obtained on single-bit adders are also grouped in groups of two and are connected together with the transfer signal to the input of two bit totalizers and so on. In comparison with the previous scheme, this is a more rapid one and in principle it can count the number of cells per clock cycle, so the counting unit is implemented on the basis of adder cascades.

The correct functioning of the associative coprocessor module was verified during the execution of a number of computational experiments. Experience has shown that the use of a hardware coprocessor (when search and comparison operations were performed) can increase the computer system performance by an average of about 25% as compared to the systems that include

only traditional processors. In other words, the system with the associative coprocessor shows 1.25 times higher performance than the analogs. Hence, this development should be used in practice. An expansion board with an associative coprocessor module can be used to increase the performance of database servers (by information processing on the stage of reading from memory, and bus load reduction) such as Oracle and SQL Server located on x86 machines, as well as for the processing of graphics, while the use of an expansion board should be economically justified by the criterion of "cost-effectiveness".

The structure of the associative coprocessor module based on PLIC was developed in the article. This structure which differs from the analogs: the device under consideration is executed in the form of a functionally independent block in which algorithms are implemented to perform laborious operations of data search and comparison. In the traditional organization of such

devices, these operations were performed directly by the processor. It is also necessary to note one more advantage of this development, which is connected with the implementation of the module under consideration on the modern element base (PLIC).

The considered hardware module of the associative coprocessor is implemented on PLIC of "Xilinx" company. The VHDL codes of the device were developed consisting of four modules, including the main blocks of the device under consideration: an associative coprocessor, reaction fixation memory and a multiple coincidence analyzer, PCI interface description, the conjugation of an associative coprocessor and a PCI interface.

## 5 Conclusions

The structure of PLIC-based associative coprocessor module is described. Based on the above description of the device blocks, the VHDL code of the associative coprocessor was developed and debugged at the functional level.

The device mentioned in the work can be physically realized in the form of an CS expansion board, connected via the PCI interface. The associative coprocessor is implemented in hardware, which allows to perform laborious searches and comparisons, thereby unloading the CPU and increasing the overall performance of the CS.

The associative coprocessor described in the article performs the following functions:

- 1. address record in AMU;
- 2. address reading from AMU;
- the search for data equal, larger and smaller than search arguments;
- associative reading (the reading elements greater, less or equal to an argument);
- associative record (the record to a memory cell whose contents are larger, less or equal to an argument).

The performance of the device and individual units is verified by testing and debugging of the developed VHDL codes.

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# THE METHOD OF NON-CONTACT VIBRATION CONTROL OF ENERGY DEVICE DETAIL STATE BASED ON THE USE OF INFORMATIVE FREQUENCIES OF OWN VIBRATIONS RELATED TO CERTAIN TYPES OF DEFECTS

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Abstract: They performed the theoretical studies in the software complex ANSYS to determine the information frequencies of the natural oscillations of gas engine parts associated with certain types of defects. A new method of non-contact vibration control (MNCVC) was developed for the state of complex details based on the use of informative natural vibration frequencies associated with certain types of defects. The developed and created a new instrumentation-measuring and software complex to implement a new MNCVC of complex-shaped parts using laser vibrometry methods. Experimental studies of the natural oscillation parameters of the gas engine parts have been carried out and the working capacity of the new MNCVC state for the power plant parts was confirmed.

Keywords: Instrument-measuring complex, software, noncontact vibration control method, gas engine, laser vibrometer, TKR turbine body, ANSYS.

## 1 Introduction

Power plants (PP) of various purposes, type and operation principle should be effective and reliable in operation. Timely and accurate control of the technical condition of products is one of the ways to improve product reliability and reduce operating costs. Modern methods of power plant state monitoring allow to detect a defect at an early stage of its generation in time, to predict its development, and to determine the scope of maintenance or repair. Among many existing methods of state monitoring the vibrational method is the most objective, accurate and sensitive to defects, which allow to apply non-contact measurement methods and computer technologies.

Vibration characteristics contain sufficiently large information about the technical state of a power plant, its nodes, parts and mechanisms (Randall, 2011; Girdhar, 2004; González & Villalobos Antúnez, 2016). At the same time, the existing methods of vibration control require further development and improvement. The development and the improvement of noncontact vibration control methods to determine the state of parts, working units and the mechanisms of power plants is an urgent task.

Numerous works by domestic and foreign authors have been devoted to the problem of vibration control method improvement (Kazakov, 2012; Ivshin, 2009). In these works, the control of complex shape object state is performed by the analysis of the spectra in the frequency range from 0 to 20 kHz, their comparison with the reference spectrum developed in the same frequency range. However, theoretical and experimental studies showed that the defects affect the natural frequencies of the product oscillations in a certain frequency range (Nizamiev, 2017; Mamedov, 2017). The analysis of the spectra over the entire frequency range under study reduces the probability of a defect detection, which can be seen in the analysis of informative parameters characterizing the state of control objects.

As a defect develops, the degree of its influence on the product own oscillations changes, and only significant defects can affect the change of most modes of natural oscillations, and this can be determined by the signal spectrum designed over the entire range of studied frequencies.

In this regard, it is expedient to develop the method of product vibration control, based on the analysis of those frequencies of natural oscillations that are most sensitive to a product state change and a defect presence.

# 2 Theoretical Substantiation for The Development of A New Method of Non-Contact Vibration Control for The Condition Of Energy Unit Details

With the purpose of a new MNCVC development for power plant components, theoretical studies have been carried out to determine the informative frequency interval that allows to detect the defects in a turbine compressor (TC) turbine casings by analyzing the spectrum of natural vibrations.

The examination of the available methods related to the modeling of defects for complex shape parts has shown that it is expedient to use finite element method (FEM) based on computer modeling in ANSYS Workbench to determine the informative harmonics of spectra (Barulina, 2011).

In the ANSYS Workbench finite element simulation software, the frequencies of turbine shell natural vibrations were calculated, which made it possible to determine the informative frequency intervals of the research object associated with certain types of manufacturing defects (Repin, 2013; Nizamiev et al, 2010).

The objects of the study are turbine housing of TC of a prospective gas engine, 20 standard defect-free and 5 control ones: case No. 1 of the serial version (without a defect); cases No. 2, 3, 4, 5 with the most typical artificial defects (Table 1), which are not detected by visual inspection.

Table 1. Production Defects of TC cases

TC body No	Description of defects
2	"Shrinkage porosity" inside one of the inner rods
3	"Shrinkage porosity" inside both inner rods
4	"Growth" inside both inner rods
5	«Shrinkage shell»

Three-dimensional model and a finite-element grid of the object under study are shown on Figure 1.

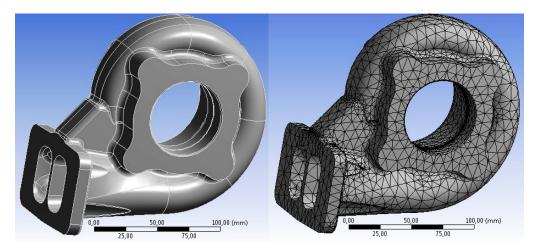


Fig 1. Three-dimensional model (on the left) and a finite-element grid (on the right) of TC turbine body

In order to conduct a modal analysis of the research object (defective and defect-free), it was decided to simulate the

production defect of TC turbine body # 4, that is, to apply "growths", as shown on Fig. 2.

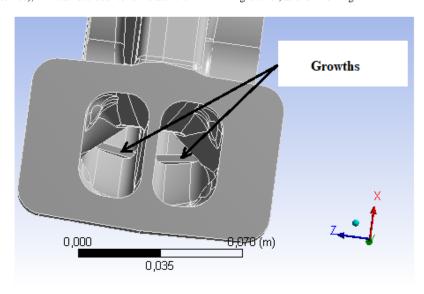


Fig 2. Defective body of TC turbine

Modal analysis was applied, the calculation was carried out using the Lanczos algorithm. The block diagram of the

calculation is shown on Figure 3 (Kotov, 2008; Nizamiev et al, 2014).

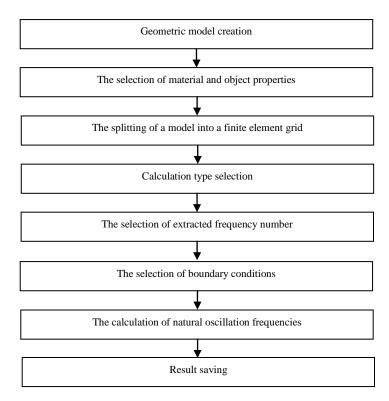


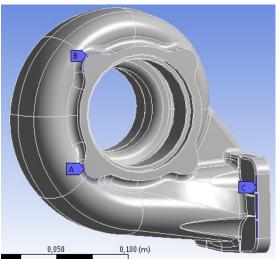
Fig 3. Calculation flowchart

The properties of the material used in the calculation are presented in Table 1.

Table 2. The properties of TC turbine body material

Design part	Material	Density, kg/m <sup>3</sup>	Young's modulus, GPa	Poisson's ratio
TC turbine housing	Gray cast iron	7200	110	0,28

At the stage of the boundary condition setting, the movement restrictions were applied to the design model in the places where the body is in contact with the vibration-proof surface shown on Fig. 4



 $Fig \ 4. \ Places \ for \ TC \ turbine \ body \ installation \ on \ a \ vibration-proof \ surface \ (marked \ on \ the \ model \ in \ blue \ (A, B, C))$ 

The main differences between the modes (the region of difference) in the frequencies of a defect-free and defective TC turbine body natural oscillations are shown in Table 2.

Table 3. The frequencies of TC turbine body natural oscillations

Mode	Frequencies of a	Frequencies of a	Difference		Frequencies of a	Frequencies of a	Difference
Mode	defectless TC	defective TC	in	Mode	defectless TC	defective TC	in
	turbine housing,	turbine No.4	frequencies,		turbine housing,	turbine No.4	frequencies,

	Hz	housing, Hz	Hz		Hz	housing, Hz	Hz
1	2	3	4	1	2	3	4
1	907,53	909,31	1,78	31	10079	10081	2
2	1507,5	1508,7	1,2	32	10169	10174	5
3	1939	1936,5	-2,5	33	10428	10431	3
4	2044,3	2046,2	1,9	34	10528	10529	1
5	2813,3	2817,2	3,9	35	10705	10711	6
6	3105,4	3105,8	0,4	36	11235	11238	3
7	4617,7	4615,7	-2	37	11298	11300	2
8	4788,4	4794,1	5,7	38	11585	11584	-1
9	4937,8	4939,3	1,5	39	11753	11758	5
10	5409,2	5408,7	-0,5	40	12186	12199	13
11	5501,6	5501,8	0,2	41	12298	12308	10
12	5612	5612,9	0,9	42	12399	12413	14
13	5757,2	5761,8	4,6	43	12604	12616	12
14	6305,6	6318,5	12,9	44	12703	12723	20
15	6443,2	6454,6	11,4	45	12870	12884	14
16	6510,3	6525,8	15,5	46	13055	13063	8
17	6922,2	6937,4	15,2	47	13150	13160	10
18	7007,5	7025,9	18,4	48	13437	13449	12
19	7193,6	7212,5	18,9	49	13503	13512	9
20	7294,7	7314,4	19,7	50	13685	13700	15
21	7478,4	7489,7	11,3	51	13848	13868	20
22	7791,8	7800,2	8,4	52	13994	14016	22
23	8269,8	8271	1,2	53	14185	14200	15
24	8463	8467	4	54	14445	14442	-3
25	8846,1	8846,3	0,2	55	14656	14661	5
26	9063,9	9061,8	-2,1	56	14790	14788	-2
27	9219,8	9218,4	-1,4	57	14856	14854	-2
28	9518,3	9519,1	0,8	58	14976	14981	5
29	9687,9	9685,3	-2,6	59	15158	15153	-5
30	9846,9	9850,6	3,7	60	15316	15313	-3

Figure 5 and 6 show the differences in the frequencies of a defect-free and a defective TC turbine casing, as well as the zones of the largest and smallest differences are singled out by modes in the frequencies of a defect-free and defective TC turbine housing. The abscissa shows the ordinal number of the mode, the ordinate represents the frequency difference in hertz,

the points denote the differences in the frequencies of natural oscillations by the modes of a defect-free and a defective TC turbine body (column 4 of Table 2). The dashed line corresponds to the frequency difference of 7 Hz. The frequencies above the dashed line are the most different ones.

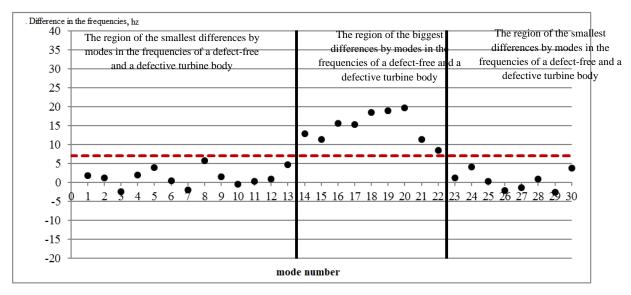


Fig 5. Difference in the frequencies of a defect-free and a defective TC turbine body from the mode 1 to 30

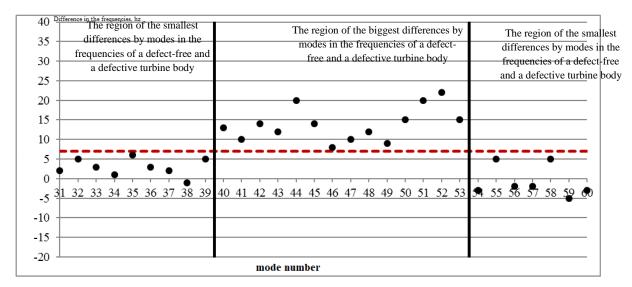


Fig 6. Difference in the frequencies of a defect-free and a defective TC turbine body from the mode 31 to 60

The analysis of the modal analysis results showed that the greatest differences by modes in the frequencies of a defect-free and a defective body of TC turbine are available at the intervals of 6-8 kHz (mode 14-22) and 12-14.2 kHz (mode 40-53 mode). Theoretical calculations were carried out for three defective bodies of TC turbines, shown in Table 1.

Based on the results of theoretical studies on the determination of natural oscillation information frequencies of gas engine parts associated with certain types of defects, the following conclusions can be drawn:

- According to the results of natural oscillation frequency calculation in the ANSYS Workbench software complex, the frequency ranges were determined to study the parameters of the natural oscillations for TC turbine body. The analysis of modal analysis results showed that the most informative frequency ranges characterizing the presence of production defects such as "growth", "shrinkage porosity", "shrinkage shell" in TC turbine housings are the frequency ranges of 6-8 kHz and 12-14 kHz.
- The frequency ranges of 0-6 kHz, 8-12 kHz, 14-15 kHz of a
  defect-free and a defective research object did not show any
  differences in the modes of natural oscillations and the
  record of these ranges in the general analysis of spectra may
  adversely affect the results of TC turbine body state
  monitoring.
- According to the results of numerical simulation, it can be concluded that in order to determine the presence of a defect effectively, it is advisable to analyze the spectra not on the

- entire frequency interval, but only in the informative frequency range, which makes it possible to detect the defects in complex shape details.
- 4. According to the results of theoretical studies, a new method of vibrational control for the state of complex shape products is proposed, based on the analysis of the informative frequency range of the amplitude spectrum associated with certain types of defects (Bruyaka et al, 2010).

In order to implement the proposed MNCVC of complex shape part state, they developed the instrument-measuring complex and software using the contactless methods of laser vibrometry, and the experimental studies of natural oscillation parameters of gas engine parts have been carried out.

# 3 Instrument-Measuring Complex To Implement A New Method Of Non-Contact Vibration Control For The Condition Of Energy Unit Details

A new instrument-measuring complex (IMC) was developed and created for the implementation of the new MNCVC for the state of power unit parts (Figure 7) (Nizamiev et al, 2015)

IMC includes the laser vibrometer 1, the matching device 2, the multifunction input/output module 3, the personal computer 4, and software 5 developed in a graphical programming environment LabVIEW 13.0 (Morris Alan & Langari, 2012), Pat. 160989. Rus. Federation: IPC G01M 15/02, G01M 15/05). A patent for IMC utility model was obtained (Zhuravlev, et al, 2006; Nizamiev et al, 2016).

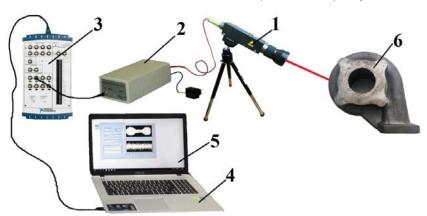


Fig 7. The diagram for the instrument-measuring complex: 1 - laser vibrometer; 2 - matching device; 3 - multifunctional input-output module; 4 - personal computer; 5 - software; 6 - the object of the study

A special feature of the developed complex is the use of non-contact laser vibrometers as the measuring sensors. Contact vibration sensors have a number of significant disadvantages (unsatisfactory repeatability of a signal when a sensor is installed on the same object in "remove-set" mode, the impossibility of measuring the vibration parameters of small-sized products, complex shapes, high-temperature objects, the need for a special surface preparation for sensor mounting, a reliable fixing of a sensor on a control object, etc.) and are not fully suitable to determine the state of gas engine parts. Laser measuring systems, characterized by a high accuracy, informative and noncontact nature, do not have these drawbacks and allow to measure the vibration parameters of complex shape parts of a gas engine (Nizamiev M.F. 2015).

Laser vibrometers allow to make oscillation measurements in the studied points of the working engine at the distance of up to 5 meters, and also to exclude the influence of numerous noises of operating engine mechanisms on the oscillations under study.

The laser vibrometer registers vibrations and converts them into an electrical signal proportional to the vibration speed of a research object that is connected to the multifunction input-output module, where it is digitized and transferred to a personal computer with installed software (Figure 8).

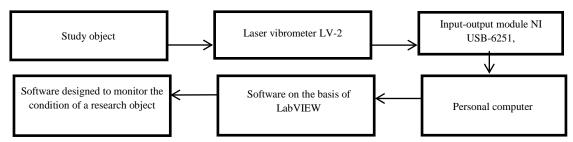


Fig 8. IMC structural scheme

The digitized signal received from the multifunction inputoutput module is converted into the amplitude spectrum using the Fast Fourier Transformation (FFT) procedure and analyzed by software.

IMC software (Nizamiev M.F. 2015; Hampel et al, 1989). consists of the following components combined into one user package:

- the programs for the generation of reference spectra;
- the programs for spectrum comparison with a standard;
- technical condition monitoring programs.

All these components are combined in one integrated shell, the logging of work is provided with the possibility of further viewing the results of record and signal processing modes. The conclusion about a product state is performed automatically without a user's participation, which excludes subjectivity in et al, 2014).

The program for the generation of reference spectra is designed to form the reference product spectrum of a serviceable product and a confidence interval for the comparison with a confidence level of 0.95. The reference spectrum is formed from the results

of testing a sufficiently large batch of serviceable products that are the sample from a general population, and includes the most common characteristics of the product's own oscillations. The

robust weighing method is used to form the reference spectrum (Hastings & Peacock, 1980). The development of the reference spectrum is the process of frequency transition from the set of amplitudes of the original spectra at a given frequency  $(a_1,\,a_2,\,a_3,\,...,\,a_m)$  to a single (generalized, reference) value  $a_s.$  It is assumed that a standard will contain only general data typical for the whole set of spectra and should not contain any (random) features of a particular spectrum. In the software, they implemented the possibility of the spectrum "normalization". This function divides each harmonic of the spectrum into the largest amplitude, thus the influence of the mechanical impact force on the results of the experimental data is excluded.

The program for the comparison of spectra with a standard (Fig. 9) is designed to assess the differences of each initial spectrum of the recorded signals from the reference spectrum.

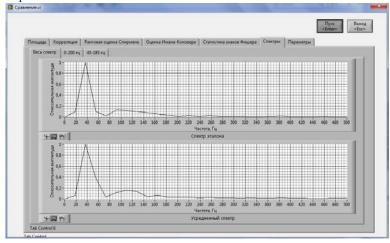


Fig 9. The appearance of the program front panel to compare the spectra with a standard.

The program works in the following sequence:

- a reference file and sensor signals are read;
- a spectrum is formed for each signal;

- the values of target functions are calculated for each spectrum using target comparison functions;
- it is determined whether the values of the objective functions are within the limits of the confidence interval.
- They use the following as the target functions for vibration signal spectrum comparison in the developed programs:
- correlation coefficient;
- Spearman's non-parametric rank estimate;
- Iman-Konover estimate (Orlov, 2004).

The technical state control program is designed to evaluate the differences between the current signal spectrum and the reference spectrum in the automatic mode.

When the program is started, the vibrational responses of the beats are recorded from the measuring channels (a product number and code are put into a file name, the file format is .txt). After the end of a record, the program generates the spectrum for each signal by the FFT algorithm automatically, calculates the target comparison functions of the reference and the current spectra, and compares them with the confidence interval boundary.

In the software, in order to implement the proposed method for complex shape product state control, the possibility of reference and controlled object spectrum comparison is implemented by the means of objective functions, not only over the entire frequency range of the spectrum, but also in its informative areas characterizing the presence of a defect in a monitoring object.

In order to determine the products as "suitable" or "defective" (Figure 10), the approach is used that is typical for the procedures of anomaly rejection: the program interprets the set of computed values of some statistics  $(p_1, p_2, ..., p_m)$  as a set of measured values of an abstract parameter and applies the following procedure to this set of values (The certificate of the computer program state registration N 2014613692.):

- 1) to calculate the median value estimate  $\overline{p}$ ;
- 2) to calculate the spread estimate S as the mean absolute deviation:
- 3) to develop a confidence interval for a given level of significance  $\alpha\colon$

$$\overline{p} \pm S \cdot t(1 - \frac{\alpha}{2}, m - 2),$$

where  $t(\alpha, m) - \alpha$  -quantile of the Student's distribution with m degrees of freedom.

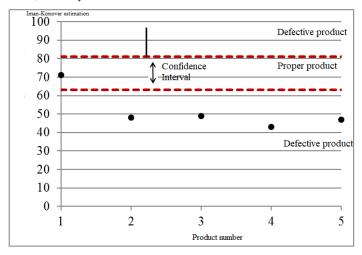


Fig 10. The principle of decisive "proper - defective" rule development by the example of Iman-Konover estimate

If the comparison coefficients are within the limits of the confidence interval, then the object of the study is considered as "proper", if they exceed the limits of the confidence interval, then the product is recognized as "defective".

Thus, using the developed software, the spectra of gas engine parts are analyzed, not only over the entire frequency range of the spectrum, but also on its informative areas characterizing the presence of a defect in a control object.

The software registration certificate for PC was received (24).

### 4 Experimental Studies Of Own Vibration Parameters For Gas Engine Parts With The Use Of A New Method Of Non-Contact Vibration Control

In order to approbate the proposed state of MNCVC for power plant components based on the analysis of amplitude spectrum informative frequencies and the development of the technique to monitor the state of power plant parts, the series of experimental studies were carried out with TC turbine shells of a gas turbine engine using IMC.

Prior to the experimental studies, they performed the preparation, the adjustment and the tuning of the equipment used in the measuring system in accordance with the requirements set forth in the technical documentation, the operating instructions for specific instruments and GOST. The laser vibrometer was installed at the distance of 1 - 2 m from the study object, the laser beam was directed to the point of TC turbine body, as was shown on Fig. 11, without a preliminary preparation of an object surface

The location of free oscillation excitation and the point of the laser vibrometer beam aiming is chosen on the basis of the initial experimental studies and the possibilities of the studied object placement on a vibration-proof surface. The proposed method of excitation and guidance makes it possible to determine a defect of TC turbine body. The peculiarities of experimental study performance were taken into account during the modal analysis of the finite element ANSYS modeling during the determination of the spectrum informative frequencies, which make it possible to detect a defect in the control object.



Fig 11. The body of TC turbine with the laser sensor beam guidance point and the place of free oscillation excitation

In order to record a signal, the following parameters were set:

- time interval for signal recording 20 seconds (5 beats);
- sample rate 60,000 countings;
- the parameters of the detected signal pulses (sensitivity 10, pulse start minus counts - 10, multiplication of height - 0.4, height addition - 0).

The body of TC turbine experienced 5 mechanical impacts with a shock hammer from the height of 5 cm without an effort, under the action of gravity. The vibration parameters were recorded by a laser vibrometer.

The first series of experiments was conducted in order to develop a reference spectrum. One measurement was performed for each defect-free body, in which 5 mechanical shocks were performed. The reference spectrum is designed around 21 defect-free body parts of power plants for TC turbines of a gas engine, that is, according to 100 mechanical shocks (signals) (Figure 12)

In order to develop the reference spectrum and the confidence interval, the following parameters were set:

- zero reference number;
- signal sampling length for spectrum acquisition 16,384 counts;
- frequency intervals, in which the processing of spectra will be performed, were selected on the basis of theoretical studies in ANSYS Workbench, and made 6-8 kHz and 12-14.2 kHz;
- Confidence level 0,95;
- Normalization of the spectrum into the "on" mode.

The second series of experiments was conducted to obtain the spectra of control (defect and defect-free) shells and compare them with the reference spectrum. TC control bodies were used as the object of the study, the defects of which are described in Table 1. The spectrum of a defective control product (TC body No. 4) is shown on Figure 13.

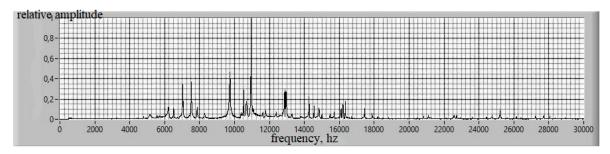


Fig 12. The reference spectrum of TC turbine bodies

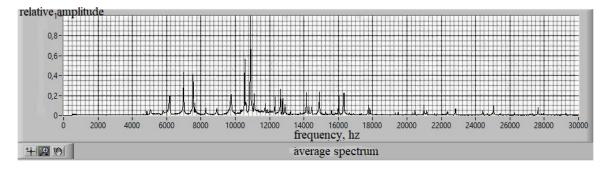


Fig 13. The spectrum of TC  $N_24$  defective body

The spectra were compared over the entire frequency range from 0 to 30 kHz and in the frequency range from 6 to 8 kHz and from 12 to 14 kHz.

The results of the reference and control spectrum comparison of TC No. 4 body are shown on Figure 14.

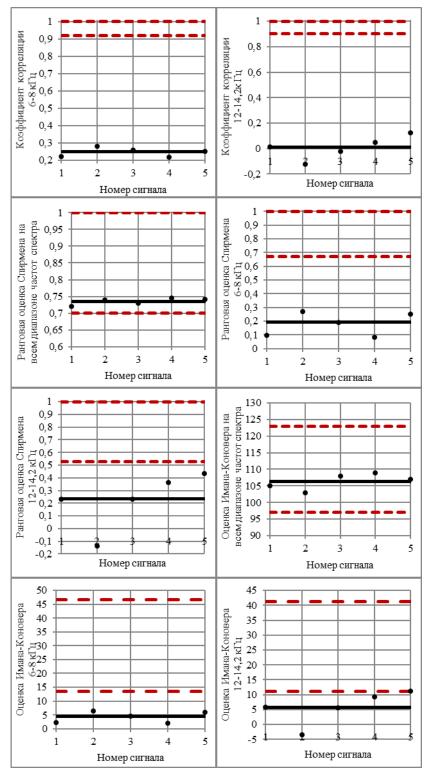


Fig 14. The results of reference and control spectrum comparison for TC № 3

The numbers of mechanical shocks (signal number) are presented on Figures 14 within the abscissa axis, the values of the target comparison functions are plotted along the ordinate axis, the dashed lines are the confidence interval boundaries, the solid line is the median value for all measurements of the control (defective) case.

The values of the objective functions during the comparison of the spectra over the entire frequency range (0-30 kHz) are either near the boundaries or within the confidence interval, which indicates that a defect ("growth") of TC turbine body is not detected.

The values of function objective comparison in the frequency range of 6-8 kHz and 12-14 kHz go beyond the confidence

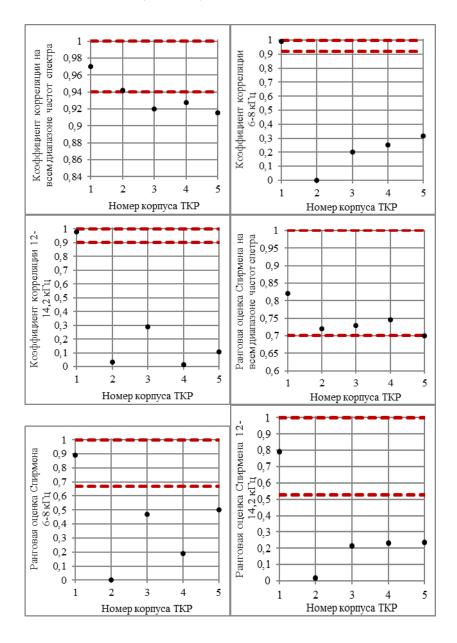
interval of defect-free (reference) cases. Thus, the spectra on these ranges have significant differences, that is TC turbine body is recognized as a defective (a defect is detected).

By the technique described above, 5 control objects (4 faulty ones (Table 1) and 1 defect-free TC body) were studied. The results of the reference spectrum comparison and the spectra for 5 control objects are shown on Fig. 15. The dots denote the median values (of five signals) of the objective comparison functions for a corresponding TC body.

The median values during spectrum comparison over the entire frequency range (0-30 kHz) of TC № 1 defect-free body lie within the confines of the confidence interval (dashed lines),

respectively, the body is recognized as a defect-free, the median values of the body No. 2, No. 3, No. 4, No. 5 (table 1 - defects) are either near the boundaries or within the confidence interval, which indicates that the manufacturing defects of the bodies are not detected.

Median values during spectrum comparison at the frequency intervals of 6-8 kHz and 12-14 kHz of TC No. 1 body (defect-free) lie within the confines of the confidence interval (dashed lines), respectively, the body is recognized as a defect-free one. The defective bodies No. 2, No. 3, No. 4 and No. 5 were uniquely identified using the developed IMC with the confidence level of 0.95 on the frequency bands of 6-8 kHz and 12-14 kHz.



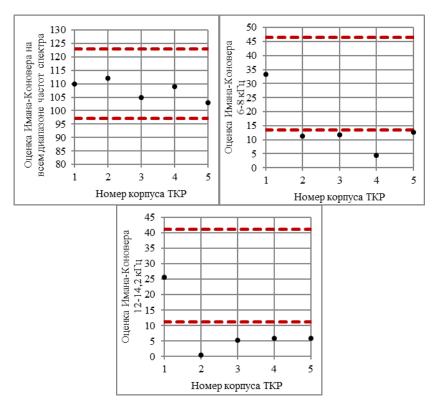


Fig 15. The comparison results of reference spectrum and the spectra of five TC control bodies

The defects described in Table 1 are detected on a narrow frequency band of 6-8 kHz and 12-14 kHz, which is determined by the output of the objective function values beyond the limits of the confidence interval with the confidence level of 0.95.

The analysis of the experimental data showed a stable defect detection in TC turbine body using a laser vibrometer according to 3 objective comparison functions at the frequency range of 6-8 kHz and 12-14 kHz and confirmed the possibility of this method use and the IMC to control the state of power plant parts in an automatic mode.

Based on the results of experimental studies, they tested the method for complex shape detail state control, based on the analysis of the informative frequency interval of the amplitude spectrum. The results of experimental studies confirm the theoretical studies on the effect of defects on the natural vibration frequencies of TC turbine engine bodies of a gas engine in the ANSYS Workbench software package. The most informative frequency intervals characterizing the presence of defects in TC turbine housings make 6 - 8 kHz and 12 - 14 kHz.

# 5 Conclusions

- Theoretical studies were carried out to determine the informative frequencies of gas engine part natural oscillations associated with certain types of defects. The informative frequency intervals were determined after finite element modeling in the ANSYS Workbench software package, which allow to detect the defects in the turbine body of a gas turbine engine by analyzing the natural frequency spectrum.
- A new method of non-contact vibration control of complex shape part state was developed, based on the analysis of the amplitude spectrum informative frequencies of natural oscillations associated with certain types of defects. The method is tested as the result of experimental studies using IMC.
- A new IMC was developed and created for the implementation of a new method of non-contact vibration control of complex detail state using laser vibrometry methods. The developed complex allows to control

- contactless the state of gas engine parts, both during production and during operation.
- The software was developed that allows to implement a new method of non-contact vibration control of power unit part state using non-contact laser vibrometry methods.
- 5. The experimental studies of natural oscillation parameters for gas engine parts have been carried out. The analysis of the experimental data showed a stable determination of the defect in a control object and confirmed the possibility of IMC use and the method of noncontact vibration control of defects in engine parts within automatic mode

# 6 Summary

After the theoretical and experimental research given in the work, the actual scientific and technical problem is solved in the field of nondestructive testing, which consists in a new method development for contactless vibration control of the state for complex shape parts, as well as in the development, the creation and the testing of an instrumental-measuring complex that implements a new method.

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# ABUSIVE LEXICON STYLISTICS IN DIALECT CARRIER CHARACTER

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Abstract: Dialectic lexicographic material during the analysis is classified with the following stylistic marks, characteristic of obscene vocabulary: swearing, abusive, unflattering. The article analyzes the character of abuse in the dialectal language and in the colloquial form of the modern Russian language, the assessment of its functioning change in retrospect is performed, which allows to see the role of abusive words in the organization of speech. Many linguists at the turn of the 20th and 21st centuries turned to the topic of the linguistic consciousness of the dialectician, using obscene vocabulary. Recognizing abuse as a peculiar means of an object description, explaining its emergence by a communicative situation, the authors come to the conclusion that the evaluation vocabulary reflects the picture of the subject's world, determines his values, the language identity. Research materials can be used in the educational process at a higher educational institution.

Key words: anthropocentrism, linguistic consciousness, dialectology, obscene vocabulary, nicknames, dialect carrier, communication study.

#### 1 Introduction

Language as a product and an instrument of a man serves as a tool to mark the surrounding world, all its components, and a person himself. A man from a linguistic point of view is a nomination whose meaning can be formed from psychophysical characteristics. A man is the bearer of the onom, but the name has an independent lexical meaning, has a historical basis and motivation. The anthropic nature of nominations and their emotionally expressive coloring of is manifested most clearly in the dialectal language, especially in nicknames.

The study assumes an analytical understanding of anthropocentrism in the linguistic context, revealing the forms of its manifestation in communicative practice. It seems important to study the frequency of abusive language use. One of the important tasks of the work is the systematic analysis of the lexicographic material with its further stratification based on the semantic feature.

# 2 Theoretical basis

In the anthropocentric approach to the dialect carrier speech, the person himself and those spheres that shape his life are exposed to nomination. M.E. Ruth explains this phenomenon as a specific way of dialect carrier life, those traditions and foundations that were formed throughout the history of human development in his mind at home. The scholar notes that "at that it is very noteworthy that the orientation takes place not on the house as a structure, but on the home as a way of life, the totality of the realities that accompany the person collected under the house roof" (Ruth, 2008).

The linguists of the XX-XXI centuries turned to the study of the individualized speech of dialect-carriers in scientific works. They sought to analyze comprehensively the language personality, to reconstruct the speech portrait of the epoch, and the micro-model the recepient's consciousness (Gross, 2000; Ivantsova, 2010; Myers-Scotton, 2000; Sorace, 2004).

V. S. Leea, A. B. Tumanovaa, Z. H. Salkhanovaa, отмечают «the anthropocentric approach in focused on the person as a subject of speech activity that implements his communicative intentions in certain speech acts oriented to the world of semantics and mental human activities» (Leea Valentine et al, 2016; Villalobos Antúnez, 2015).

The frequency of abuse manifestation can not be ignored from the linguistic aspect. A characteristic feature of the dialectal language is anthropocentrism. The attempt is made in this work to summarize the answer to the difference in the nature of abuse colloquial form within dialect and modern Russian.

#### 3 Methodology

During the work with dialect lexicographic material, often encountered swearing, abusive, unflattering marks, prompted us to analyze the nature of abuse in dialectal language and in the colloquial form of the modern Russian language. In addition to the observation of obscene vocabulary operation in different forms of national language, it is important to record and evaluate the changes occurring in the speech of dialect carriers. The most productive methods are the following ones: the method of stylistic analysis, which allows to evaluate the choice of lexemes from the stylistic point of view; the method of comparison, consisting in word form comparison used by the dialect carriers from different places of residence; the method of continuous sampling, which was used during the operation with the linguistic material of the explanatory regional dictionary by Vasnetsov, who reflected Vyatka dialects.

Anthropocentrism is the expression of the situation where a person in a nominative process is in terms of communication not at peripheral positions, but at the center of linguistic processes. Of course, it is not entirely true to talk about the applicability of this thought to the modern dialect carrier, as they change the language, the conceptual component of it, and, as a consequence, the language picture of the world, which can be traced back to the method of retrospective analysis.

# 4 Results and discussion

In the modern world a dialect-carrier becomes closer the urban type of a native speaker, and the main thing for him is material, a work, perhaps. The attitude of the subject to work becomes the source of antonymic pair development, the semantic core of which is in the following terms: laziness - diligence, licentiousness - morality, accuracy - negligence, sanity stupidity and a number of other qualities that characterize a person more from a negative aspect than from a positive one. This may be due to the fact that a person as the result of the behavior that is disapproved by society becomes not so much in the center of attention as the center for discussion and censure. Why it happened so and, in general, and the situation is currently being developed, one can understand if we turn to the psychological structure of society. Positive psychology, which studies the causes of all sorts of psychological disorders of a person, suggests that a person is naturally negative, a negative and a positive attitude toward the world is evolutionary, which is difficult to prevent. Along with the conditionality by psychology, a negative significance of the nomination can also be explained by the semantics of a nickname as a lexeme, its bright expressive-evaluative function; by the means of a nickname, they express the attitude to the nomination an object, and, as a rule, the most negative becomes the focus of attention (Ruth, 2008; Shekarbaghani, 2017). It is peculiar to provide communicative resonance for a negative.

In the lexicographical material, the indication of a nickname is given extremely rarely, basically a nickname-like nomination is marked as a naming. And relying on the definition of the substantive, we can talk that it can function as a nickname in a communication environment but not with an absolute accuracy.

Given the prevalence of negative motivation, it is not surprising that abusive will be a frequent mark. If we talk about the part of speech affiliation of the marks, then the noun prevails, adjective is little less quantitatively, which is logically aligned with the process of naming as the functional task of nomination as a name. However, in most cases, the verb with the intrinsic value of the action will serve as the base for them, which is also understandable, since the above-mentioned component, the component of everyday life - work, labor - presupposes the semantics of action.

Having studied "Materials for an explanatory regional dictionary of Vyatka dialect" by N.M. Vasnetsov, which is the first

dictionary reflecting Vyatka dialects, 71 words were found, marked as swearing, calling, unflattering, abusive (Vasnetsov, 1908).

The boundary between these marks is unsteady, they become synonymous with each other under certain conditions and contexts. For example, calling and swearing marks become synonyms: bangs - the calling of a "stupid" person (as swearing); выпороток - the calling of children, swearing; здохлой, adj. - 1) the calling of a weak, a sick person; 2) an abusive word to address someone who does not meet expectations, so to speak. Thus, swearing and abusive language come close to calling when they are aimed at that quality isolation in the subject that contradicts the value usual norms.

The following examples already have only the swearing mark: bad stomach - 1) a child who has not worn pants yet; 2) swearing; tattooed - big-eyed, more like cursing; botalo - a person who eats soup, does not about others, and tries to eat more himself. This word is abusive; mop - swearing: rubbish, wasteful person!

Swearing can come close to calling, being used irrespective of person: pens - 1) scrupulousness, ambition, pride, wilfulness; 2) swearing; scolding, a malevolent wish.

An interesting example of swearing and caressing combination, which is transmitted by the diminutive-affectionate suffix - incubus (in the dictionary -ёнок) in the word лешачонок - a dirty word. (Лешачонок, where have you gone?).

The following words are revealed with a single mark "curse": bashka- 1) a smart man, an intelligent head; 2) as curse; bezpelyukha - a man rather poor, carefree and, perhaps, dull. Often it is used as swearing; beznoloch (the voiceless effect is not reflected in the dictionary) - absolutely безтолковый. It is often used as swearing; bitch - noun, f. - 1) carrion, fall, the corpse of an animal, when it began to decompose; 2) sometimes the following meaning is taken: very skinny; 3) abuse, calling of only the subject, or even the abuse without an address; шайтан - swearing. An evil creature according to Cheremis mythology.

On the basis of these examples, we can conclude that swearing and calling can also come together, they can be synonymous with an address. If there is no address, a subject will not be called, because it is focused on a subject, abuse can be general and function independently, approaching abuse, but with a larger negative connotation of meaning: стерво! - abuse; халера - abuse.

The most numerous group of words with "swearing" mark: корзовка - an indefinite, abusive expression; this word is used to name those who behave like grouchy old women; kosh - an abusive word, means a merciless man, without pity or compassion; locus - a bad person, weak in skills and acts; mahry - an indefinite expression; corresponds to some extent to the word "slop"; обмолызга - unflattering epithet, an abusive word. It refers to a person mocking others; падина - the calling of a skinny, weak, powerless animal, and sometimes a person. In the latter case (with respect to a man) the expression takes on a tinge of swearing; pokas - abusive word; straggle - dirty, untidy to disgust; Sometimes it is used as an abusive word, corresponding to the expression "submarine"; Tpeyx - 1) a clumsy hat, 2) a hit given to someone, 3) a swear word, referring to an awkward, unwieldy person; freebie - abusive: untidy, slovenly; jaw) - used as a swear word in the sence of greedy, glutton; chuh - 1) shabby (the dictionary does not reflect voiceless phenomenon), sometimes used to play in chukhi (gorodki), 2) sometimes used as an easily abusive word; and etc.

In these examples the mark "abusive" comes nearer to the mark "calling", but there are not always such nuances of meaning as censure, reproach, condemnation for naming, inherent for an abusive expression. Calling often delineates a certain quality, which will be a subjectively chosen naming element at a particular moment. Calling is not a permanent character, rather, it is sporadic and depends on external conditions, whereas the

appearance of abuse provokes specific external conditions. Abusive expressions are of a general nature, they are known to dialect speakers in the meaning assigned to them, calling is often of an individual character. For example, vorgan is a swear word, and sometimes it's just the call of another: the meaning is uncertain; fizzy (the phonetic version of the word " shibzdik ") - the calling of a small person - a word is unflattering, although not an abusive. But there are not always marks with words. The absence of other lexeme marking does not exclude the fact that they can not be used as abusive during a person description. The reasons for the semantic repulsion are conditioned not only by a communicative situation, but also by the language picture of the world of a dialect carrier.

Having analyzed obscene vocabulary, we can assume that the abuse is less vulgar than in modern Russian, its colloquial form. For example, if you refer to the meaning of the word "abuse" from "The dictionary of Russian language" by S.I. Ozhegov (Ozhegov, 2004) then the definition contains the reference to the synonymous word swearing. Swearing is a word that they abuse, abuse. In the description we do not see a bright negative shade, which would be contained in the word. The "Dictionary of the Russian Language" edited by A.P. Evgenieva already has the indication of word description, called swearing. "Swearing is insulting, rude words, which abuse. As a shade of meaning: gross condemnation, blame, reproaches. Wrangling - offensive, abusive words; abuse / condemnation, censure, reproaches" (Dictionary of Russian language). An interesting fact is the etymological reference of the word swearing. Homonyms "fighting - battle" and "abuse - abuse" have one source of origin. Брань in meaning battle is the producing basis of the second one according to the etymological study by Shansky (Shansky, 1971). battle is borrowed from the Old Slavonic language. The Old Slavonic abuse dates back to the common Slavonic borns, formed by the suffix nь from \*borty (cf.: to fight, defense, fence). Wrangle in the meaning of abuse is actually Russian word, which appeared on the basis of the first lexical-semantic way of word-formation, that is, through the semantic wordformation. Thus, it is possible to single out the common motivator - a struggle. Thus, it is understandable how this value motivates the internal form of the word abuse as swearing.

In linguistics, numerous functions are fixed for the language. Considering this concept from the point of view of communication studies, it can be found that the language also performs the function of an amulet, implementing it through a careful selection of word forms, the fixation of proper names. It is established that obscene vocabulary, originally used as the means of protection, stating the motivation of abusive words. In the future, the protective function is transformed and becomes destructive. Since the development of a common language is accompanied by the formation of functional-style varieties, such vocabulary refers to the lower style and later turns out to be outside the literary language. This lexical layer goes into the category of vernacular, often coarse one. Jargon, dialectisms, professionalisms, argotisms are opposed to literary language. Given that the dialect language is an independent language system, the lexical stratification with a functional-style variety will also have independence, which means that swearing will not go beyond any limits because of the lack of stylistic delimitation inherent in literary language. The only thing that can be noted in the nature of abusive vocabulary is the attitude to everyday and conversational sphere and the bright expressive and emotional coloring. But there no reasons that the abusive vocabulary turns out to be beyond the bounds of language, since the dialect language is not selective with respect to its filling lexemes, they carry the same semantic and functional load, make an integral component of the linguistic consciousness of a dialect carrier. In this case, we can not say that cursing is the function of vagueness, because if it were so, there should have been the norm opposed by common language, and the concept of norm does not apply to dialectal language.

#### 5 Conclusions

Obscene vocabulary often acts as the means of an object characteristic nomination, which is contained in the semantic basis of antonymic pairs. In this case, insulting nicknames and calls are presented to a dialect carrier by a motivated situation, attitude, behavior, external data, a person's character, an insult can be heard even if a person to whom the negative is directed does not possess any of the characteristics invested in lexical unit. Such vocabulary is often classified as obscene language, obscenity rather than abuse. In the XX century obscene vocabulary attracted the attention of philologists, but the study of this lexical layer was not complete and profound due to the current censorship. Recognizing the need for distancing from normative and non-normative vocabulary in speech and language, these strata should be viewed from the research point of view, revealing the nuance of stylistic marks, studying language structures and components. Along with, for example, Balakhonova who considers the dilemma between vernacular and dialectal vocabulary, as well as colloquial and common vocabulary, which has disparate functional-stylistic marks, the correlation in the explanatory dictionaries of Russian language, we can by analogy speak of the fragility of functional-stylistic and expressive marks in abusive vocabulary. Subjective marks are close to the actual linguistic ones. The main function of nicknames, which they perform in the anthroponomical system, is their substitute function, which consists in the fact that a nickname can adopt the functions of a name, a surname, and also a compound naming (Balakhonova, 2018).

#### 6 Summary

Thus, the cursing in dialect speech has a pronounced motivation, unlike its position in modern Russian language, where it tends to common language or turns into a stage of obscenity and is rarely subjected to analysis. However, until now clear, transparent relationship are not developed between the concepts of abuse, cursing, vernacular and obscene vocabulary. Rogers Brubaker stresses that: "Cognitive approaches make it possible to comprehend ethnicity, race and nation in a non-group way, as a view of the world, rather than the essence of the world, and at the same time help to explain the practical vitality of thinking in the categories of groups" (Rogers, 2004). Obscene vocabulary, like any evaluative vocabulary, reflects the picture of the subject's world, determines its values and the linguistic identity. At the same time a dialect-carrier is not always objective in the interpretation of lexemes, and often uses them to express an emotional state and a personal relationship.

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# CONSUMER POSSIBILITIES OF RUSSIA REGIONS THROUGH THE PRISM OF ENTREPRENEURIAL ASSESSMENTS (ON THE MATERIALS OF THE REPUBLIC OF TATARSTAN AND MARIY EL)

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Abstract: The article presents for the first time the results of the author's expert survey in terms of the level of consumer opportunities for the bulk of the population of the Republic of Tatarstan and the Republic of Mariy El. Based on the analysis of the data obtained, the authors estimate the level of consumer opportunities of citizens as generally average, in Tatarstan slightly higher than in Mariy El. Proceeding from the conclusions drawn, recommendations are offered on accelerating the growth of incomes of the population and the speedy institutionalization of a fully-fledged consumer society in Russia.

Keywords: consumption, consumer opportunities, consumer practices, consumer society.

#### 1 Introduction

With the emergence of the consumer society in Russia, there is an urgent need to study consumer practices and purchasing opportunities for the bulk of the population, but not for the elite, which, as history shows, rarely allowed itself to limit its purchasing appetites. The consumer society is often defined as a society in which mass consumer practices are developed, where the majority of the population actively, broadly and regularly participates on the basis of the principle of individual consumption in consumer activities.

We will not describe in detail the society with the metaphorical name "consumer society", the essential characteristics and external manifestations of which are described in a variety of works, both foreign and domestic authors. And the spectrum of judgments about this society is very extensive: from outright rejection with labeling, like "simulacra" and "consumerism" (Baudrillard, 2006; Shalaev, 2016) to sufficiently weighted estimates, when along with the negative sides of mass consumer behavior, positive features are also distinguished, primarily due to the availability of objective possibilities to legally satisfy diverse natural human needs (Ritzer, 2011; Ilyin, 2007; Tahavieva & Nigmatullina, 2017)

Determining our place in the ranks of researchers of the purchasing power of the population of the regions of Russia, we note that we are more impressed by a cautious, restrained approach. With this approach, the aforementioned possibilities are considered through the "academic glasses" of rigorous and impartial scientific analysis, when the theoretical model, constructed on the basis of studying mainly the experience of Western countries, correlates with Russian everyday life (Ilyin, 2014; Ilyin, 2008a).

From our point of view, one should not rush to assess the modern Russian society as a "consumer society" in the full sense of the word, excluding, perhaps, individual islets, primarily inhabitants of megacities, as well as representatives of elite and

sub-elite social strata and groups. One way or another, the hypothesis formulated before the research and writing the article on the basis of analysis and generalization of its results was reduced to the fact that the consumer society in the surveyed republics makes only the first steps, at least in aspects that relate to the level of consumer capacity of the bulk of the population.

The basis and prerequisite for such an assumption were reasonable and logical considerations available in the scientific literature that the consumer society emerges under the conditions of mature capitalism, being one of the forms of further capitalist development (Ilyin, 2008a).

# 2 Methodology

In order to identify the prevailing type of entrepreneurial motivations and the level of consumer opportunities of the population of the Russian regions in June-July 2016 in the Republic of Tatarstan (RT) and in the Republic of Mariy El (RME), a pilot study was carried out (Martynova et al, 2017), as a preliminary stage of preparing a mass survey on the stated problem. Experts of entrepreneurship were interviewed, as were practicing businessmen and entrepreneurs (n = 210), 105 experts from each republic. The type of sampling is "snowball".

Let us explain why only entrepreneurs and experts engaged in the study of business processes were involved as respondents in the survey. From our point of view, entrepreneurs-practitioners have extensive experience in acquiring, since they directly engage in the production, promotion, sale of goods and services, most closely associated with acquisitions. Entrepreneurship theorists, when examining real business, tend not to overlook its purchasing side, since "buying" is immanently inherent in entrepreneurship as a specific type of economic activity.

The Republic of Tatarstan and the Republic of Mariy El are bordered one by other; there are close economic ties between them, which is important for exploring the consumer opportunities of the broad masses of the population of these republics. A comparison of the consumer potential of the inhabitants of Tatarstan and Mariy El acquires additional interest, connected with the fact that in both republics the urban population predominates, although the industrial potential of Tatarstan is incomparably higher than that of Mariy El.

Finally, the authors dwelled on the type of sampling "snowball", guided by the fact that the exact number of entrepreneurs and experts in the study of business is difficult to establish, since many citizens are engaged in business from time to time or in part-time mode.

It is appropriate to recall the classification of people involved in politics, by M. Weber, which, in addition to the two types mentioned, includes politicians by profession and by vocation, extrapolating it to the field of entrepreneurship (Weber, 1990; Villalobos Antunez, 2003).

# 3 Results and discussion

We will review the results of the research carried out in the part of entrepreneurs' assessments of the consumer potential of the residents of the two mentioned republics.

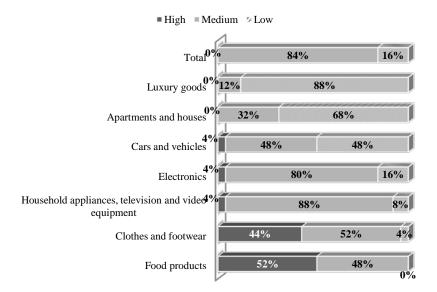


Fig 1. Estimation of consumer opportunities of the bulk of the population of Tajikistan in the acquisition of goods and services

Figure 1 shows that the absolute majority of experts estimate the overall level as average (84%). Only 16% - as low. Somewhat surprisingly, there were no high marks at all. At the same time, it is not difficult to find an explanation for this if we compare business valuations with the daily buying practices of authors who often visit stores, seeing what the bulk of buyers are acquiring. The observation of buyers does not give grounds for assessing the level of consumer opportunities of most of them as high. Quite the contrary, a significant part of visitors to shopping centers are limited to very modest purchases.

In the context of the main types of goods, entrepreneurial assessments of consumer opportunities of RT residents differ considerably from each other.

So, in the nomination "Food products" high scores (52%) with a slight advantage prevail over the average (48%). Low estimates are absent at all (0%). In the nomination "Clothes and shoes", on the contrary, a slight preponderance on the side of average ratings (52% vs. 44%). Along with the high and medium here are low scores. True, there are not so many, only 4%.

The following two nominations are characterized by overwhelming prevalence of average consumer appraisal of Tajik citizens: "Household appliances, television and video equipment" (88%) and "Electronics" (80%). High ratings in these categories are few, 4% each. Low ratings are slightly higher: 8% and 16%, respectively. We do not think that such indicators meet the standards and requirements of the techno-era with its high technologies, electronics, robotics, Internet resources.

The situation with entrepreneurial assessments of consumer opportunities of RT residents in the nomination "Cars and

vehicles" is even more sad. Although there are more than enough cars on the streets of Tatarstan cities, as evidenced by the "traffic jams" that have become a daily occurrence. So, experts' assessments of the potential of Tajik citizens connected with the acquisition of cars and vehicles were distributed equally between medium and low (48% each). With a small impregnation of high ratings (4%). Without fear of making a mistake, we will say that the consumer opportunities of the Tatarstan people in this category are much lower than the corresponding opportunities of German citizens, for example (Tyulenev & Tulenev, 2015).

Estimates by experts of the possibilities of RT residents in the acquisition of apartments and houses were distributed between low and medium figures in the proportion of approximately 2 to 1 (68% vs. 32%). This distribution of expert estimates indicates that the problem of purchasing housing for many residents of Tatarstan remains acute.

The last category of "Luxury goods" by the number of low ratings surpassed all the others (88%). Average estimates were only 12%. Strictly speaking, such a picture is not surprising at all. Luxury is an expensive pleasure.

And, when there is not enough money to buy houses, cars, electronics, household appliances, consumers are not up to diamonds, gold products, expensive paintings and sculptures.

Let us pass to the analysis of the results of the expert poll on the RMEs, comparing the assessments of the experts of Mariy El with the experts' assessments from Tatarstan.

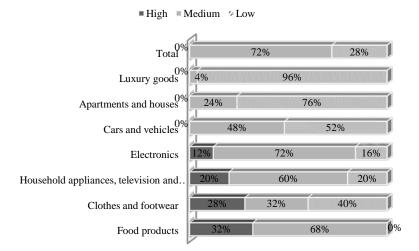


Fig 2. Estimation of consumer opportunities of the bulk of the population of the ITRs in the acquisition of goods and services

Even a cursory glance at Diagram 2 shows that the Mariy El estimates are lower than the Tatarstan ones, and in some product categories it is quite significant. Thus, the total level of consumer opportunities of the population of Mariy El defined by experts as predominantly average (72%). But the lower estimates are much higher than in Tatarstan. In the RME 28%, while in the RT 16%.

For individual product categories, the difference in estimates also reaches a significant value. In particular, in the sphere of purchasing foodstuffs, 32% of experts rated the consumer opportunities of the RME as high and 68% of respondents as average.

In the Republic of Tatarstan, we recall, there were more high marks in this nomination - 52%. Even lower consumer opportunities for citizens of the RME in the acquisition of clothing and footwear.

Particularly striking is the fact that 40% of experts of Mariy El estimated the acquisition potential of the Mariy El in this area as low. In Tatarstan there were very few low ratings, only 4%. In other words, ten times less.

At first glance, it seems that the consumer capabilities of the RME population in the nomination "household appliances, TV and video equipment" are estimated by experts on a higher scale. High estimates are 20% of the total. But, if you combine high and medium estimates, the consumer resource of the Tatarstanis will be higher (92% vs. 80%). In addition, experts of Mariy El, assessing the consumer potential of fellow citizens in this area, put out 20% of low ratings.

Electronics was the only nomination where approximate parity in estimates of the level of consumer opportunities was formed. Here, 84% of experts from each republic estimated the purchasing resource of their compatriots as medium and high. Experts from Mariy El put even higher marks than their counterparts in Tatarstan (12% versus 4%).

In the three subsequent nominations, a small advantage was on the side of the Tatarstan consumers of goods and services. In the nomination "cars and vehicles 4% of high scores, 48% average and low in RT against, respectively, 0%, 48% and 52% in RME. In the sphere of purchasing apartments and houses: 32% of medium and 68% of low ratings (RT) versus 24% of medium and 76% of low (RME). Finally, 96% of the experts rated the consumer opportunities of the residents of Mary El as low, whereas the low ratings in Tatarstan turned out to be 88%, plus 12% of the average ratings.

#### 4 Conclusions

Thus, the hypothesis formulated at the beginning of the article proved to be justified, having received confirmation of its validity by the results of the conducted research. Assessments by the experts of both republics of the level of consumer opportunities of the population of Tatarstan and Mariy El serve as evidence that the consumption society, in the form in which it exists in the developed countries of the West, is just beginning to form in the regions of Russia, in particular, in RT and RME.

Its institutionalization will not take place soon, given the contradictory trends in the regeneration and development of capitalism in the Russian Federation. It is known that the consumer society is formed on the basis of developed capitalism, in other words, in the conditions of transformation of the industrial society into a post-industrial society.

Data from expert surveys show that the level of consumer opportunities of citizens of the Republic of Tajikistan in total is higher than the similar level of residents of the RME. According to some indicators, in particular, on the consumer potential in the sphere of purchasing clothes and footwear, the gap reaches a significant value. In addition, only one nomination ("Household appliances, television and video equipment") has approximate equality in assessing the level of consumer opportunities in the republics.

Based on the analysis of the results of the study, examined and evaluated through the prism of scientific tools developed on the basis of studying the experience of industrial and post-industrial development of Western countries, we will state the following assumption. One of the main reasons for the lack of a full-fledged consumer society in Russia is the insufficiently profound and diversified development of capitalism, with the high levels of industrial, agrarian, urbanization, etc., inherent for the latter.

Proceeding from the above assumption, let us propose a number of recommendations addressed primarily to power structures, since the growth rates and the scale of the consumer opportunities of simple, ordinary citizens largely depend on their activities:

- in Russia it is necessary to intensively develop industry, especially those industries that are associated with the production of goods and services needed to meet everyday human needs;
- it is necessary to invest more in the agricultural sector, primarily in the development of farms;
- the development of urban trends, urban entrepreneurship and developing the infrastructure of cities should be encouraged;

 an urgent need is also to increase the size of salaries, benefits and pensions, along with a reduction in government spending for non-production purposes.

The complex implementation of the proposed measures will contribute the growth of incomes of citizens, and, at the same time, the level of consumer opportunities of the bulk of the population of the regions of Russia.

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# METHODOLOGICAL APPROACHES TO ESTIMATION OF THE STABILITY OF MUNICIPAL FORMATIONS: ANALYSIS OF INTERNATIONAL RESEARCHES

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Abstract :The paper discloses conceptual provisions of sustainable development, the principles of sustainable environmental and economic development, the problems and contradictions of the modern phase of sustainable development concept implementation. The directions on achievement of the sustainable development goals are substantiated on the basis of materials provided by international organizations. The work studies the trends in sustainable development of municipal formations revealed by Pricewaterhouse Coopers International Limited (PwC). The system of sustainable development indicators both at the municipal and at the international level is considered. The directions of achievement of sustainable development goals are grounded. A number of tasks necessary for the sustainable development of municipal formations have been formulated. In accordance with the guidelines of the fundamental international documents adopted in terms of formation and implementation of conceptual provisions for sustainable ecological and economic development, criteria and indicators have been identified that allow assessing the economic, social and environmental situation at various levels of the social system. Based on the study of methodological developments of the United Nations and the World Bank, the criteria and indicators have been systematized to assess the level of sustainability of the ecological and economic system. The foreign experience of sustainability of the ecological and economic system in its various assess the level of sustainability of the ecological and economic system in its various aspects.

Keywords: sustainable development, ecological and economic system, sustainable development model, problems and contradictions.

#### 1 Introduction

In accordance with the Sustainable Development Concept, the goal of sustainable development of municipal formations is to promote stable development of society in accordance with modern requirements, i.e. balanced socio-economic development which does not €lamage external environment and contributing progress of society. Municipalities have a serious potential and ability to bring in a tangible contribution to the decision of socio-economic development problems of thecountry. For this purpose,it is necessary to determine priorities in development of territories based on systematized approach to development of municipalities (Villalobos Antúnez, 2001; Makhiyanova & Zainullina, 2015).

#### 2 Methodology

The basis for the PwC study was the system of indicators grouped by directions: intellectual capital and innovations, technological readiness, transport and infrastructure, health, security, law and order, sustainable development and environment, economic impact, favorable conditionsfor doing business, costs, demography and living conditions, and others. Original information is contained in such multilateral international organizations such as The World Bank and International currency fund, national statistical organizations, such as UK Management National Statistics and United States Bureau of Census, and commercial service providers data.

#### 3 Results and discussion

Sustainable development of a municipal formation may be characterized by a set of indicators which give qualitative and quantitative assessment of the situation, and also let see where we moving.

We consider that it is necessary to execute a number of tasks to implement the sustainable development of municipalities; among those tasks we can specify the following:

- Organization of a system for stimulation of sustainable development of municipal formations;
- Formation of the system for support of sustainable development projects in municipal formations;
- Creating a system for monitoring sustainable development of municipal formations.

For the solution of tasks assigned it is necessary to realize methods of management by development and implementation of strategies, programs and techniques.

Methods of sustainable development implementation in municipal formations are presented in Table 1.

Table 1. Methods for implementation of sustainable development in municipal formations

	Tasks									
	Formation of a system on support of sustainable development projects in municipalities	Creation of financing mechanisms for municipal sustainable development	Organization of a system for stimulation of sustainable development of municipalities	Creation of a system on monitoring sustainable development of municipalities						
Methods	Development of a strategic Plan and programs of sustainable development of municipalities	1. Budget financial mechanisms: - creation of favorable legislative conditions (including tax); 2. Participation of Russian systemically important banks. 3. Attraction of Russian private and foreign investors to support of enterprises	Development of Sustainable Development Institutions;     Creation of a system on training, retraining and personnel development;     Improve of infrastructure for sustainable development of municipal formations;     4. Organization and coordination of actions held by municipalities	Development of the sustainable development indicator system for municipalities and their evaluation;     Evaluation of the production, ecological and socio-economic impact of sustainable development municipalities						

To create a municipal formation sustainable development monitoring system, it is necessary to work out the system of indicators of municipal formation sustainable development and methods of their evaluation.

In the opinion of scientists, sustainable development indicators should reflect economic, social and environmental aspects of meeting the needs of a modern generation without limitations to the needs of future generations to meet their own needs. In order to achieve development which could be considered sustainable, they must take into account achievement of economic growth, but with ensuring its balance with society needs for improvement of life quality and prevention degradation of the environment (Bobylev, 2007; Makhiyanova et al, 2015).

It is worth noting that the working out of sustainable development indicators is possible at three levels:

- Federal,
- Regional,
- Local (districts, municipalities, cities).

Their own indicator systems with individual characteristics can be developed at these three levels (Bobylev, 2007; Vonk & Schras, 1987)

It is important to assess and analyze the authorities and resources that can be used to create and use those indicators. It should be noted that the distribution of responsibilities between different levels of state power is discussed in presidential and Duma (the Parliament of the Russian Federation) structures.

"Cities of Opportunity" are highlighted in the study of trends towards the sustainable development of municipalities held by Pricewaterhouse Coopers International Limited (PwC) (Yusupov & Demyanov, 2017; Igorevna et al, 2017). Our analysis of the results of this project which has been implemented since 2007, allows us to formulate a series of conclusions using the system of sustainable development indicators and to develop recommendations for the inclusion of other large Russian cities with high urbanization rates in similar studies. This will make it possible to more rationally form strategic directions for their sustainable development with a view to preserving the resource base for future generations.

First of all, it should be noted that the study includes the largest cities in the world: in 2011 - 26, in 2012 - 27, in 2014 - 30, in 2016 - 30 cities. In addition, special studies are conducted on selected groups of cities. In particular, in 2014 the rating of the cities from the seven leading countries with the developing economy "From Moscow to São Paulo" was published, in 2016 the rating of 10 cities - the leaders providing the greatest number of opportunities was published also.

The PwC study is based on a system of indicators grouped by areas: intellectual capital and innovation, technological readiness, transport and infrastructure, health, security and the rule of law: sustainable development and the environment, economic impact, favorable business conditions, costs, demography and housing conditions, and others. Background information is provided by sources such as multilateral international organizations - the World Bank and the International Monetary Fund, national statistical organizations such as the UK National Statistics Office and the US Census Bureau, and commercial data providers.

Methodological features of these calculations are that the city ratings for a particular parameter are presented in descending order - from a larger (better) indicator to a smaller (worst) one. Then cities are awarded a score from the highest to 1 (the lowest score). After all the parameters were appropriately ranked and evaluated according to a point system, they are categorized. In each category, the scores for a given parameter are added together to obtain the total score. As a result, tables of ratings are compiled reflecting the comparative figures of all the cities participating in the study.

Leading cities are identified for each group. So, in 2016, such cities included London (the leader in the group "Intellectual Capital and Innovations"; analysts note some changes related to the fact that this year in the UK there was a referendum on withdrawal from the EU), Singapore (the leader in the groups "Technological readiness" and "Transport and infrastructure"), Toronto (the leader in the group "Demographics and standard of

living"), Paris (entered the top-10 in many indicators), Amsterdam (entered the top 10 for seven of the ten parameters for which cities were rated), New York (high rating in the group "Demography and the life level), Stockholm (the leader in the group "Sustainable Development and the Environment"), San Francisco (second place in the rating "Intellectual Capital and Innovation"), Hong Kong (leads in the most diverse parameters), and Sydney (high scores in the group "Sustainable development and the environment") (Makhiyanova et al, 2016).

Methodological features of these calculations are that the city ratings for a particular parameter are presented in descending order - from a larger (better) indicator to a smaller (worst) one. Then cities are awarded a score from the highest to 1 (the lowest score). After all the parameters are appropriately ranked and evaluated according to a point system, they are categorized. In each category, the scores for a given parameter are added together to obtain the total score. As a result, tables of ratings are compiled reflecting the comparative figures of all the cities participating in the study.

PwC analysts are considering the ways of development for 26 cities which are world financial and cultural centers.

Analyzing the indicators of these cities, international experts tried to understand what helped the cities to take the leading positions, what are the driving factors in the development of those cities. Then, they transfer the acquired knowledge to civil servants, policy-makers, businessmen, professionals and citizens who contribute to the development of their city.

The "Cities of Opportunity 2011" study is the fourth edition which draws close attention to some of the most urgent problems at the moment - regional governance, education, sustainable development, population density, and transport and nature protection (Makhiyanova et al, 2017).

The results of the correlation analysis give one of the signals that the researchers are moving in the right direction. There is a correlation between favorable economic and social indicators. Of the 10 indicators, five are in close positive relationship intellectual capital and innovation; health, safety and security; simplicity of doing business; technological preparedness, as well as demography and fitness for life. In other words, if one of them grows, others, as a rule, are pulled up after it. For example, indicators reflecting health and intellectual capital follow each other with astonishing accuracy + 87% (Makhiyanova & Shakirova, 2015).

100% - strong positive correlation

0% - weak positive and weak negative correlation

-100% - strong negative correlation

The results of the correlation analysis in percent are presented in Table 2.

Five indicators, which are very positively correlated with each other, are located in the upper left corner. In addition to the two indicators discussed above, they also include ease of doing business, technological preparedness, and demographics and fitness for life. In this block it is worthy to mention that only the simplicity of doing business is a "tough" economic or financial indicator. The other four are social, educational or technological indicators.

Correlation analysis of sustainable urban development indicators

Table 2. Correlation analysis of sustainable urban development indicators

	average ratio	cumulative total	intellectual capital and innovation	health, safety and security	ease of doing business	Technological readiness	demography and ffitness for life	life style	economic impact	transport and infrastructure	expenses	sustainable development
average ratio	55	74	70	67	61	60	57	53	50	48	43	27
cumulative total	74	100	94	91	83	81	76	71	67	65	56	32
intellectual capital and innovation	70	94	100	87	69	81	69	63	54	60	55	36
health, safety and security	67	91	87	100	78	65	84	46	47	46	68	30
ease of doing business	61	83	69	78	100	69	67	51	47	37	62	6
technological readiness	60	81	81	65	69	100	43	63	52	63	35	5
demography and fitness for life	57	76	69	84	67	43	100	28	27	30	67	38
life style	53	71	63	46	51	63	28	100	76	62	11	9
economic impact	50	67	54	47	47	52	27	76	100	68	-5	15
transport and infrastructure	48	65	60	46	37	63	0	62	68	100	-6	3
expenses	43	56	55	68	62	35	67	11	-5	-6	100	24
sustainable development	27th	32	36	30	6th	5	38	9	15	3	24	100

Most economic indicators - economic impact, transport and infrastructure, as well as costs - are in the lower half of the map. Interestingly, that the costs, which are the most "hard" and straightforward economic indicator of all, show a negative correlation with economic influence, as well as transport and infrastructure.

Indicator of intellectual capital and innovation has the greatest correlation with each other indicators. Indicator of health, safety and security are at the second place. However, these two indicators are more related to each other than any other indicators.

# 4 Summary

It should be concluded that the most competitive cities are almost always those where men and women who create intellectual resources are offered professional and personal conditions that enable them to ensure their health and safety.

As the researchers and analysts of PwC note that correlative analysis introduces an interesting aspect to the study, in which data create their own schemes, of the kind in which a random route leads to new, often unexpected and paradoxical conclusions that cast doubt on some theories and confirms others.

This is a wonderful illustration of the transformation of modern capital economies, which today are based and dependent on education, science and technology, and not on traditional industry. Moreover, in order to consolidate their success, modern cities are obliged to continuously attract and retain mental workers which are highly educated, technically literate and capable to use digital technologies, and which increasingly constitute the essence of their human capital and which are demanding and uncompromising in relation to quality standards life

# **5 Conclusion**

Thus, according to these data, a successful modern urban economy is dependent (and is almost exclusively a product) of intelligence and social well-being – that is a methodological conclusion which does not seem to challenge a theory, but supports common sense as much.

The development of cities changes over time. Both tangible and intangible components - physical and intellectual capital - should be balanced in modern cities and aimed at intensive development. Intellect is the foundation for the emergence of new ideas, and it serves as an incentive for building innovation.

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# PROBLEMS OF JURISDICTION OF ECOLOGICAL CRIMES, PROVIDED BY THE CRIMINAL CODE OF THE RUSSIAN FEDERATION

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Abstract: The international documents assign to the national legislator of a duty to pay to questions of jurisdiction the closest attention. The specified duties are provided in item 1 of Art. 14 of the Covenant on Civil and Political rights, item 1 of Art. 6 of the Convention on protection of human rights and fundamental freedoms. Providing guarantees of the rights for fair public consideration of the case by competent court immediately and red tape is imputed an obligation of the states. Questions of jurisdiction, i.e. competence, vessels on criminal cases in the territory of the Russian Federation are provided by article 31 of the Code of Criminal Procedure of the Russian Federation. The rules regulated by this article have the big importance. So, implementation of requirements of article 31 Code of Criminal Procedure of the Russian Federation is in what in case of detection of violations of the rules of this article, automatically leads to cancellation of a sentence and reconsideration of criminal case anew. Territorial jurisdiction in practice, as a rule, is not broken, however to observance of requirements to subject (patrimonial) jurisdiction or by what court of the first or second instance concrete criminal case has to be considered, arise not only questions, the facts of violations and cancellation of sentences are also elicited. In case of cancellation of a sentence all procedure begins anew that tightens terms of consideration of the case and is estimated as rough red tape. It is important to note that any transfer of criminal cases from court is not provided by the Russian legislation in court. Thus, nobody can be deprived of the right for consideration of its business only by that court to which jurisdiction it is carried by the criminal procedure legislation. The provided procedural rule is rather simple therefore under no circumstances it should not be violated.

Keywords: corpus delicti, jurisdiction of the magistrate, ecological crimes, maximum sanctions, The composition of crimes, jurisdiction of a magistrate, environmental crimes, maximum sanctions.

#### 1 Introduction

Since 1864 to jurisdiction of magistrates of the imperial period criminal cases treated with the maximum punishment till 1 year of imprisonment. However 25 years later maximum "threshold" was increased up to 1 y 6 months of imprisonment. Means, the tendency to expansion of jurisdiction of magistrates took place during this period.

The maximum punishment which the magistrate could impose was increased by the federal law of December 18, 2001 No. 174-FZ from 2 to 3 years of imprisonment with adoption of the new Code of Criminal Procedure. The last took legal effect since July 1, 2002. As a result passed to jurisdiction of magistrates not only crimes of small weight for which consideration were the world justice, but also a part of corpora delicti of average weight is created. During this period the Russian legislator had no thought of consideration of a question of decrease in top "threshold" till 1 year 6 months of imprisonment as it was during the imperial period. Because of high office load of regional judges "idea" was only about increase in top "threshold" up to 3 years of imprisonment. After this increase the amount of the corpora delicti referred to jurisdiction of the magistrate significantly increased. Jurisprudence needed the adjustment directed to decrease in office load of magistrates again.

However and this situation with jurisdiction of the legislator did not arrange. It went further. Ten years later, the maximum punishment for commission of crimes of small weight in article 15 Criminal Code of the Russian Federation was also increased by the Federal law of December 7, 2011 No. 420-FZ from 2 to 3 years of imprisonment. These changes, in our opinion, aimed now at decrease in loading not on judges of federal courts, and magistrates. However it should be noted that the situation did not normalize load of magistrates, and numerous increases in states of magistrates not only does not help, but also costs much to the budget of the country.

Revision of the corpora delicti provided in chapter 26 of the Criminal code of the Russian Federation which could be excluded from the list of jurisdiction of the magistrate that would allow achieving optimization of their loading belongs to separate internal reserves.

#### 2 Methodology

The specified scientific article is written with use of comparative and procedural methods of a research in relation to normative legal acts of the Russian Federation, its short analysis taking into account all earlier adopted procedural laws is stated.

The fact that authors chronologically describe the legislative changes made by the legislator to keeping of structures of ecological crimes of chapter 26 of the Criminal code of 1996 is remarkable.

Such combination is successful as helps to approach consciously the solution of the basic tasks facing the Russian judges of federal courts and magistrates, belonging to vessels of the first instance. Results of this research allow to assess objectively a situation and to make the correct decision on formation of the list of the corpora delicti referred to jurisdiction of magistrates and judges of federal courts of the Russian Federation of the corpora delicti provided by chapter 26 of the Criminal Code of the Russian Federation.

In the course of carrying out research general scientific and special methods of science observation, a comparative, system and structural, structural and criminalistic, historical method, an integrative method and other methods of a research were used.

# 3 Results and discussion

With reference by the legislator of parts of the first stations of Art. 250 (up to 1 y of corrective works), 251 (up to 1 y of corrective works), 252 (up to 2 l. corrective works), 253 (up to 2 1. corrective works), 254 (up to 2 1. corrective works) (6 structures) to jurisdiction of federal courts can be debated still. In our opinion, the maximum sanctions up to 1 y and 2 l. corrective works assumes automatic transferring them to jurisdiction of magistrates. In this case the ratio of number of the corpora delicti referred to jurisdiction of federal courts - 14 corpora delicti and magistrates - 10 structures, will be according to 58% for 42%. Such ratio does not answer the legislator's plan in any way: 80% of criminal cases, magistrates - 20% belong to jurisdiction of federal courts. For this reason such decision of the legislator, in our opinion, needs to be made as objectively reasonable. In a final version our offers would lead to the following ratio to jurisdiction of federal courts - 84%, magistrates - 16% of criminal cases that will be the correct proceeding decision as of May, 2018 as changes are constantly made to the Criminal code of the Russian Federation (Gibadullin & Nurullina, 2018).

Article 414 Code of Criminal Procedure of RSFSR of Chapter 34 "Protocol form" includes 40 articles in which 57 corpora delicti which were considered in 10-day time. From them 4 structures of ecological crimes from 19 that make 21%, were made out on a protocol form and were considered in 10-day time. According to requirements of Art. 415 of the Code of Criminal Procedure of RSFSR 1963, the protocol form were put into operation since January 1, 1997. Federal law of December 21, 1996 No. 160-FZ (Mardanshin, 2016). From structures of ecological crimes on UK of 1996 as of 2000 three parts of Art. 256, p.1 Art. 260 and p.1 Art. 261, i.e. five structures entering to jurisdiction of magistrates belong to a protocol form. From the Criminal Code of the Russian Federation with changes for April, 2018 to category of criminal cases which could be issued on a protocol form: two structures - the p. 3 of Art. 256 (from 2 to 51. imprisonments) and the p. 2 of Art. 258 (up to 2 1. imprisonments) and also five structures belonging to jurisdiction of magistrates: 1-2) p.1, the 2nd Art. 256 (both up to 2 l. corrective works), 3) p.1 Art. 258 (up to 2 l. corrective works), 4) p.1 Art. 260 (up to 1 y of imprisonment), 5) p.1 Art. 261 (up

to 3 l. imprisonment). Presence of two structures which could be issued on a protocol form earlier, in our opinion, is contradictory.

With adoption in 1996 of the Criminal Code of the Russian Federation "Ecological crimes" began to be provided by chapter 26. In this chapter in 2000 with the maximum sanctions to 2 years of imprisonment was 12 (by April, 2018 there were 26 corpora delicti with the maximum sanction to 3 years of imprisonment) corpora delicti (Nurullina, 2014). Under such name in the Criminal code 1960 of the head was not at all. So, to jurisdiction of the magistrate taking into account requirements of part 1 of article 467 Code of Criminal Procedure of RSFSR, the following belonged: 1) the p. 2 of Art. 249 Violation of the rules, established for fight against diseases (2 g of imprisonment) (in the previous UK RSFSR, 1985 it was article 161 with the sanction to 1 y of imprisonment); 2) p.1 Art. 250 "Pollution, contamination, exhaustion ... waters" (1 g of corrective works) (article 163 UK RSFSR, 1985 with the sanction to 1 y of imprisonment); 3) p.1 Art. 251 "Violation of the rules of emission in the atmosphere ..." (1 g of corrective works) (article 223 of chapter 10 of UK RSFSR, 1985 with the sanction to 1 y of corrective works); 4-6) ch. p.1, the 2, 3 Art. 256 "Illegal production of water animals" (respectively up to 2 l. corrective works, up to 2 l. corrective works and 2 g of imprisonment); 7) Art. 257 "Violation of the rules of protection of fish stocks" (up to 2 l. corrective works); 8-9) ch. p.1, the 2nd Art. 258 "Illegal hunting" (up to 2 l. corrective works, 2 g of imprisonment) (ch. p.1, 2 article 166 UK RSFSR, 1985 with sanctions to 1 and 31. imprisonments); 10-11) ch. p.1, the 2nd Art. 260 "Illegal felling of trees ..." (respectively up to 1 and 2 l. corrective works) (p.1 article 169 UK RSFSR, 1985 with the sanction to 1 y of imprisonment); 12) p.1 Art. 261 "Destruction or damage of the woods" (2 g of imprisonment) (the p. 2 of article 169 UK RSFSR, 1985 with the sanction to 3 l. imprisonments) (Gilyazov & Nurullina, 2017).

At the same time in jurisdiction of federal judges in the form of exceptions 7 structures of ecological crimes departed: 1) p.1 Art. 247 "Violation of the rules of the address of ecologically dangerous substances and waste" with the sanction to 2 l. imprisonments, 2) p.1 Art. 252 (up to 2 l. corrective works) "Marine pollution ..." (up to 2 l. corrective works) (article 223.1 of chapter 10 of UK RSFSR, 1985 with the sanction to 1 y of imprisonment); 3-4) ch. p.1, the 2nd Art. 253 "Violation of the law of the Russian Federation about the continental shelf" (up to 2 l. corrective works in both parts) (article 167.1 UK RSFSR, 1985 with the sanction to 1 y of imprisonment); 5) p.1 Art. 254 "Damage of the earth ..." (up to 2 l. corrective works); 6) Art. 255 "Violation of the rules of protection and use of a subsoil" (up to 2 l. corrective works); 7) Art. 262 "Violation of the mode of especially protected natural territories" (up to 2 l. corrective works).

Upon transition since July 1, 2002 on the basis of the Federal law No. 174-FZ of the maximum amount of the punishment imposed by the magistrate from 2 to 3 years of imprisonment the number of structures sharply decreased with 12 to 7. The legislator reasonably excluded the following six structures from the list of structures of ecological crimes: 1) the p. 2 of Art. 249, 2) p.1 Art. 250, 3) p.1 Art. 251, 4) the p. 3 of Art. 256, 5) Art. 257, 6) the p. 2 of Art. 258 of the Criminal Code of the Russian Federation were also added by one structure - part 3 of Art. 260 of the Criminal Code of the Russian Federation. At the same time it is necessary to notice that the legislator increased number of exceptions of the list of the corpora delicti excluded from jurisdiction of the magistrate with 7 to 20. That it is necessary to estimate these innovative changes made to the criminal procedure law with advantage.

It is possible to agree with the main changes made by the legislator. However it is simply impossible to agree with addition of the qualifying structure of part 3 of Art. 260 of the Criminal Code of the Russian Federation. This structure, in our opinion, is subject to an exception together with other qualifying corpus delicti, provided by the p. 2 of the same article 260

Criminal Code of the Russian Federation. As the reason for that serves existence in a disposition of the second part of several qualifying signs: 1) repeatedly; 2) the person with use of the official position; 3) in a large size. Existence of these circumstances allows rejecting all doubts on transfer of this corpus delicti in jurisdiction of federal judges.

Earlier the legislator on the basis of the Federal law of 8.12.2003 No. 162-FZ, using almost same qualifying signs, excluded part 3 of this article 256 Criminal Code of the Russian Federation in which the qualifying signs were also provided: 1) with use of the official position, 2) a group of persons by previous concert and 3) organized group. It is worth paying attention that the p. 2 of Art. 256 of the Criminal Code of the Russian Federation is not the qualifying sign, and is independent corpus delicti therefore we and do not make the proposal on its exception.

Thus, having excluded then two above-stated corpora delicti, in jurisdiction of the magistrate there would be 5 simple structures. On need of an exception of the qualifying corpora delicti for chapter 26 neither Khamatova E.V., nor Novokreshchenov N.S. attached significance.

The federal law of 22.07.2008 No. 145-FZ the legislator toughened the sanction of part 3 of Art. 260 of the Criminal Code of the Russian Federation from 3 to 6 years. As a result this corpus delicti automatically passed into the list of corpora delicti, jurisdictional to federal judges.

Generalizing the analysis according to chapter 26 of the Criminal Code of the Russian Federation "Ecological crimes", it should be noted that taking into account our offer on an exception of the p. 2 of Art. 260 of the Criminal Code of the Russian Federation in jurisdiction of the magistrate there would be 5 corpora delicti: 1-2) ch. p.1, the 2nd Art. 256 of the Criminal Code of the Russian Federation "Illegal production (catch) of water biological resources" (sanctions of everyone up to 21. corrective works); 3) p.1 Art. 258 of the Criminal Code of the Russian Federation "Illegal hunting" (with punishment to 2 l. corrective works); 4-5) ch. p.1, the 2nd Art. 260 of the Criminal Code of the Russian Federation "The illegal cutting down of forest plantings" (sanctions up to 1 and 3 l. imprisonments respectively); 6) p.1 Art. 261 of the Criminal Code of the Russian Federation "Destruction or damage of forest plantings" (with the sanction to 3 l. imprisonments). Among the excluded corpora delicti, i.e. the federal judges belonging to jurisdiction, there will be 21 structures (them 20 now).

Let's provide chapter 26 of the Criminal Code of the Russian Federation as of 2000.

Chapter 26. Ecological crimes from 35 structures from which 19 corpora delicti up to 2 years of imprisonment, 12 structures treat jurisdiction of the magistrate, and the exceptions carried to jurisdiction of federal court, 7 structures.

- 1) 247 p.1. Violation of the rules of the address ecologically dangerous in/in (2 1.);
- 2) 252 p.1. Marine pollution (up to 21. corrective works);
- 3-4) 253 ch. p.1, 2. Violation of the law of the Russian Federation  $\dots$  shelf (2 l. and / r; 2 l. and / r);
- 5) 254 p.1. Damage of the earth (up to 2 l. corrective works);
- 6) 255. Violation of the rules of protection and use of a subsoil (up to 2 l. and / r);
- 7) 262. Violation of the mode especially protected natural  $\dots$  (up to 2 l. and / r);

Magistrates have 12 corpora delicti:

- 1) 249th p. 2. Violation of veterinary rules ... (up to 2 l. p/c);
- 2) 250 p.1. Pollution of waters (up to 1 y of corrective works);

- 3) 251 p.1. Air pollution (up to 1 y and / r);
- 4-6) 256th p. 1,2,3. Illegal production of water animals ... (2i/r, 2i/r, 2 l);
- 7) 257. Violation of the rules of protection of fish stocks (up to 2 1. and / r);
- 8-9) 258 ch. p.1, 2. Illegal hunting (up to 2 l. and / r, 2 l. p/c);
- 10-11) 260th p. 1, 2. Illegal felling of trees ... (up to 1 y and / r, 2 and / r);
- 12) 261 p.1. Destruction or damage of the woods (up to 2 l. p/c).

For comparison we will provide chapter 26 of the Criminal Code of the Russian Federation as of 2018. This chapter includes 41 structures of ecological crimes.

Chapter 26. At federal judges (20 corpora delicti):

- 1) 247ch.1. Violation of the rules of the address of ecologically dangerous emissions (up to  $2\,l.\,p/c$ );
- 2) 248 ch.1. Violation of safety rules at treatment of microbiological agents (21.);
- 3-4) 249 ch. of the p. 1, 2. Violation of veterinary rules (up to 2 l. p/c; 1 g p/c);
- 5-6) 250 ch. p.1, 2. Pollution of waters (p/c up to 1 y; 2 l. p/c);
- 7-8) 251 ch. p.1, 2. Air pollution (p/c up to 1 y; 2 l. p/c);
- 9-10) 252 ch. p.1, 2. Marine pollution (p/c up to 2 1.; 2 1. p/c);
- 11-12) 253 ch. of the p. 1, 2. Violation of the law of the Russian Federation about the continental shelf (p/c up to 2 1.; 2 1. p/c);
- 13-14) 254 ch. p.1, 2. Damage of the earth (p/c up to 2 l.; 2 l. p/c);
- 15) 255. Violation of the rules of protection and use of a subsoil (p/c up to 21.);
- 16) 256th p. 3. Illegal production (catch) of water biological resources (from 2 to 5 l);
- 17) 257. Violation of the rules of protection of water biological resources (p/c up to 2 l.);
- 18) 258 ch. p. 2. Illegal hunting (up to 2 l. p/c);
- 19) 259. Destruction of critical habitats for organisms (up to 3 l. p/c);
- 20) 262. Violation of the mode of especially protected natural territories (p/c up to 2 l.);

Magistrates have 6 corpora delicti:

- 1-2) 256th p. 1, 2. Illegal production (catch) of water biological resources (both up to 2 l. p/c);
- 3) 258 p.1. Illegal hunting (p/c up to 21.);
- 4) 258.1ch.1. Illegal production and a turn of wild animals (up to  $3\,\mathrm{l.}$ );
- 5) 260 p.1. The illegal cutting down of forest plantings (up to 2 l. p/c);
- 6) 261ch.1. Destruction or damage of forest plantings (up to 3 l. p/c) (Lapidus, 1988).

To the Russian legislator we offer the following option:

Chapter 26. (25 corpora delicti up to 3 l. p/c, m/s – 4,  $\varphi$  / with – 21 corpora delicti.

- 1) 247ch.1. Violation of the rules of the address of ecologically dangerous emissions (up to 2 l. p/c);
- 2) 248ch.1. Violation of safety rules at treatment of microbiological agents (2 l.);
- 3-4) 249 ch. of the p. 1,2. Violation of veterinary rules ... (up to 2 l. p/c; 1 g p/c);
- 5-6) 250 ch. p.1, 2. Pollution of waters (p/c up to 1 y; 2 l. p/c);
- 7-8) 251 ch. p.1, 2. Air pollution (p/c up to 1 y; 2 l. p/c);
- 9-10) 252 ch. p.1, 2. Marine pollution (p/c up to 2 1.; 2 1. p/c);
- 11-12) 253 ch. of the p. 1,2. Violation of Law of the Russian Federation about the continental shelf (p/c up to 2 l.; 2 l. p/c);
- 13-14) 254 ch. p.1, 2. Damage of the earth (p/c up to 2 l.; 2 l. p/c);
- 15) 255. Violation of the rules of protection and use of a subsoil (p/c up to  $2\,\mathrm{l.}$ );
- 16) 257. Violation of the rules of protection of water biological resources (p/c up to 2 l.);
- 17) 258th p. 2. Illegal hunting (up to 21. p/c);
- 18) 258.1ch.1. Illegal production and a turn wild a stomach (up to  $3\ 1.\ p/c$ );
- 19) 259. Destruction of critical habitats for organisms (up to 3 l. p/c);
- 20) 261 p.1. Destruction or damage of forest plantings (up to 3 l. p/c);
- 21) 262. Violation of the mode of especially protected natural territories (p/c up to  $2\,\mathrm{l.}$ ).

Magistrates have 4 corpora delicti:

- 1-2) 256th p. 1,2. Illegal production of water animals and plants (both up to 2 l. p/c);
- 3) 258 p.1. Illegal hunting (p/c up to 2 l.);
- 4) 260 p.1. The illegal cutting down of forest plantings (up to 1 y of p/c).

Thus, we suggest to report from jurisdiction of the magistrate to federal court: 1) 258.1ch.1 (up to 3 l. imprisonments), 2) 261 p.1 (up to 3 l. imprisonments); and also it is necessary to withdraw in a legislative order from the list of the corpora delicti provided p.1 by Art. 31 of the Code of Criminal Procedure in the form of exceptions, the p. 3 of Art. 256 of UK (from 2 to 5 years of imprisonment).

# 4 Summary

The provided comparative and comparative analysis of questions of jurisdiction according to chapter 26 "Ecological crimes" of the Criminal Code of the Russian Federation. In our opinion, the amounts of the corpora delicti referred to jurisdiction to the magistrate offered reduction can be referred to number objective and subject to use in practice of the Russian legislator. In Germany functions of vessels of the first instance are carried out by local judges (Amtsgericht), belong criminal cases with the maximum sanction of punishment till 1 year of imprisonment to their jurisdiction (Zenkovsky, 1960; Bustanov & Kemper, 2012). In 1958 the French legislator made the decision on abolition of magistrates (Voll, 1994; Hroch, 1985), i.e. courts of the first instance began to be subdivided into courts of small instance and courts of big instance (Ferrer et al, 2015; Nurhayati, 2018).

#### 5 Conclusion

The short analysis of only one Chapter 26 of the Criminal Code of the Russian Federation leads us to a conclusion that differentiation of jurisdiction between the district (city) courts relating to federal courts, and magistrates it is up to the end not solved and needs careful researches. However and the reality dictates as it is accepted in some countries of the West, in particular, Germany and France, at the end of every year the commission of the State Duma has to gather and on the basis of statistical data to develop offers on correction of situations with the raised office loading of vessels of the first instance. The solution of the matters is referred to competence of the federal authority therefore offers have to be discussed according to plan in the State Duma of the Russian Federation with adoption of real decisions the next year.

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# BILATERAL RELATIONS BETWEEN UZBEKISTAN AND THE USA IN THE 21ST CENTURY

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Abstract: The paper considers the main stages of the relationship between Uzbekistan and the United States beginning with the period of their strategic cooperation after the events of September 11, 2001 and until the end of 2017. For a more detailed study of the problem, this work is divided into three periods reflecting the evolution of the relationship of the two over the past 17 years. The provisions of the study can be used to further exploration of this problem, as well as in the teaching of disciplines related to international relations. Upon that, problematic-chronological and comparative-historical methods were applied. First of all, the period of strategic partnership between Uzbekistan and the United States, which began immediately after the September 11 attacks, was reviewed and analyzed. Further, the advantages of the geopolitical position of Uzbekistan located in the heart of the Central Asiatic region, were noted. After that, the period of the crisis in relations between Uzbekistan and the US in connection with the color revolutions, as well as the events in Andijan in May 2005 is considered. At the same time, the reasons for mutual criticism were revealed. Then the period of normalization of mutual relations of the two countries is described. At the end of the paper, conclusions are drawn based on an analysis of current integration processes in the region.

Keywords: International relations, politics, history, USA, Uzbekistan, strategic partnership, geopolitics, Central Asia, terrorism.

#### 1 Introduction

With the growing geopolitical importance of Central Asia after the September 11 attacks, Washington strengthened its relations with the countries of the region, including with Uzbekistan, despite the discrepancy of the latter with liberal values and ideas. During this period, relations between the US and Uzbekistan reached a level of strategic partnership. The actual factor in its formation was such their common enemies as the radical Islamist organizations "Taliban", "Al-Qaida", and the Islamic Movement of Uzbekistan (IMU). However, the color revolutions in the former Soviet republics, supported by the United States, changed these relations. In particular, the support received by the United States from Uzbekistan was severely affected after the Andijan events. The United States lost an important lever of influence in Central Asia when its military base in Uzbekistan was closed. On the other hand, after these events, the positions of Russia and China strengthened in the region.

# 2 Methodology

In the course of the research, problematic-chronological and historical-comparative methods were used, what allowed us to operate with chronologically correct and reliably stated facts for revealing the motives and driving forces of the most important events in the region. The method of *study of the process* made it possible to emphasize the key directions of political and international processes in Central Asia. In addition, the article uses literature on the history and contemporary development of international relations. All this helped to identify the interconnectedness of regional and global development processes.

# 3 Results

# 3.1 The period of strategic cooperation (2001-2003).

After the terrorist attacks of 11 September, 2001, Uzbekistan was one of the first to express its support for the United States. It agreed to use its infrastructure for military purposes during the antiterrorist campaign in Afghanistan. At this time, the US and Uzbekistan developed close political relations, which was demonstrated in March 2002 during the visit of the President of Uzbekistan to Washington, where he met with George W. Bush and the signing of a strategic partnership agreement.

Improvement of relations with Washington has brought great advantages to Uzbekistan. First of all, this made it possible to eliminate the influence of the Islamic Movement of Uzbekistan, which became the greatest threat to the Republic. In addition, Uzbekistan becoming an "anchor" country for the United States

in Central Asia, hoped for US investment in its economy, especially in the oil and gas sector. In addition, it was assumed that Tashkent's influence on Afghanistan would increase, and the southern borders of Uzbekistan would be safe.

For the United States, Uzbekistan was a springboard for penetration into Central Asia and for creating a zone of influence in the region in order to oust Russia and China. At the same time, the geopolitical significance of Central Asia and Uzbekistan was recognized by US leaders even before the September 11 incident. The neo-conservatives in the New American Century project in 1997 stressed the need for American control in regions of strategic importance to prevent the growth of potential rivals. And such authors as S. Frederick Starr and Z. Brzezinski noted the important strategic location of Uzbekistan in Central Asia. Starr stated that this country is an "island of stability" and has the potential to be a balancing regional power in Central Asia (Star, 1996). Brzezinski stressed the location of Uzbekistan in the region, calling it "the most important candidate for participation in regional leadership" (Brzezinski, 1997). In the same period, under the leadership of President V. V. Putin, Russia began to pursue an active foreign policy in Central Asia, initiating the Eurasian integration processes. China also strengthened its influence in the region through the Shanghai Cooperation Organization (SCO). The Bush administration understood that the influence of these countries in the region should not be allowed to spread (Villalobos Antúnez & Ganga, 2016).

After the events of September 11, I.A. Karimov said that the country is "ready to cooperate with the US in the fight against terrorism" (Ülkü, 2002). During the visit of US Secretary of Defense D. Rumsfeld to Tashkent on October 5, 2001, an agreement was signed on bilateral cooperation in the fight against terrorism. In a short, it was stated in a joint declaration that Uzbekistan gives the US agreed to use the airspace, as well as one of its airfields for "humanitarian operations" (Djalili & Kellner, 2009).

Thus, NATO and the US acquired a strategically important stronghold in Karshi-Khanabad, located in the southeast of Uzbekistan, near the Afghan border. This base has become the largest point of the US support in the region, where up to three thousand servicemen have been deployed. Later it became an instrument of restraining Russia (Lachowski, 2007). However, close ties did not last long. Human rights violations in Uzbekistan served as a pretext for their breakdown in 2004-2005.

# 3.2 The crisis period (2004-2007).

Cooperation between the United States and Uzbekistan reached its peak in 2003. However, the project of the Greater Middle East, as well as the strategy of democratization in the region, including violently, aroused I.A. Karimov's fears. Tashkent's concern grew as the "color revolutions" were carried out with the help of the United States in the republics of the former Soviet Union.

In late 2003, Georgian President Eduard Shevardnadze tried to get closer to Russia, but was overthrown, and Mikhail Saakashvili, a politician dependent on the US, came to power during the Rose Revolution. This prompted the administration of I.A. Karimov to take decisive action. First of all, the activity of all foreign non-governmental organizations operating in Uzbekistan was limited (Genç, 2010). The activities of those organizations that carried a potential danger ceased. A number of events that occurred in 2004 created tensions between the US and Uzbekistan. Sometime after this, I.A. Karimov made a diplomatic maneuver and made an official visit to Moscow, during which it was decided to jointly fight terrorism.

Washington has always faced a dilemma in its relations with Uzbekistan: continue to support the authoritarian administration in accordance with its strategic interests, or abide by the declared principles of freedom and democracy.

The Orange Revolution held in Ukraine in 2004, further strengthened I.A. Karimov's doubts. In a statement made in January 2005, he accused the Western powers of supporting the opposition in Uzbekistan and stated that he would review Uzbekistan's membership in GUUAM (Azizian, 2005). After a while, riots erupted in Kyrgyzstan, which grew into a "revolution of tulips". The administration of I.A. Karimov, who believed that Uzbekistan will become the next, refused to participate in the GUUAM meeting in Moldova on April, 2005. In early May of the same year, Uzbekistan withdrew from GUUAM.

Soon, a real crisis in relations with the US was caused by riots that began in Andijan and were severely suppressed by the administration of I.A. Karimov on 13 May, 2005. The fact that the riots in other former Soviet republics were organized by non-governmental organizations with the help of the United States made I.A. Karimov to take notice on their involvement in the Andijan events.

The US, along with other Western countries, demanded that the events in Andijan be investigated by an independent committee under the aegis of the United Nations. Nevertheless, they did not intend to distance themselves from Uzbekistan. However, the relationship was reduced to a minimum, because the administration of I.A. Karimov intended to completely protect the country from US influence. After having received the support of Russia and China, Uzbekistan agreed at the next SCO summit on the closure of the US base in Karshi-Khanabad within six months (Azarkan, 2009).

The United States and the European Union (EU) decided to impose an embargo that included a ban on the sale of arms to Uzbekistan. In addition, the EU imposed a ban on issuing visas to eight well-known Uzbek officials. I. A. Karimov urged the West not to interfere in the internal affairs of Uzbekistan under the slogan of promoting democracy. After these events, I. A. Karimov unfolded a foreign policy toward Russia and China, who supported him during the Andijan events. In particular, in 2006 Uzbekistan became a member of the Eurasian integration structures initiated by Russia: the Eurasian Economic Community (EurAsEC) and the Collective Security Treaty Organization (CSTO).

# 3.3 The normalization period (from 2007 to the present)

Two years later, the administration of I.A. Karimov decided to normalize relations with the US and other Western countries. At the end of 2006, I. A. Karimov dismissed the mayor of Andijan for neglecting people's complaints and lack of success in resolving the growing social and economic problems. In the same year, he expressed interest in joining to the Baku-Tbilisi-Ceyhan (BTC) gas pipeline project. In response, the US and the EU began gradually to ease the embargo. In May, 2007 the visa ban imposed by the EU to leading Uzbek officials was abolished. In September of the same year R. Norland, appointed by the US Ambassador to Uzbekistan, held a number of meetings, including with I.A. Karimov, which was perceived as a signal to a "thaw" in the relationships. I. A. Karimov, in a report made to overcome the consequences of the Andijan crisis, said: Uzbekistan in its foreign policy adhered to mutually beneficial cooperation and mutual respect of its close and with distant neighbors, including the United States and Europe. Moreover, we can confidently state that the foundation for equal and mutually beneficial relations that meet our national interests is further strengthened. In addition, I. A. Karimov began to distance himself from Moscow and suspended membership of Uzbekistan in the Eurasian Economic Community in early 2008.

Politics by I. A. Karimov on rapprochement with the US gained momentum with the coming to power of the administration of Barack Obama. Accordingly, in 2009, Washington was given the opportunity to use Uzbekistan's airspace and military base in Termez.

In February 2009, the Collective Rapid Reaction Force (CRRF) was formed within the CSTO for emergency situations, but Uzbekistan did not join this initiative. In addition, ite did not participate in military exercises conducted within the CSTO since 2011. This meant that in fact he left the organization. Formally, the exit took place in 2012.

On 2 December, 2010, H. Clinton made an official visit to Uzbekistan, during which an agreement on cooperation in the field of science and technology was signed. The visit of the Secretary of State was the first after visit of Colin Powell in December 2001, what indicated the improvement of relations between the states.

In 2013 the USA has offered to Uzbekistan various investment projects totaling \$ 4 billion. As a result both I. A. Karimov, and later Sh. Mirziyoyev, supported all-round ties with the United States. For Uzbekistan, the objectives of cooperation include the expansion of trade, investment and technology transfer, security assistance, including training in defense, supply of military equipment and support in the fight against terrorism; diplomatic approval and recognition of Uzbekistan's domestic achievements and international interests, as well as maintaining a significant US presence in the balance of other external forces. The Washington's list of priorities for cooperation with Tashkent included combating terrorism, countering to proliferation of weapons of mass destruction, supporting stability in Afghanistan, ensuring the sovereignty and autonomy of Uzbekistan, developing bilateral economic ties and improving human rights.

D. Trump's support for US foreign policy based on realistic principles and the establishment of priorities for national sovereignty is consistent with the position of Uzbekistan under the leadership of Sh. Mirziyoyev. The prospects for improving relations between the United States and Uzbekistan during Trump's presidency may have strengthened the position of Tashkent's non-participation in Eurasian integration projects under the leadership of Moscow, such as the Collective Security Treaty Organization and the Eurasian Economic Union. Nevertheless, under Sh. M. Mirziyoyev the relations between Uzbekistan with Russia significantly strengthened (Sulkarnaeva et al, 2018).

On 19 December, 2017, the presidents of the United States and Uzbekistan discussed regional security, economic reforms in Uzbekistan and other "opportunities for improving cooperation". The Government of Uzbekistan stressed that Trump welcomed the development of his productive relations with neighboring countries and supported the democratic changes and economic reforms taking place in the country aimed at strengthening civil society, the rule of law and economic liberalization.

# 4 Discussion

During the study of the US foreign policy strategy in Central Asia, as well as bilateral relations with Uzbekistan, the authors of the paper have analyzed a wide range of works.

Leading Uzbek and Central Asian representatives of scientific journalism presented their vision of the situation. Among them we can name such experts as Sarabekov, Abulgazin. The work of the Uzbek researcher Shukurzoda The Chronology of American-Uzbek Relations, 1992-2012" deserves special attention; it analyzes the bilateral relations during this period (Sarabekov, 2014; Shukurzoda, 2012).

The place and prospects of Central Asia in the international arena is mentioned in the collective work of D. V. Trenin and his foreign colleagues "Central Asia: A View from Washington, Moscow and Beijing" (Rumer et al, 2008). It provides a multifaceted assessment of the processes taking place in the region studied by specialists from the United States, Russia and China. Among the works by researchers from the US, it seems interesting the paper by M.B. Olcott "The Second Chance of Central Asia" (Olcott, 2005), which describes the events in

Central Asia after 11 September, 2001. The author gives a detailed analysis of the human rights situation in Central Asia.

#### 5 Conclusions

The United States and Uzbekistan are not sure of the reliability of their partnership. There is only one reason for improving their relations: the geopolitical position of Uzbekistan. It can be assumed that the actions of radical Islamists and security problems, especially those related to Afghanistan, will be the main factors determining the form of relations between the US and Uzbekistan in the long term. In general, the partnership between the United States and Uzbekistan has no firm basis and is of a temporary nature. However, at the moment we see how the interests of the two countries coincide on a number of issues, and both states use this. The US needs a reliable partner in the region with a more or less independent foreign policy and try to find it in the person of Uzbekistan, which can distance itself from other actors in the region.

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# PREDICTION OF ABILITY AMONG DISABLED SCHOOL STUDENTS: POSSIBILITIES AND LIMITATIONS OF DIAGNOSTIC TOOLS

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Abstract: The research relevance is caused by the fact that forecasting is an element of regulation of the leading activity and behavior, participates in processes of adaptation of the personality to the changing environment conditions. The ability to forecasting is considered as a resource of successful socialization, significant for the child with limited opportunities of health. The analysis of the current state of a problem of forecasting and the most perspective directions of its further development for school students with limited opportunities of health is submitted. As the most important condition of its constructive research need of differentiation of the general subject of psychology of forecasting which has to be studied differentially, in three basic aspects, cognitive, regulatory and communicative, in significant situations of communication of the school student is proved (with adults, with peers, with parents and family members, virtual communication). The existing psychodiagnostic tools on identification of various aspects of ability of younger school students to an anticipation of situations of the future, opportunities of these tools in identification of deficiency of forecasting at school students are estimated. Studying of ability to an anticipation of situations of the future at children of younger school age represents today not only a research task, but also a social mission of scientists to model, predict success of course of processes of socialization, to prevent initial process of formation of deviant behavior at children with limited opportunities of health and to reduce risks of emergence of destructive and deviant behavior at teenage and youthful age.

Keywords: forecasting, an anticipation of situations of the future, social norms, diagnostic tools, younger school students, violations in development.

# 1 Introduction

Neurophysiological and psychophysiological problems of predictive activity by Anokhin, Bernstein, Kinsbourne, and Mills are actively studied. Features of probabilistic forecasting normal and pathologies in Peresleni works, Mendelevich are revealed. Development of anticipation in ontogenesis is studied by Sergienko, Regush, Burgess, at violations of speech development (Anokhin, 1987; Bernstein, 1997; Kinsbourne & Scott, 2009; Mills et al, 2014; Peresleni, 1982; Mendelevich, 1996; Sergienko, 1989; Regush, 1997; Burgess, 2012; Akhmetzyanova, 2015; Akhmetzyanova, 2014; Akhmetzyanova, 2016a; Akhmetzyanova, 2016b). The condition of successful adaptation of the individual distinguishes ability to forecasting as to ability to reflect regularities of the environment in structure of last experience, to form the strategy of behavior, anticipating the course of events in B.F. Lomov's works, E.N. Surkova, Kocie, and Gusev Lomov, 1980; Kocie & Cki Przyluski, 1996; Gusev & Okune, 2017). Huge actual material is saved up, the interesting experimental results disclosing important regularities and mechanisms of anticipation are received; a number of explanatory concepts in the field are formulated. However, forecasting is insufficiently studied as integrated ability of the younger school student with limited opportunities of health for adaptation in society (Denisova et al, 2012; Villalobos Antúnez & Bozo, 2010). The special role in the course of social and psychological adaptation, according to Tvardovskaya, Lindsay belongs to mechanisms of an anticipation of succession of events, abilities of children with limited opportunities in full and most objectively to anticipate, predict development of their disease, need of stay for specialized institutions, feature of their interactions with significant adults and peers (Tvardovskaya, 2015; Lindsay, 2008; Nurhayati, 2018).

The main problems of social development of children with limited opportunities of health are shown in disruption of communication with the surrounding social and objective world,

in low social mobility, in poverty and stereotype of social interaction with peers and adults, in limitation of familiarity of human and national culture (Denisova et al, 2012; Platow et al, 2008).

Development of the diagnostic tools allowing carrying out assessment of anticipation ability of the child with limited opportunities of health is relevant. However, at a large number of techniques of identification of various aspects of forecasting, at the moment there are no means of complex and versatile diagnostics of predictive abilities of younger school students with visual impairment, hearing, the speech, the musculoskeletal device. Studying of ability of children with visual impairment, hearing, the speech, the musculoskeletal device to an anticipation of situations of the future allows assuming its heuristic opportunities for prevention of formation of deviations, preventions of situations of asocial behavior.

### 2 Methodological framework

The methodological basis of the study was:

- points of system-functional approach of anticipation as a phenomenon that permeates all levels of psychic reflection of reality and have a multi-level structure laid down in the works of Anokhin, Bernstein and Lomov(Anokhin, 1987; Lomov, 1980; Bernstein, 1997).
- basic points of cultural-historical theory of mental ontogenesis by Vygotsky (Vygotsky, 2005).

# 3 Discussion

Any psychodiagnostic technique has to be based on the certain theoretical construct displaying at the conceptual level of idea of the measured property. The technique developed by us is also based on the following provisions:

# 1. Cognitive aspect of forecasting

Diagnostics of ability of school students to an anticipation of situations of the future has to consider surely, according to Sergienko, informative activity of the subject of social interaction. Theory and methodology justification of the questionnaire "Specifics of an anticipation of the future" is directed to development of the diagnostic tools revealing specific features of an anticipation of the future of the young men (Malyuchenko et al, 2009). Regush, the technique the "Predictive task" allowing revealing the level of development of predictive ability at teenagers and adults was offered by Somova (Somova, 2002).

For studying of cognitive aspect of predictive activity the technique of a research of features of predictive activity "Guessing game" (Nadin, 2015) on indicators can be used: speed of formation of the forecast, derivation error, reproduction of orders of sets, strategy of forecasting.

In Akhmetzyanova's researches it was revealed that, thanks to an anticipation (forecasting) the younger school student is capable to control educational activity; mental processes are exposed to the high-quality changes connected with consciousness function; the act of communication is accompanied by forecasting of own acts and actions of people around.

The researches directed to studying of a cognitive component of predictive activity at children of younger school age with visual impairment, hearing, the musculoskeletal device, with violations of the speech, allowing to predict success / not success of adaptation of the school student to the changing environment conditions, it was not conducted.

# 2. Regulatory aspect of forecasting

Anticipation acts as an important component in regulation of behavior, allowing creating the purposes, to carry out planning and programming of behavior of the subject (Isaev, 2013). Diagnostics of predictive abilities of younger school students with violations in development has to be directed to studying of strong-willed effort in response to the difficulties arising in the course of activity and communication, definition of forecasts of results of action (Kocie & Cki Przyluski, 1996; Nielsen et al, 2015)

Ulyenkova's technique "Self-control studying" is directed to studying of features of formation of self-control in intellectual activity (Ulyenkova, 2001). The technique "Not solvable task" of N.N. Aleksandrova, T.I. Shulga allows to diagnose specific features of emotional reaction and intellectual strong-willed effort in response to the difficulties arising in the course of activity and communication (Alexandrov & Shulga, 1987).

However there are no methods of studying of prognosis abilities of younger school students with violations in development at regulation of the social relations.

# 3. Communicative aspect of forecasting

Diagnostics of social development of children and teenagers with limited opportunities of health allows to reveal at them difficulties of forecasting of consequences of the acts and behavior of people around; the aspiration to avoid pressure of rules, norms (Bayanova & Mustafin, 2016; Bayanova et al, 2016); shortcomings of understanding and awareness of need and expediency of observance of social rules and norms (Chernyak & Kushnir, 2014; Veraksa, 2014). Prediction of actions of other person on his mental conditions for children with an autistic range was more difficult, than for children with typical development in Lebedeva's research (Lebedeva, 2006).

A.K. Pashchenko's technique "Perception of a standard situation" allows revealing the level of normativity of perception of a situation by the younger school student (Pashchenko, 2010). This indicator reflects degree of representation of all-group norms in interpretation of external signs of a standard situation of the specific pupil (Artemyeva, 2016; Nigmatullina & Artemyeva, 2015). Ulyanova V. P. technique. "The anticipation of an outcome of a situation with violation of norm" allows defining ability of the teenager to an anticipation of consequences of the behavior in a standard situation (Accusative, 2008).

However, despite problems of social development of children with limited opportunities of health, defective communications with the surrounding social and objective world, methods which would allow to estimate a social context of interaction of younger school students with violations of the speech, hearing, sight, the musculoskeletal device in psychological science it is not developed.

Complex diagnostics of ability of younger school students with limited opportunities of health to an anticipation of situations of the future has to include cognitive, regulatory and communicative aspect of forecasting in significant situations of communication

The interpersonal context is defined by action of threats of social development in a microenvironment of activity (Furnham & Argyle, 1981), subjective perception by children of these relations, formation of communicative activity and features of the interpersonal relations (Iches & Knowles, 1982). The relations with peers at children with limited opportunities of health are characterized by prevalence of situational forms of communication, immaturity of communicative means, shortcomings of understanding of their semantics and communicative sense, existence of peculiar communicative lines, aspiration to isolation and privacy (Killen et al, 2013).

The intra family relations have originality in the families raising children with limited opportunities of health. The dis-adaptation is painfully endured by the child and leads to emergence of feeling of isolation at it, vulnerability, rejection from people around (Denisova et al, 2012, Rean, 2015; Sheeran et al, 2014). In the conditions of limited social interaction, absence of friends and the companies in which the younger school student could have feeling of belonging to group there is a big risk of leaving of the school student to the virtual world which will act for it as the means of communication and self-affirmation, substituting for itself process of real interaction.

#### 4 Conclusion

Thus, the carried-out analysis of modern researches in the field of forecasting allowed us to define structure, significant situations of interaction, diagnostic criteria (recommendations) of complex psychodiagnostic tools about identification of various aspects of ability of younger school students to an anticipation of situations of the future, consequences of own actions and acts. These tools will allow revealing deficiency of predictive competence at children with visual impairment, hearing, the speech, the musculoskeletal device. Development of diagnostic tools, will allow to carry out assessment of predictive ability of the child with limited opportunities of health from positions criteria approach and to estimate risks of further violations of socialization and emergence of deviations.

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# SOCIAL CAPITAL OF THE FAMILY AND AVAILABILITY OF HIGHER EDUCATION IN VIETNAM

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Abstract: The possibility of access to higher education depends on the social capital of the family and has an important significance for access to higher education by the individuals or various social groups. Social capital includes the presence of social ties both within the family and outside it and allows applicants acquiring more opportunities at admission to the universities. It is the basis of an informal network of contacts between people and forms the basis of social transfers. The theoretical basis of the study was the papers of P. Bourdieu, J. Coleman, as well as Vietnamese sociologists, who paid attention to this problem. It is noted that the influence of social capital is relevant for the Vietnamese entrants, however, there are no studies characterizing this aspect of social interaction in sociological science. Therefore, this work is a kind of innovative study. The authors distinguish the structure of social capital and show, based on the empirical material, the influence of each of the elements on the possibilities of obtaining higher education. The empirical basis of the study is the survey data, conducted by the author among 1,000 Vietnamese students (Danang University) in 2016. These studies showed that the social capital of the family had a significant impact on the possibility of obtaining higher education for the Vietnamese applicants. It is noted that the relationships of children with parents, the place of family residence; the professional status of parents (the position of parents); the composition and number of family members have a decisive impact on admission to the universities as the constituent structural components of social capital. We give recommendations to parents, relatives of the Vietnamese families in terms of vocational guidance of their children.

Key words: social capital, higher education, access to higher education, social inequality, professional orientation, entrants.

#### 1 Introduction

The availability of higher education implies the equality of opportunities for the receipt of higher education by the representatives of different social strata and groups, which differ in terms of socioeconomic status, cultural capital of the family, territorial, ethnic and gender beloning. However, in practice, there is a low level of opportunity to receive higher education for the representatives of various groups in Vietnam. According to the Vietnamese Statistical Service, the proportion of individuals with the completed higher education over the age of 15 years was 6.9% in 2015. This reflects the low level of higher education of the population, despite the needs of the information society (Dyachenko & Tsymbal, 2013; Brown, 2017).

Moreover, social inequality in the accessibility of higher education becomes the current issue in Vietnam. The education inequality index is 37.76 in Vietnam. This shows the differentiation between different groups of the population in access to social resources, including higher education in the developing countries (including in Vietnam). At the same time, the statistical service data show that 20.1% of the richest sections of the population have higher education, and only 0.4% - of the poor ones . Higher education remains less accessible to poor groups of the population in Vietnam. This is confirmed by the postulate that with increasing access to wealth, the chance of getting education increases, and social stratification (in this case, the differentiation of the economic status) creates inequality in access to higher education for people from different social strata. Thus, the differences in the education accessibility are determined not only by religion, class status, gender, race, financial, psychological features of children; contextual factors depending on the social environment; but by the socio-economic origin as well (Mobbalegh Naseri et al, 2018). At the same time, the social capital of the family is one of the important resources affecting the chance of receipt of higher education for the individuals from various social groups.

Hanifan L.J. analyzes the role of social capital in improving the education accessibility. The theory of social capital is studied

deeper by P. Bourdieu in his work "Types of Capital." He regards social capital as a collection of real or potential resources that are associated with the possession of a stable network of more or less institutionalized relations of mutual acquaintance and recognition, in other words, with the inclusion in a particular group (Villalobos Antunez, 2018). This theory is developed by J. Coleman in the monograph "Social and Human Capital". According to Coleman, the child gets access to the human capital of adults due to the social capital of the family. Social capital depends both on the physical presence of adults in the family, and on the measure of attention they give to the child. The physical absence of adults can be considered as the absence of structural elements in the family social capital. The most vivid example of the absence of the structure element in modern families is the existence of incomplete families. However, the complete families in which one or both parents are engaged outside their home can be considered as families with a broken structure lacking social capital. This is directly related to the presence of parents or other close relatives (grandparents, aunts and uncles) throughout the day within the household. Even when the adults are physically present, there may still be a lack of social capital in the family, if there is no strong relationships between children and parents. The absence of close relationships can arise from the child's ties to youth associations, from the parents' ties to other adults who do not contribute to the intersection of generations, or for other reasons. Regardless of the reason, this means: whatever the human capital of the parents is, the child does not benefit from this because there is no social capital.

The greater the relationships between parents and children, the degree of mutual contact, the involvement in joint activities, the children's interest in learning, the leisure activities are, the greater is the level of social capital in the family, the greater are the opportunities for learning and the subsequent career of family members.

The Vietnamese sociologists study the problem of social inequality in the system of higher education: the causes of social inequality in education, the education inequality in modern Vietnam, gender inequality in education (Kinsey, 1948; Maurice & Bowman, 2013; Fabrikant & Magun, 2014; Ocheretko, 2017; Marinkin, 2015).

Vu Hoang Linh, Le Viet Thuy and Giang Thanh Long, Phung Thi Kim Anh focus their attention on the demographic, socio-economic factors, parents' education and family income level (Kartseva, 2012).

Tran Thi Thai Ha and Ngo Thi Thanh Tung analyze the situation of rural youth in the aspect of orientation toward higher education (Gorodnyanskaya, 2016).

An analysis of the scientific literature on the study subject shows that there are no researches studying the influence of social capital parameters on the accessibility of higher education in Vietnam.

What is the role of social capital in the accessibility of higher education in Vietnam? What parameters of social capital do make influence on the accessibility of higher education for different social strata in Vietnam? All these and other questions will be answered in this paper.

# 2 Methodology

The study was conducted in 2016, using such methods as a questionnaire survey and an interview in Danang. Danang is one of the largest cities in Vietnam, the city's population amounts to more than a million. There are more than 10 universities in Danang, while the Danang University (DU) is the largest, in

which 55,000 students study in 212 specialties. In 2017 DU ranked 9th place among all universities in Vietnam and top 100 of all the universities (98th) in Southeast Asia.

The questionnaire survey of 1,000 Danang first-year students (Vietnam, Danang). It was supposed to investigate the students of those universities in which there are different faculties and specialties. The survey was conducted in 10 institutes of each university, where 100 students of both genders were randomly selected in an equal number. The sampling error does not exceed 5%. The data processing was performed in SPSS Statistics Version 20.

The number of interviewees was 15 first-year students of DU. One respondent was selected from each faculty of 15 profile specialties.

# 3 Results and Discussion

Social capital is embodied in the relationship existing between the family members, group members, and society and is inextricably linked with them. In this article, we consider the social capital of the family as consisting of the following main components: the relationships of children with parents, which are the main source of information and vocational guidance for their children;

the place of family residence;

the professional status of parents (the position of parents);

the composition and number of family members that reflect the links between generations in the family, as well as affect the possibility of admission to higher education and the successful training completion.

When enrolling in the university, an orientation toward children having an important role. According to the research, children receive information not only from the websites of the universities (48.2%), but also from such such information sources as "parents, relatives, acquaintances" (45.4%), "teachers" (35.4%), "friends, peers" (31.8%). While the information channels from the media (newspapers, television, and broadcast) and from the events held in the universities and schools take a non-specific place in the chieldren's orientation at admission to the institution. Thus, parents and teachers who have more inseparable relationships are the main information source when targeting children to the higher education (see Fig. 1).

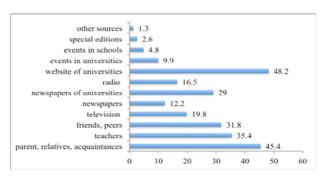


Fig1. The source of information obtained during the admission to the university, in %

However, the place of family residence is one of the factors that have a significant influence on the choice of the information source (see Table 1).

Table 1. Influences of information origin on admission to the university depending on the residential locations of the family, in %

The sources of information	provincial center	mean city	small city	town	rural, village
parent, relatives, acquaintances	46,7	48	39,5	43,4	36,7
teachers	36,4	33,7	43,4	30,1	36,7
friends, peers	30,1	34,4	30,3	29,2	35,4
television	15,8	17,6	20,3	22,1	22,6
newspapers	12,7	12,4	7,9	16,5	7,9
newspapers of universities	25,9	28,8	28,9	38,1	32,9
radio	7,6	15,6	17,7	18,3	21,1
website of universities	68,4	47,4	47,1	44,2	43
events in universities	16,8	10,5	9,3	5,3	3,8
events in schools	5,4	3,4	6,6	6,2	3,8
special editions	2	3,4	2,6	1,8	3,8
other sources	0,7	1,9	2,6	0	2,5

The analysis of dependence of the information source on the place of family residence of the students shows that, among the differences in obtaining information from children from different settlements, the biggest gap is observed between the regilanl centers and villages. Children who come from the rural areas used the information from the "websites of the universities" more often (difference of 25.4 percentage points); they took part in the "university events" less often than the students from the regional center (the gap was 13 percentage points). However, there is little difference in receiving information from parents, relatives, acquaintances, teachers, friends between children from different localities, especially between children from the regional centers, large cities and children from the villages and settlements. This means that the information receipt from the family members is of the greatest importance for children in

terms of vocational guidance and does not depend on the place of children residence.

One of the important factors of social capital is the family composition. According to the study, 87.6% of respondents from the complete families (father and mother), and only 12.4% of respondents from the families with no father or mother entered the university. Thus, the absence of one of the parents reduces the total volume of the family capital, including social capital, which significantly affects the educational opportunities of children.

The position of parents and the number of family members also reveal a certain social connection. (see Table 2).

Table 2. Correlation between the professional status of parents and the motives for access to higher education										
		family decision	your friends in university	solving the problem of employment	to make a professional career	guarantee of material prosperity and position in society	self- development and self- improvement			
the must essioned	Pearson Correlation	055	.030	008	.004	.005	022			
the professional status of mother	Sig. (2-talled)	.084	.337	.788	.894	.884	.481			
status of mother	N	1,000	1,000	1,000	1,000	1,000	1,000			
41	Pearson Correlation	.012	024	.035	.062*	035	.029			
the professional status of father	Sig. (2-talled)	.709	.444	.271	.049	.272	.363			
status of father	N	1,000	1,000	1,000	1,000	1,000	1,000			
* Correlation is significant at the level of 0.05 (2-tailed).										

Table 2. Correlation between the professional status of parents and the motives for access to higher education

According to the research, the professional status of the father (sig. = 0.049, r = 0.062) and the number of family members (sig. = 0.034, r = 0.067) correlate with the motives for obtaining higher education for children (solving the employment problem).

At the same time, the study materials show that the students who entered the university are more likely to come from families with the specialist parents (42.8% of respondents from the families with a specialist father). In addition, these studies show that 28% of students come from the families with a worker father. These data correlate with the interview results. To the question "How does the occupation of parents affect the accessibility of higher education for the applicants?", the student notes that it does not matter, but makes a reservation: "However, if parents work in the intellectual profession, they orient their children to their specialty". However, the worker and peasant parents also try to

orient their children to the higher education so that their children can live better and earn more. This is a typical setting for Vietnamese culture, suggesting that children, especially those belonging to the low-income families, should study diligently to end the status of the poor. On the other hand, the occupation of parents reflects the links between the parents and their children in a professional orientation, which is especially relevant for the families with high professional status.

The number of members in the family is seen as one of the significant factors of social capital that affect the children's enrollment in the university. The study results show that the average number of family members of the students enrolled is 4.54 people, including the spread of the number of family members from one (1%) to fourteen people (0.8%) (see Fig. 2).

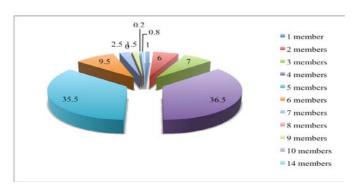


Fig 2. The proportion of students enrolled in the university, depending on the number of family members, in %

These studies show that mainly children from the families consisting of 4-5 people entered the university. So, the smaller the number of family membersis, the higher are the chances of enrolling the university. This is due to the fact that the parents are more able to communicate with their children in the small families and transfer their knowledge, experience, that is, social capital

Moreover, when enrolling in the university, the entrant faces many difficulties, such as: lack of opportunity to have additional classes, lack of information, lack of necessary educational literature, lack of money (for paying tutors, preparatory courses, etc.), etc. According to the survey, 8.3% of respondents come from the families of 7 people, which indicates a lack of money in these families, but only 4% of respondents from the families with 4 people have this difficulty; 20% of respondents from the families of 7 people do not have a computer, while only 8% of respondents from the families of 3 people have this difficulty. Thus, the students from the small families (the number of family members) have less difficulties than the students from the families with a large number of members. The less the number of family members is, the less difficulties face the students. Therefore, there are more opportunities to obtain higher

education in the families with fewer children. This determines, in particular, the choice of the forms of additional courses and the amount of costs for them.

The study materials show that if the children from large families (more than 7 people) attend classes in the schools (64% of respondents), then the children from small families choose additional courses with a tutor. For example, the share of respondents from the families of 4 people (14.3%) who took lessons with a tutor from a university was greater than the children from large families (0% of respondents from the families of 7 people). This is also reflected in the interview results. The student gives the following answer to the question "Does the number of your family members influence the accessibility of higher education?": "There are 8 people in my family, (including me), I has been taken extra courses at the school 3 times a week, which have been inexpensive. However, I have had such a problem. We live in the village, my parents are peasants, and I have helped them in the field works except for studying at school". That is, parents have enough money only for inexpensive courses for their children in large families.

The study showed that the number of family members correlates with the cost of additional courses in preparing children to enter the university (see Table 3).

Table 3. The spend of additional courses, depending on the number of family members, in%

The size of spend		The number of family members									Total
(VND)	1	2	3	4	5	6	7	9	10	14	Total
no spend	0	0.5	0	0.5	2.3	0	0	0.1	0	0	3.4
less than 1 million.	0	0	0	1	0.5	0	0	0	0	0	1.5
from 1.1 to 5 million.	0	1	0	5.5	7.4	0	0	0	0	0	13.9
from 5.1 to 10 million.	0.5	1.5	3.5	16.4	12.7	4.1	2	0.7	0.2	0.4	42
from 10.1 to 15 million.	0.5	2.	3	9.6	8.9	3.4	0.5	1	0	4	28.4
from 15.1 to 20 million.	0	0	0	0.2	2	0	0	1	0	0	0.5
more than 20 million.	0	0	0	0.3	0	0	0	0	0	0	0.3
difficult to answer	0	1	0.5	3	3	2	0	0.5	0	0	10
Total	1	6	7	36.5	35	9.5	2.5	1.5	2	8	100

The analysis data make it possible to judge that families of 4 to 5 members (16.4% of respondents and 12.7% of respondents) spend from 5.1 to 10 million for the additional courses more than other types of families, especially the families with a large number of children (0.7% of respondents from the family of 9 people). Thus, the smaller the number of family members is, the better are the conditions for providing children with the education (this concerns the costs for educational services). The parents can both influence the children in terms of career guidance, and invest in them to ensure preparation for exams. In this case, we believe that the economic capital of the family is converted into social capital and vice versa. Thus, it can be assumed that the less the number of family members is, the deeper are the relationship between the family members. In this case, the social capital of the family has a significant place in the strengthening of economic capital in the children's enrollment to the universities.

# 4 Conclusions and Summary

Thus, the social capital of the family, namely the education level of parents, the existence of close relationships with them is a significant factor at the stage of admission to the university. There is an inequality in access to the higher education between different social groups, depending on the educational status of parents (education level of parents, place of residence, number of family members). The higher the social capital of the family is, the greater is the possibility of entering the university.

The territorial differences are directly interrelated with the family status, its economic capital, but there is no difference in the degree of influence of parents on the professional orientation of entrants in terms of information resources.

The educational result in the secondary school, the father's occupation, the level of the mother's education, the number of family members, the income and place of family residence, the settlement type of the students are significant factors that have the greatest impact on the professional orientation of entrants, since they are the integral elements of social capital.

The families of students can contribute to ensuring the accessibility of higher education. To increase the chances of obtaining a higher education, the following can be recommended to parents and close relatives of applicants:

- To guarantee the financing of all learning processes at the school and university. You should be prepared for the fact that the costs of receiving educational services themselves, as well as related expenses, will become one of the main articles of the family budget.
- To actively look for the information about the universities, faculties, where children decide to enroll. This means that parents should formulate their opinion, which will be decisive for many entrants.
- To be interested in the child's difficulties arising in the learning process, in order to develop rational ways of

- influencing children, which will help to improve school and university performance.
- It is necessary to refrain from forcing children to choose a specialty, since this will significantly reduce the possibility of successful and effective socialization of the personalities of future students, and will also reduce the quality of higher education.

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# THE TASK OF PHILOSOPHY AND PROBLEM OF LANGUAGE

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Abstract: In article the question of how the problem of language becomes at the same time a problem of the beginning of philosophizing is considered. The essence and sources of a problematization of language in philosophy is analyzed. Ontologic prerequisites of interrelation of language and philosophy come to light. The problem of border of language and its expressive abilities is comprehended. The received theoretical conclusions are used for formulation of the purpose and a problem of philosophy, besides the special subject of philosophy is allocated. In particular the author draws a conclusion that the philosophy works not with ready knowledge, and with absent, in ontologic sense it means that the non-existence acts as a subject of philosophy. From the point of view of the author, need of philosophy results from the fact that it represents primary way of theoretical judgment of a problem before identification and a specification of a subject. Philosophizing as a special form of cognitive activity is carried out where there is no formulated question, the subject of asking yet. According to the author, the fundamental place of philosophy in formation of new knowledge is defined by it. Along with it the assumption that clearing of the place of language in an ontologic picture will help to clear the place and functions of philosophy in the course of cognitive activity becomes.

Keywords: philosophy, language, language borders, knowledge, inexpressibleness, life, non-existence.

# 1 Introduction

Before us all infinite space of language, the incalculable number of words is developed, and we choke in their uselessness. The expressive force of the human speech, but all not that is necessary for us, and we remain are mute. Unvoiced and with sure feeling of the importance. This twilight feeling of importance of a subject deprived of clear lines which we so far even not in forces to call.

Most likely, here the main enemy of expressiveness also is. To call what is the reason of the available experience there is already its expression. The name of a subject is failure to the covering uncertainty veil. All the rest, more, only the scrupulous description of the image grabbed in language. Here the question "what?" advances anything "why?", as the question of the reason cannot be put forward before a question of a subject. We need to know what calls us to the act of expression, to be exact the lack of what demands our expressive abilities, and only after in the slightest degree satisfactory answer to this question an opportunity to consider the reasons of why we were captured by the importance of this subject opens (Ferrer et al, 2015; Kuzminov et al, 2017).

However whether it is possible to call absence in general? Absence - here the suitable word for designation of expressive dissatisfaction. It can be understood as confidence in the available ambiguity, a lacuna, incompleteness. Let's note that such feeling is in essence esthetic experience. Eventually, unless art is not one of possible spheres of expression? How the clean canvas demands the artist's brush as a poetic line wishes a rhymed word, also and everyone philosophical (and scientific therefore hardly a mistake will call it generally - cognitive activity) a thought is eager to be added or rethought. Contemplation of incompleteness, absence and imperfection is test and a call to human abilities - to express what is not present, what is absent to create something new, thereby, to bring a non-existence to life.

Perceived something as the perfection assumes, first of all, completeness and integrity, but at the same time, the perfection is still the limitation closed in own borders completeness. Therefore the perfection is imperfect in the essence, owing to the limitation, and what is not complete, is not that by definition. Perfect is present being absent, very not achieved objectives as experience of dissatisfaction and discrepancy. The aspiration to fill available gaps represents infinite aspiration to the absent ideal. What is finished with imperfectly own limitation it is external emptiness and defect of own borders. The perfect

completeness of music note forces and demands a new sound by means of which the melodious sequence going to infinity is created. Inexhaustibility of a non-existence and absence provides infinity of creative obsession of the person (Safiullin et al, 2017; Jonassen et al, 1999).

So philosophizing - begins with the suffocating shortage of words, with attempt to express the absent life. Practically at the very end of the *Logic and Philosophy* treatise Wittgenstein writes: ... every time when someone would like to state something metaphysical, to prove to it that it did not allocate with value certain signs of the offers. The impossibility of value is also that shortage of proper words in infinite number of improper here. The senselessness of each word does not speak about need to reject metaphysics, no, it speaks about infinite incompleteness of any metaphysics. The person metaphysically the fateful being sentenced to the eternal use of palliatives and ersatz. The escaping sense and the renewing incompleteness torments a patrimonial damnation of the person who opened in himself a consciousness gift (Gafurov et al, 2011; Altbach & Salmi, 2011).

#### 2 Methodology

Here we dare to approve need of metaphysics and philosophy. Climbing up a ladder of positive statements, at some moment steadily there is an abyss testifying to the end of a firm support of intelligent and unshakable statements. The next step is absent, and feet ascending helplessly feel emptiness - reliable knowledge ran low, but it is not exhausted at all. From where such confidence? How can we know that emptiness it not normal and not natural state of human knowledge? Just as in process of the eminence air becomes discharged, and feeling of suffocation a legal consequence of rise, and inexpressibleness dumbness, perhaps, there is the unique final of knowledge. Possibly, it is required to learn not to breathe and to understand without an opportunity and desire to invest this understanding with an improper cover of words? Silence then would matter refusal of senseless sound extraction, reconciliation about limitation of own expressive forces. If something does not give in to the image, then there is only a silent contemplation. If the idea cannot be transmitted by a strict positive statement, then the only exit - to stop in over-rational understanding, in other words, learning gets to the area of irrational and intuitive consciousness in which the subject considerably surpasses any expressional

If to assume that the situation is quite so, then the original wisdom appears as ability to be silent about inexpressible. Again Wittgenstein: About what it is impossible to speak, about that it is necessary to be silent. There is something about what it would only be necessary to be silent. The wisdom does not utter metaphysical nonsense, she majestically is silent, like a sphinx, keeping a secret of own helplessness. Therefore the fair share of nonsense is required to be engaged in metaphysics. And as often happens, near nonsense the bravery walks. We need rollicking, impetuous courage to make philosophizing. Without it the metaphysics is dead, it is silently powerless and is content with a non-existence. The clever metaphysicist Wittgenstein too well understood it (Zimmerman, 2008).

# 3 Results and discussion

Philosophy not an essence what conducts us to inexpressible, but that work which is made in the field of not expressed. Philosophy not a ladder which we reject, having reached a limit of own understanding, but creation and finding of new steps. This rushed forth understanding preceding emergence of knowledge. To philosophize means to create knowledge from nothing, in lack of knowledge to create the ideas which can become a reliable support for learning subsequently? For this reason we say that the metaphysics is inexhaustible since the non-existence is inexhaustible and that philosophizing is carried out as work with the absent knowledge. For this purpose courage and madness going on an edge of steep in complete darkness is required. Facing inexpressible, not to agree and not to be

reconciled with the covering dumbness - here that we believe for philosophy and metaphysics. In it there is a lot from spirit of the pioneers conducted by exclusively human feeling of reckless curiosity contrary to personal security. Silence means refusal of philosophizing here if something can be expressed as we cannot give in to this temptation (Buckingham, 2003).

Non-existence inexpressible here, but not expressed - absence to which we are attracted by esthetic sense of novelty and curiosity. Danger will be here that this distinction can remain implicit and then can seem that from philosophizing as a specific way of expression any to use, and better really to reject any metaphysics or to stop in contemplation of emptiness. Despite external similarity, absence not a clean non-existence since it assumes life in an opportunity, otherwise, it something that is not present while a non-existence - nothing which is essentially inexpressible, irrespective of ongoing efforts. The absence hides under the guise of a non-existence, and a task of the philosopher to define absent, i.e. to allocate it from a non-existence with effort of own mind therefore everyone who reaches this border present and whom the dissatisfaction attracts further involuntarily dresses clothes of philosophizing. Any sphere of human activity can overcome the limitation only by means of the metaphysical tool. The philosophy is a reflection on empty, but vacant, the place where there is yet no way, but which could be created. It is search and finding of a way (Eisenstadt & Roniger,

We began with suffocating feeling of shortage of suitable means of expression. This feeling was defined as metaphysical obsession in which basis the intuitive tendency to novelty. related to experience of esthetic dissatisfaction lies. Moreover, by us it was claimed that this choking expressiveness and is original metaphysics which constantly renews itself on limits of already expressed knowledge that provides universal character of philosophy. Repeating, one may say, that the pioneer and the pioneer always the philosopher seeking for borders existing and described. The philosophy purpose - expression of the absent knowledge, a philosophy subject - a non-existence, its task separation of the first from the second, for the satisfactory description of life (remembering the renewing character of metaphysics). Therefore we do not agree that the philosophy can be rejected as if a ladder, on border expressed, on the contrary, on this border it only is feasible, finding the need, like air at big height here. Owing to this fact, the philosopher cannot be content with silent contemplation of limits of being explicit. Nobody can know he faced inexplicit or rested against a barrier of own expressive abilities. Nothing else remains, except fearless immersion in depths of a non-existence and absence in which learning tests own strength (Timofeeva et al, 2017).

It is undoubted that for metaphysicists the words are the main instrument of expression. Of course, the thought or the idea can be expressed by action or other symbolical act, nevertheless, all this can be considered as language elements in a broad sense which is dictated by expansion of narrow understanding of verbal language forms. Therefore it is more convenient to consider essence of metaphysical expressiveness, having concentrated attention in words and names. The intelligent word which is most fully expressing certain thought, one of the biggest values for philosophizing. At the same time, we have yet no full understanding of as far as language in the essence is metaphysical.

Inevitable metaphysical nature of human nature puts need of emergence of language. In turn, language as a metaphysical trap pushes out the person in space of philosophical judgment of the world on means of conscientious attitude to words and other expressive forms. In other words, the person, using means of expression, uses fruits of philosophical activity, being involuntarily involved in the field of metaphysics, whether it be it is active, comprehending an expression subject, or it is passive, using ready words and symbols. Resorting to tools of language, the person already appears in the field of philosophical thought, he realizes it or not.

We believe that emergence of word per se is a result of that work of the philosophizing mind in the field of a non-existence about which we spoke earlier. A word an essence created something from nothing (a creationism doctrine in a positive form - creation of everything from nothing by means of a word). For this reason, we insist that the problem of essence of a word is basic for philosophy. To understand how the thought is present at a word, it is required to explain the designating force of names, i.e. to show as words designate objects what objects are and as philosophizing participates in it. With it we pass to reasoning on the nature and essence of words.

With special diligence peering at the nature and essence of words, we can find out that they also are a product of collision of the person with a non-existence. Let's try to clear it.

At a glance on language, apparently, those words have to serve in it as names of objects. To each name there has to correspond the subject of the outside world. However it is only partly right as some words do not require existence of the designated object at all. Between language and the world there is no ontologic determination. The ideal structure of language does not generate objects, and things do not pledge us the word for own designation. The bottomless abyss divides the ideal and material worlds, and the name to this chasm which we already mentioned, is an *absent subject*. We are convinced that such subject has absolutely special ontologic characteristics.

# 4 Conclusions

Thus, as language as we showed, is attempt to express, grab absent and nonexistent, communication of emergence of a word and the act of philosophizing which is attempt to think outside the present knowledge becomes obvious here. Facing the absence, the person in every way tries to comprehend and express it, i.e. to define what lacks that acts as a contradiction of a white spot on a cloth of human knowledge. It seems to us that process of knowledge and represents transition from absence to being. The philosophy is a definition and naming of knowledge nonexistent so far. Therefore philosophical work represents search of words for absent objects, judgment not existing yet, but possible. It is no wonder that search of an exact and suitable word turns into back-breaking toil. But as it seems to us, in this constant aspiration to overcome borders of language and consecutive and methodical philosophical work has to consist.

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#### GR-TECHNOLOGIES FOR CONFLICT RESOLUTION IN BUSINESS AREAS

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Abstract: In this paper, we consider the concept and practices of GR technologies, as well as the effectiveness of their use in resolving conflicts in the business sphere. For the complex study, the focus group method was applied, which helped to identify the spectrum of opinions on the problem under study. The effectiveness of focus groups is determined by the fact that most people feel comfortable if they are involved in the discussion as part of the group. In four cities of the Republic of Tatarstan, a project was implemented, the main objectives of which were: estimation of the quality of subjects / actors and the development of public institutions / mechanisms; public policy effectiveness estimation, dialogue with power, intersectoral social partnership in addressing socially significant problems; formation of appropriate recommendations for management. The project was implemented through a survey with the calculation of the corresponding consolidation index. At the public level, the public policy estimation index consisted of two elements: an index of the development of actors and actors and an index of the state of institutions and mechanisms. The consolidation criterion is determined by the numerical index: if the difference on the indicators between the surveyed groups is less than 0.1 - the opinions are consolidated, if more than 0.1 they are not consolidated, more than 0.2 - unconsolidated gap. The project involved three groups of respondents: government (representative bodies: municipal employees and deputies); business (owners and employees: small and medium business); non-profit-making organizations (managers and employees of the organizations (without volunteers)). Based on the results of this survey, focus groups interviews were held in all four cities with the participation of representatives of business, government and non-profit-making organizations. Representatives of the three groups, as direct participants in the interaction, interpreted the poll results from their point of view.

Keywords: GR technologies, focus group, business, power, non-profit-making organizations, consolidation

# 1 Introduction

The presence of conflicts in the business segment today is beyond doubt. The competitive nature of the relationship invariably entails a confrontation of business interests. The practice of studying and overcoming conflicts is sufficient in the economic, sociological, and political sciences. Public policy has a strong impact on business, so it is in the interest of business to stay informed and try to influence the adoption of government decisions and public policy (Villalobos Antúnez & Bozo, 2010). But, also as changes in power, they influence on interested groups that act as a weathervane to determine the location of power in society (Karpanina et al, 2018). However, it is obvious that the communication component should act as a tool for "treating" such conflicts, as successful communication in modern society underlies its conflict-free existence. From this point of view, the relevance of new directions in the development of communicative practices in the interaction of the state and GR civil structures from the perspective of their conflictology science. For example, in Europe the use of such GR technologies as strategic forums, advisory committees, expert groups, etc. led to the emergence of a new European lobbying system characterized by direct lobbying, transparency and trust (Vannoi, 2011).

The relevance of the topic is also conditioned by a number of circumstances: firstly, the appearance in the post-Soviet period of business structures, which, as they develop, increasingly need cooperation with state authorities, with the goal of harmonizing and institutionalizing their interaction. Secondly, the global financial and economic crisis made significant adjustments to the country's development prospects, affecting all areas of the Russian economy. In these conditions, the role of the state in providing them with the necessary financial and other types of assistance was required. Thirdly, in connection with the emergence of new forms of communication between the business community and government in Russia which are known in the world practice as Government Relations (GR). Fourth, the growing demand for GR in Russia is precisely the business community, which is the most vulnerable by nature to all types of risk. Fifth, the need for a more in-depth study of the essence and content of GR-activity, which is a combination of

technologies that allow achieving a pre-set goal, and compare them with such already known technologies in Russia as lobbying, public relations, etc (Kotiev, 2010).

The purpose of the study is to determine the effectiveness of GR technologies in resolving conflicts in the business sphere.

To achieve the stated goal, it will be necessary to solve the following tasks: to analyze GR concepts and practices as technologies in the world social and political thought and from the point of view of conflictology; to study the technologies and practices of individual sciences in the study of GR problems; to highlight the complex conflictological methodology for studying the applicability of GR technologies in the business sphere; conduct a case analysis of the situation of the crisis in the banking sector; and then identify GR technologies in resolving bank conflicts in the Republic of Tatarstan.

The theoretical basis of the study was the work of domestic and foreign economists, sociologists, political scientists and conflictologists devoted to the problems of interaction between the state and the business sphere, GR technologies and their implementation in various countries.

The methodological basis of the research is presented by an interdisciplinary, integrated approach that unites the provisions of dialectical, logical-historical and structural-functional analysis, allowing power and business to examine in the process of their interaction. In the study of GR, as technologies for resolving conflicts in the business sphere, the authors are based on the management and communication approaches to studying the links between business and public authorities.

The work is not only theoretical but also applied. The study was conducted using content analysis, analysis of secondary data and focus groups.

For the first time on the basis of the conducted research, the position on the role and effectiveness of GR as technologies for resolving conflicts in the business sphere as a whole was put forward and justified. For the first time, the interaction between business and government is studied within the framework of research in the Republic of Tatarstan.

#### 2 Methodology

In the work, three main methods were used: content analysis, analysis of secondary data and focus groups. Thanks to the first two methods, it was possible to identify the theoretical and methodological features of GR technologies. Analysis of various interpretations of the term "GR" allowed its content to determine: the formation of mutual trust between business and state authorities for obtaining both a mutually beneficial and socially useful result.

The third method made it possible to determine the effectiveness of using GR technologies in the practice of resolving conflicts in the business sphere, what can contribute to setting up effective communications between the authorities and business community and increasing the level of trust to each other.

# 3 Results

In the course of the study, it was revealed that all business estimations were nested in non-profit-making organization estimations, and non-profit-making organization estimations were nested in government estimations. It happens because the business is more critical, realistic and estranged. Today, the task is to raise the level of confidence among entrepreneurs. Accordingly, this can be done with the help of technologies such as GR; they help to set up effective communications between the authorities and business and increase the level of trust. Estimations for non-profit-making organization are closer to the authorities' estimations, perhaps because they depend more on it than on business. As in the Russian Federation in general, and in

particular in the region, non-profit-making organizations have not yet taken root. The initiative in terms of their budgeting is shown to a greater extent by the state, since there is an item of expenditure allocated to non-profit-making organizations in the budget. We can conclude that such a GR-technology as a focus group worked perfectly, it allowed into an open dialogue with representatives of business, authorities and non-profit-making organizations to enter and to find solutions to certain problems.

It is interesting that the participants in focus groups were surprised at the bulk of survey results: their opinions differed from the opinion of the respondents. The majority expressed doubts about the quality of the quantitative study. This doubt can be considered in two ways: 1) a group of researchers did not work qualitatively; 2) different target groups were interviewed. Most likely, this is due to the fact that the community is differentiated, that is, participants in the focus group can act both in the interests of the authorities, and purely in their personal interests.

#### 4 Summary

To compare the results, to find the deviations of results of this study from previous works is not possible, since such a study was conducted in the Republic of Tatarstan for the first time. Based on it, the statement on the role and effectiveness of GR as technologies for resolving conflicts in the business sphere as a whole was put forward and justified.

Practical significance consists in applicability of the developed analysis mechanisms to practice in any region of the Russian Federation, and in transformation of the results of this work into the component part of the master's course "Corporate Conflict Management".

#### 5 Conclusion

Modernization of business structures, transformation of government bodies, and development of public representative institutions - all these factors determine the improvement of communication mechanisms between these social groups. In the modern world, new technologies, for example, GR, lobbyism, etc., come to replace the ways of the last century which were used for promoting somebody's interests. They differ significantly from the methods used in the 90s of the 20th century, for which criminal and corrupt connections between power and business were typical. The distinctive features of modern methods are publicity in the conduct of a dialogue between government and business, the wide involvement of business and public non-profit-making organizations in the formulation of state policy in various spheres, the reduction of the role of direct contacts (the so-called "corridor lobbyism"), the use of indirect technologies of influence (working with public opinion, lobbying, grass-roots, communication with the media community), etc. These transformations have served as the reason for the creation and institutionalization of a new structure responsible for the interaction between business and state - Government Relations (GR) (Kinyakin & Matveenkov, 2009).

The main stages and technologies of GR-activity were determined. The history of creation, its development and gradual expansion, together with coverage in the media, is one of the necessary aspects of GR, due to which it is possible to achieve greater effect than with "encounters in the corridor" that have been committed to the moment (Achkasova, 2015).

Analysis of various interpretations of the term "GR" allowed its content to determine: the formation of mutual trust between business community and government authorities to obtain both a mutually beneficial and socially useful result (Chernoskutova, 2016). It was revealed that the concepts of lobbyism and GR are similar, but not identical. B. Woolp believes that "the significant difference between internal GR specialists and contracted professionals (lobbyists) is that employees of a corporation receive salaries and represent only one organization which is their employer. A corporate GR specialist often climbs the

corporate ladder: the marketing department, the sales department, the head office, and contract lobbyists push their way within the authorities" (Wolpe & Levine, 1996)

Subjects (corporations, non-profit-making organizations, business associations, professional agencies, etc.), stages (monitoring, strategy and tactics, control of implementation), and GR-activity technologies (impact on decision-makers through expert community, media-relations, technology implementation of corporate social responsibility programs, support for political activities, political fundraising, etc.) have been determined also (Achkasova, 2015).

Interested groups rely on a wide range of tactics to influence public policy. They can unite with other like-minded people, use institutional centers at several levels of management, various types of arguments and information. GR-activities include many tactics or actions that serve together to specific political purposes (Binderkrantz, 2005).

One can confidently say that the consistent alignment of effective communication with state authorities differs from backstage lobbyism primarily in its openness. The creation of history, its development and gradual expansion, together with coverage in the media, is one of the necessary aspects of GR, thanks to which it is possible to achieve greater effect than with "encounters in the corridor" that have been committed to the moment.

Since the emergence of business community as an independent actor in the political field of the country, the issue of its interaction with the authorities is most often considered in conflict discourse. Throughout all modern Russian history, during the period of transit from one political-economic system to another, the relations between power and business have always been characterized by a significant level of tension and a repeated shift of the balance of power in one direction or the other (Ivanovich, 2013). Today, like the entire society, Russian entrepreneurship faces a choice between comprehensive modernization through market mechanisms and adaptation to the realities of the emerging authoritarian-bureaucratic system. Therefore, the task of studying the conflicts of interests between business community and power as a process that plays an essential role in the socio-political reality of modern Russia is now being actualized. Considering the relationship between business community and government as a conflict of interests is also necessary because in the process of interaction the parties demonstrate differences in value orientations and attitudes, goals and methods for achieving them, express political preferences and state claims of an imperious nature. It is precisely the analysis of the relationship between the power and business community structures as a conflict of interests taking place within the framework of existing institutions that allows us to assess the possibility of moving to civilized conflict with the building of interaction in the consultation mode, using mediation and arbitration, and GR technologies. It was revealed that GR technologies are universal methods, as they can be used in conflict prevention, regulation, and resolution. At each stage, certain GR technologies are applied, and all of them, with the exception of unethical ones, contribute to the normalization of relations and the adjustment of effective communications.

Proceeding from the GR multidimensionality, its interrelation with various branches of science is obvious, as well as the term 'representation of interests' which also has no restriction on specific areas. At the same time, based on the branch of science, from the perspective of which GR is studied, the vision of not only its separate aspects, but also the idea of the phenomenon as a whole depends.

Direct connection of GR with such branches as: politics, economics, management, communication, media, law and others, allows us to explore GR from alternative positions. In contrast to the developed countries (USA, Canada, EU), which has formed a complete system of interaction between government and business, relationship between business and

government in Russia is at an early stage of formation. Effective formation is hampered by many factors and, above all, by the fact that in Russia this sphere of activity is not legally consolidated. Negative attitude of Russian society towards lobbying (with its identification by analogy with such methods as blackmail, pressure and corruption) negatively affects the attitude to GR- activity. Therefore, not only the state authorities need to recognize the inevitability of lobbying and GR technologies in the country, but society, too.

It is necessary to collect information not by mass survey, but by focus groups for a comprehensive study of the applicability of GR technologies in the business sphere. Focus groups contribute to the identification of a range of opinions on the problem under study. The focus group method as a form of group interview allows interests, values, conscious and unconscious attitudes of various groups to reveal. A focus group can be viewed not only as a method of research and information gathering, but also as GR technology, thanks to which representatives of government structures and business sphere can meet one another at one site, where they can enter into a dialogue, identify common problems and develop methods from permission.

The project was implemented in four cities of the Republic of Tatarstan: Naberezhnye Chelny, Nizhnekamsk, Almetyevsk, and Kazan, by conducting a survey, with the calculation of the corresponding consolidation index. Based on the results of the survey, focus groups were held in the same cities with the participation of representatives of business, government and non-profit-making organizations. Representatives of the three groups, as being direct participants in the interaction, interpreted the poll results from their point of view. It is interesting that the bulk of survey results surprised participants in focus groups: their opinions differed from the opinion of the respondents. Common to all cities was that all business estimations are nested in non-profit-making organization estimations, and non-profitmaking organization estimates are nested in government estimations. It happens because the business is more critical, realistic and estranged. Today, the task is to raise the level of confidence among entrepreneurs. Accordingly, this can be done with the help of technologies such as GR, they help to set up effective communications between the authorities and business and increase the level of trust. Non-profit-making organization estimates are closer to the authorities' estimates, perhaps because they depend more on it than on business. As in the Russian Federation in general, and in particular in the region, non-profitmaking organizations have not yet taken root. The initiative in terms of their budgeting is shown to a greater extent by the state, since there is an item of expenditures allocated to non-profitmaking organizations in the state or regional budgets. We can conclude that such a GR-technology as a focus group worked perfectly, it allowed into an open dialogue to enter with representatives of business, authorities and non-profit-making organizations and find solutions to certain problems.

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# THE MODERN PHENOMENON OF DRUG ADDICTION IN THE PERSPECTIVE OF SOCIOLOGICAL CONCEPTS

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Abstract: Dynamism of modern social and economic, political processes in Russia, a crisis situation in various areas of social life promote growth of deviations among which and practice of consumption of narcotic substances. Studying of a modern phenomenon of a drug addiction is impossible without the appeal to fundamental categories of sociological science, without definition of theoretical approaches for an explanation of the reasons, drug addiction consequences. The drug addiction phenomenon research methodology presented in this article is based on integration of the fundamental theoretical principles of sociology of deviant behavior and the functionalistic analysis. For the analysis of obvious, latent functions of a drug addiction, its dysfunctional consequences structurally functional approach became necessary. In the theory-methodological analysis sociological concepts of deviance, an anomy, stigma, and social exclusion were important. In article concepts of a drug addiction, various properties of its categorical field allowing speaking about variety of manifestations of this phenomenon are analyzed. The phenomenon of a drug addiction is presented in this text as manifestations in real acts, in activity as result of symbolical determination of deviant behavior by subjects of social actions. The carried-out analysis allowed authors to define a modern phenomenon of a drug addiction as the difficult phenomenon which is expressed in deviant practicians of narcoconsumption and exposed to social control.

Keywords: drug addiction phenomenon, functionalistic analysis, deviance, anomy, stigma, exclusion.

#### 1 Introduction

The social phenomena, processes and problems happening in society are comprehended in a different way: by studying social institutes, systems of ideas, ways of production, forms of art and situations of daily interaction. Social phenomena, processes and problems occurring in society, are learned in different ways: studying social institutions, systems of ideas, modes of production, forms of art, situation of everyday interaction. As a methodological basis for the study of the phenomenon of drug addiction, unifying methodology based on functional analysis and the sociology of deviant behavior was chosen.

In the process of development society takes new shapes and structures and produces various forms of deviant behavior. There are three components of deviance: an individual having a certain type of behavior; norm acting as a measure of assessment of deviant practices; another person, group and institution reacting to a deviation. On the one hand, deviance is expressed in behavioral acts and activity; on the other hand it is a social construction, product of the process of symbolic determination of deviant behavior by the subjects of social action. Deviant behavior leads to positive and negative consequences: deviant positive - geniuses, creators, contributing to progress; negative deviants are people who destroy their deviant behavior by physical or moral health, creating threats and problems to others (Komlev, 2014). Drug use is behavior that is condemned by society and entails sanctions. The focus of most researchers is negative deviance, scale and differentiation of which in the form of crime, drug addiction, alcoholism, suicidal behavior, prostitution, gambling, phreak - an urgent world social problem.

To determine the semantic meaning of the concept of drug addiction were undertaken by many authors. For example, expanded definition of drug addiction, which underlines the mutual influence of various spheres, aspects, consequences, constructing the content of the phenomenon, E. Gasanov (Gasanov, 2009). "Drug addiction is a negative social phenomenon that includes social, legal, criminological, economic, biological and environmental aspects that affect the social, legal, criminological, economic, biological and

environmental spheres, respectively, characterized by a high degree of public danger, expressed in the incidence of drug addiction, causing harm to the health of consumers of narcotic drugs and a set of unlawful acts related to drugs or committed with a view to obtaining funds for the subsequent acquisition of drugs or in the state of drug intoxication, among which crimes related to drugs form an independent type of crime - drug crime, and the organization of the latter, which turned the most dangerous part of drug crime into a kind of organized crime". Important characteristics of the phenomenon, in our view, reflect a definition that simultaneously includes its social and epidemiological aspects, according to which narcotics are "social phenomenon, expressed in a relatively widespread, statistically stable consumption of a part of the population of narcotic (or other toxic, illegal psychotropic) means, entailing certain medical (incidence of drug addiction) and social consequences" (Gilinsky et al, 2001; Metlenkov, 2018).

Thus, based on the fact that the phenomenon of drug addiction (which is one of the objects of deviantology) is a social construct that includes deviance, causality, functional manifestations and social consequences, mass character, and also on the social signs of the phenomenon fixed in the above definitions, we came to the following conclusion. Drug addiction should be viewed systematically, as a complex statistically stable social phenomenon (associated with a set of antisocial actions), manifested in deviant practices of drug use and subject to social control.

# 2 Methodology

The methodology of this article is based on the integration of the fundamental theoretical principles of the sociology of deviant behavior and structural functionalism. In the study of explicit, latent functions of narcotics, its dysfunctional consequences, structural-functional approach of R. Merton became necessary. Important in the theoretical and methodological analysis were the sociological concept of deviance of J. Gilinsky, J. Komlev, anomaly E. Durkheim, R. Merton. Also methodologically valuable for the sociological interpretation of the sources and consequences of modern narcotics are the theories of stigmatization of I. Hoffmann, modern concepts of social inequality and exclusion.

## 3 Results and Discussion

The methodology of studying the structure and functions of the phenomenon of drug addiction was based on the structuralfunctional approach of R. Merton. According to him, in the center of functional research is a social structure, which consists of four criteria: 1) focus on relationships that link different components of society; 2) emphasis on the repetitive nature of the relationship; 3) a composite criterion of social structure - the concept of a deep, hidden, basic level (the concept of latent functions); 4) idea of a deterrent effect on Real social phenomena (behavior, beliefs, motivations). Functionalism is defined by the complex concept of "functionality", according to which the interrelation of society and individual parts is provided by various and specific functions that can be observed and repeatedly repeated in specific objects and facts. The methodological tool for observation and study of functions is proposed by R. Merton in the form of a "medium-range theory": "theory located in an intermediate space between private but also necessary working hypotheses, in a multitude of emerging in the course of everyday research, and all-inclusive systematic attempts to develop a unified theory that will explain all the observed types of social behavior, social organizations and social changes" (Merton, 1968). For the analysis of narcotics and its consequences, functionalist theory that explains the properties of social structures through their investments in preserving the social system becomes important. R. Merton defines the functions as follows: these are such notable consequences that contribute to adaptation or adaptation of the system (Merton,

1936). Institutions, structures cannot only promote the preservation of other parts of the social system, but also have negative consequences for them (Rittser, 2003). R. Merton also adds the category of "sociological ambivalence", which means that some form that performs positive functions can play a dysfunctional role in the same system. For example, existence of the problem of narcotics is functional in terms of the formation of demand and jobs in centers, clinics to combat drug addiction. However, such consequences are dysfunctional for drug users, authorities, and society as a whole.

R. Merton belongs to the distinction between the concepts of "explicit and latent functions" that determine the direction of functional analysis. Explicit functions have a deliberate intentional character; latent functions are unintentional (Merton, 1996). These ideas are combined with the Merton concept of unforeseen consequences. According to R. Merton, latent function is a kind of unintended consequence having for a certain system a functional character. To detect unintended consequences, it is necessary to conduct a sociological analysis. So, we systematize the consequences of narcotics for drug users, society. Drug addiction performs a number of functions. The obvious functional consequences of narcotics for a drug user include: finding him pleasure, relieving stress, stress, possibility of avoiding domestic, social disorder, facilitating communication processes, desire to be included in a certain group. The latent consequences of narcotics are imperceptible for consuming drugs, for example, need for large financial costs of paying for drugs that cause material instability. And such unforeseen consequences are dysfunctional for drug users.

Among the latent consequences for the drug user is the emergence of legal risk. Drug addicts gradually stop going to study, work, and ready to even steal for the exchange stolen on drugs. In the aftermath of drug abuse - dysfunctional concomitant diseases and accidents, premature deaths, the common cause of death is an overdose, although there is a risk of death from a lack of dose. For society as a whole, drug abuse also has such dysfunctional consequences as the need for additional resources, for example: content of the criminal justice system, fight against drug trafficking, and other drug-related crimes; formation of a national system for the comprehensive rehabilitation and resocialization of drug users. The unintended consequences of narcotics are multifaceted in the sphere of medicine, health (Haffajee & Mello, 2017). In connection with its spread in society, growth of such "social" diseases as HIV, AIDS, and associated infections can be traced. In addition, it can be said that narcotics destabilizes the structure of the health system as a whole, contributing to the diversion of the resources and resources necessary for the treatment and rehabilitation of drug addicts. Thus, consequences of drug consumption are: social risk (associated with the inability to adequately fulfill social, including family, educational, professional functions), health risks, financial and legal risks. All these risky consequences are confirmed, reflected in numerous real stories from the life of "former drug users" (Mead et al, 2011).

As you know, narcotics is one of the objects (along with various crimes, dependencies, deviations) deviantology. People sometimes deviate from the accepted rules, norms, falling under the category of deviants. Let us analyze the phenomenon of drug addiction in the context of concepts of deviance and anomie. Deviant behavior can be defined as behavior deviating from the accepted, socially acceptable one in certain society. A number of St. Petersburg researchers point out the deviantologic consumption which is multiplied today (Belousov et al, 2010), and which shows in the absorption of deviations by the norm. Studying the phenomenon of drug addiction, authors reason that its existence is not determined by political and economic structures as drug addiction is present in economically developed countries and in less developed countries with absolutely different political systems. Researchers prove empirically that drug addiction does not depend on social and material status. The results of the research show that crime rates do not correspond to the level of material security but to the size and sharpness of inequality in security. The concept of exclusion

characterizes the persons who have happened to be on the roadside of economic progress. The exclusion occurs gradually by accumulation of difficulties, break of social binds, disqualification and the crisis of identity. As Y. Gilinsky notes, excluded are the ones who make a social base of deviations among which there is drug addiction (Gilinsky, 2004). Exclusion is a disadvantage from the point of view of education, qualifications, employment, financial and housing resources. Drug addiction can be a result of social exclusion (Zaslavskaya, 2002; Villalobos Antúnez, 2015). And the main reason for involvement in drug addiction according to the semantic approach is the loss, deformation of the system of the person's meaning-forming values, its life-affirming meanings.

Drug addiction is also a kind of anomy. E. Durkheim believed that the anomy showing in deviant behavior is a mismatch within the world of values, shaking of basic values and moral standards and confusion of the legal/illegal. The author saw the sociology task in establishing the normal through identifying deviant behavior which points out what is considered normal by everyone and results in sanctions (Durkheim, 1995). Developing Durkheim's concept of anomy, R. Merton (Coser & Stein, 1977) defined it as a symptom of inconsistency between the aspirations determined by the culture and socially organized devices and ways to meet them. Some individuals are not able to act in compliance with standard values precisely because of their position in social structure. This imbalance can result in deviant behavior in the form of drug addiction as a behavioral reaction to anomy. R. Merton formulated five ways of individual's adaptation to the conditions existing in a group or society. They are conformism, innovation, ritualism, retreatism, rebellion. Narcoconsumption can be considered a version of adaptation to anomic situations. It can be a temporary innovative and renovating activity for some persons and leaving society for narcotic practices for others. All this is expressed in deviant selfdetermination, deviant career, leading to the social isolation which makes the probability of additional deviance even higher. The researchers from the Sector of the Sociology of Deviance and Social Control (The Center of a Deviantology) in Sociological Institute of RAS view drug addiction as one of the forms of retreatist behavior in the conditions of anomy when a person rejects both the aims and the socially approved means of their achievement at the same time.

It is also necessary to dwell on such kind of deviant behavior as addictive behavior i.e. behavior deviating from the generally accepted standards and rules, caused by a mental disease or a social attitudes of the subject, doing harm to people around and (or) subject themselves. The narcodirected behavior as one of the types of addictive behavior shows, first of all, as obsession and aspiration to escape from reality by artificial change of the mental state by means of using psychoactive substances (Begun, 1976). The phenomenon of drug addiction as a form of deviant behavior can be also comprehended from the point of view of the concept of gluing labels, branding, which enables considering the phenomenon of drug addiction through the concept of identification. I. Goffman noted that "society establishes ways of categorizing people and determines a set of qualities which are considered normal and natural for each of the categories. When meeting a stranger the first impression of his or her appearance enables us referring him or her to this or that category and determining their qualities, i.e. "social identity" (Travers, 1994). In a society where the norm of nonconsumption of psychoactive substances is dominant, culture of a healthy lifestyle and the legitimacy of the anti-drug activity, people who violate the relevant norms, principles, rules, can some extent be stigmatized.

Stigmatization, transmission of negative attitudes towards drug addicts, promotes the development of a "culture of fear" in society. Fear is capable of disarming people, causing panic and disorganization and acting as a factor accelerating negative processes and strengthening the current problems and dangers (Sargeant & Faugier, 1997). However, an active reaction to fear shows not only in destructive, but also in constructive behavior. The pragmatic approach to the fear (Matveeva & Shlyapentokh,

2000). accentuates the search for social forces that could contribute to strengthening positive processes in society, improving the survival of people, ability to confront problems. And fear can be seen as a restraining beginning, formed under the influence of various factors, which persists as a significant element of the emotional background of social life. In fact, activities to educate, prevent drug problems, inform about the consequences of drug use are examples of ways to prepare people for a constructive response to stress situations, moral panics. Thus, concept of stigmatization allows one to interpret deviation as a process of interaction between people with deviation and without it and to focus attention on the effects created by social institutions when classifying drug use practices as deviant.

#### 4 Summary

The theoretical and methodological basis for investigating the phenomenon of drug addiction has become a unifying methodology that integrates several sociological concepts. The firstly, it concerns the functionalist concept of R. Merton, which opened up the possibility of interpreting the functional manifestations of the phenomenon of drug addiction. The approaches of the sociology of deviant behavior, anomies that promote understanding of drug addiction: as manifestations in real activity and the result of the symbolic definition of deviance by the subjects of social actions became necessary; as a social structure, including deviance (systematic deviations), causality (involvement in consumption), consequences (social, medical, legal nature) and mass (part of society). Debating the processes of deviance, its consequences would not be feasible without consideration of structural changes in society, social inequality, exclusion processes. Analysis of the concepts of narcotics, various properties of its categorical field (including legal, social features, medical and personal characteristics of drug users) allowed the authors to emphasize the inherent modern features.

#### 5 Conclusion

The article substantiates the legitimacy and expediency of applying the research approach to the study of the phenomenon of drug addiction, combining several sociological theories (structural functionalism, sociology of deviant behavior). The integration of these conceptual approaches contributed to the development of the author's definition of narcotics from sociological positions as a social phenomenon manifested in deviant practices of drug use under social control. The conducted analysis promotes awareness of the prospects and ways of necessary changes in solving modern problems of narcotics.

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#### CONCEPT OF TEAL ORGANIZATIONS: THE CONDITIONS FOR THE PRACTICAL APPLICATION

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Abstract: Recently, the problem of the effectiveness of organizational models has been actualized. Teal organizations, in turn, represent a new structure that is of some interest. The article analyzes the origins and stages of forming the concept of teal organization by Frederic Lalou and the theory of spiral dynamics by Claire Graves. Each development stage of the organizational models is examined in detail. It is given the definition of the essence of the organizational structure as a whole. The idea of teal organizations was presented as an innovative model. The specific features of teal idea and teal organizations were considered in general. It is revealed the advantages and disadvantages of the concepts. This concept was introduced and applied in several foreign companies. Soon, the idea received recognition in the Russian market. It is given the examples of the introduction of teal ideas in some Russian companies. As the analysis result, the authors gave a positive experience of applying this concept in the activities of domestic and foreign business. It is also considered the details, which should be taken into account when implementing teal ideas to obtain the most effective result. The conditions for the practical application of teal ideas in the example of companies of different activity fields are considered in detail.

Key words: organizational development, organizational model, concept of teal organization

#### 1 Introduction

The founder of the innovative idea of "teal organizations" is the business consultant, coach, and former partner of McKinsey & Company Frederic Lalou. The author introduces this concept in the book "Discovering the Future Organizations", which tells about the development stages of the organizations and presents a completely new, modern level of development, which is called teal (Obolensky, 2006).

To begin with, it should be noted that the organizational structure is a document that schematically reflects the composition and hierarchy of business units (González & Villalobos Antúnez, 2016). Many organization leaders who care about the future of their company try to change the organizational structure in a variety of ways. Since the traditional ways to solve the organizational problems have exhausted their positive effect to date, the world needs an entirely new approach to organize joint work, so that the employees can fully open their potential, be ready to develop for the benefit of the company, that is, be happy and feel comfortable at work (Lalou, 2017). It is important to note that the human resource, the potential and the desire for development is a very important component of the modern economy. Thus, we observe how much the economic development depends on the qualitative human resources every day (Khairullina et al, 2016). So, is it possible to create a kind of organization where the employees will be happy, comfortable and productive, or is it just a utopia? If it is possible, it arises the following question: what these organizations will be like? It is these questions that underlie the study of Frederic Lalou (Lalou, 2017).

#### 2 Methodology

First of all, we consider it expedient to analyze the development history of the organizational models. F. Lalou focuses his attention on the fact that with this goal it is necessary to analyze the development history of mankind and the psychology of its development as a whole. According to the author's research, the development history of human society, the stages of development of its consciousness, as well as the stages of organizational models are the interrelated components. Thus, many historians, anthropologists, philosophers, psychologists, etc. are ask the question: "how did the consciousness of mankind evolve from the early stages to the complex state inherent in our time?" (Lalou, 2017). In this matter, many independent researches confirm the gradual development of mankind, and each stage, each new stage is marked by a new era, an epoch, thus, the main aspects of our life, for example, society, economy, acquire a completely new look.

As mentioned earlier, the development stages of human consciousness and the organization model are very interrelated. Frederic Lalou, exploring the development of the organizational models, appropriated certain color significance to each development level, similar to the theory of spiral dynamics of Claire Graves, an American Doctor of Psychology. However, F. Lalou referred in his research and distribution not only to the theory of spiral dynamics, but also to the research of other scientific figures, and compiled an integrated description of the development of human consciousness. For example, Lalou called the very first development stage of human consciousness "Reactive", while it was "Beige" according to Graves. Speaking of the last stage for which Lalou used the term "Teal", in many other cases it is called "Integral", or even "Yellow" according to the theory of spiral dynamics. Thus, the author claims that his descriptions, in most cases, correspond to the descriptions of integral psychology (Lalou, 2017).

#### 3 Results and Discussions

As already mentioned earlier, the first (or rather, the earliest stage of human development) is the Reactive (Infrared) stage. As a rule, there was no specific organizational model at this stage, all the more, there was no hierarchy, that is, there were no leaders, heads, etc.

The second stage is called Magical (Purple). At this stage, people began to unite in more complex tribes, consisting of several hundred people and coping with more complex tasks.

The next development stage is called Impulsive (Red). At this stage, the organizational models began to appear, in particular, the red organizations. People began to realize the fear of death, the world began to be perceived as an unsafe place where the one who has power in his/her hands ruled.

A further achievement in the mankind development is the Conformist (Amber). At this stage the society passed from tribal life to a society where the states, civilizations, state institutions began to exist, the bureaucracy appeared, etc. Large companies, created during the industrial revolution, also serve as an example of the amber organizations.

Then the society has passed to the newest development level and the corresponding stage is called Competitive (Orange). The world at this stage is perceived as a kind of complex mechanism in which it becomes possible to explore a lot and discover something new. When making any decisions, first of all, it is taken into account the effectiveness, and this stage has three very important discoveries: innovation, responsibility and meritocracy. Such serious international corporations as Walmart, Nike, Coca-Cola are an example of orange organizations.

But the feelings are included in the affair already at the next stage called Pluralistic (Green). While the dominance of material values, emerging social inequalities, the loss of important human values are the disadvantages of the orange organizations, the green paradigm takes a closer look at these problems.

Now, due to the evolution of human consciousness, people began to look at the world through another prism, and it appeared the idea of teal organizations.

Each level of organizational models carried certain innovations with it and was characterized by special metaphors. The teal worldview, according to the results of the study made by Frederic Lalou, is also a source of three discoveries and one metaphor. "Organizations as living organisms," says the author, which is a metaphor for the teal idea. The idea is based on the fact that "people in such organizations think of their companies not as mechanisms or machines, but as living organisms with a soul that can develop in the right direction without managerial control and strategic plans for a year" (Lalou, 2017).

At this stage of organizational development, it also appear three discoveries: self-management, integrity and evolutionary goal. The first, self-management, says that the employees of teal organizations are able to solve diverse tasks and problems of a more complex level. The colleagues have the opportunity to interact, as they are equal in rights, and the company does not have a functioning hierarchy. The second discovery, integrity, speaks about the importance of expressing not only rational views, as it does in classical organizations, but also using personal internal potential of determination, self-confidence, etc. And the last discovery made by Lalou is focused on the fact that the teal organizations have an evolutionary goal. Thus, the employees are led to an understanding of the main goal of the company. Thus, they help to make efforts and to take decisions specifically for the implementation of this goal, and not follow the plans imposed by the leadership.

Table 1. Features of the development stages (systematized by the author)

Development stage	Main features	Main principles			
Reactive /	- small groups of	- a specific			
	- 1				
Infrared	people consisting of a	organizational			
	couple dozen people	model does not			
	- the concepts of	exist			
	"ego", "I" do not exist	- there are no			
	, , , , , , , , , , , , , , , , , , , ,	leaders and heads			
M:-/	4:11				
Magic /	- tribes of several	- a specific model			
Purple	hundred people	of the			
	- a human begins to	organizational			
	separate	structure does not			
	himself/herself from	exist			
		- there is some			
	society				
	- people are able to	power on the part			
	solve more complex	of the elders			
	problems				
	- awareness of the				
	cause-effect				
	relationship is not				
	developed				
Impulsive /	- People completely	- Power abuse			
Red	separate themselves	- Manipulation			
1100	from the environment	- Public			
	- It appeared a fear of	punishment			
	death	<ul> <li>Achievements</li> </ul>			
	- The world is	are acquired in the			
	perceived as a	most cruel ways			
	dangerous place	•			
Conformist /	- Transition from	- Medium-term			
Amber	tribal life to society	and long-term			
	- There are states,	plans			
	civilizations,	<ul> <li>Collective</li> </ul>			
	institutions,	thinking			
	bureaucracy, etc.	- Self-discipline			
		- The authority is			
	- It appear medium	•			
	and long-term plans	determined by the			
		determined by the social role			
		determined by the social role - Inequality			
Competitive		determined by the social role - Inequality			
Competitive	and long-term plans  - The world is	determined by the social role - Inequality - Efficiency is the			
1	and long-term plans  - The world is perceived as a kind of	determined by the social role - Inequality - Efficiency is the main criterion in			
Competitive / Orange	and long-term plans  - The world is perceived as a kind of complex mechanism	determined by the social role - Inequality - Efficiency is the main criterion in decision-making			
1	- The world is perceived as a kind of complex mechanism - Material values are	determined by the social role - Inequality - Efficiency is the main criterion in decision-making - Innovation			
1	- The world is perceived as a kind of complex mechanism - Material values are the main driver	determined by the social role - Inequality - Efficiency is the main criterion in decision-making - Innovation - Responsibility			
1	- The world is perceived as a kind of complex mechanism - Material values are	determined by the social role - Inequality - Efficiency is the main criterion in decision-making - Innovation			
1	- The world is perceived as a kind of complex mechanism - Material values are the main driver - inequality	determined by the social role - Inequality - Efficiency is the main criterion in decision-making - Innovation - Responsibility			
1	- The world is perceived as a kind of complex mechanism - Material values are the main driver - inequality - The emergence of	determined by the social role - Inequality - Efficiency is the main criterion in decision-making - Innovation - Responsibility			
1	- The world is perceived as a kind of complex mechanism - Material values are the main driver - inequality - The emergence of large international	determined by the social role - Inequality - Efficiency is the main criterion in decision-making - Innovation - Responsibility			
Orange	- The world is perceived as a kind of complex mechanism - Material values are the main driver - inequality - The emergence of large international corporations	determined by the social role - Inequality - Efficiency is the main criterion in decision-making - Innovation - Responsibility - Meritocracy			
Orange  Pluralistic /	- The world is perceived as a kind of complex mechanism - Material values are the main driver - inequality - The emergence of large international corporations - Feelings of people	determined by the social role - Inequality - Efficiency is the main criterion in decision-making - Innovation - Responsibility - Meritocracy			
Orange	- The world is perceived as a kind of complex mechanism - Material values are the main driver - inequality - The emergence of large international corporations	determined by the social role - Inequality - Efficiency is the main criterion in decision-making - Innovation - Responsibility - Meritocracy			
Orange  Pluralistic /	- The world is perceived as a kind of complex mechanism - Material values are the main driver - inequality - The emergence of large international corporations - Feelings of people	determined by the social role - Inequality - Efficiency is the main criterion in decision-making - Innovation - Responsibility - Meritocracy			
Orange  Pluralistic /	- The world is perceived as a kind of complex mechanism - Material values are the main driver - inequality - The emergence of large international corporations - Feelings of people come to the fore - justice	determined by the social role - Inequality - Efficiency is the main criterion in decision-making - Innovation - Responsibility - Meritocracy  - The power / hierarchy is not relevant			
Orange  Pluralistic /	and long-term plans  - The world is perceived as a kind of complex mechanism - Material values are the main driver - inequality - The emergence of large international corporations - Feelings of people come to the fore - justice - Respect for different	determined by the social role - Inequality - Efficiency is the main criterion in decision-making - Innovation - Responsibility - Meritocracy  - The power / hierarchy is not relevant - Empowerment			
Orange  Pluralistic /	and long-term plans  - The world is perceived as a kind of complex mechanism - Material values are the main driver - inequality - The emergence of large international corporations - Feelings of people come to the fore - justice - Respect for different points of view	determined by the social role - Inequality - Efficiency is the main criterion in decision-making - Innovation - Responsibility - Meritocracy  - The power / hierarchy is not relevant - Empowerment - Organizational			
Orange  Pluralistic /	and long-term plans  - The world is perceived as a kind of complex mechanism - Material values are the main driver - inequality - The emergence of large international corporations - Feelings of people come to the fore - justice - Respect for different	determined by the social role - Inequality - Efficiency is the main criterion in decision-making - Innovation - Responsibility - Meritocracy  - The power / hierarchy is not relevant - Empowerment - Organizational model motivating			
Orange  Pluralistic /	and long-term plans  - The world is perceived as a kind of complex mechanism - Material values are the main driver - inequality - The emergence of large international corporations - Feelings of people come to the fore - justice - Respect for different points of view	determined by the social role - Inequality - Efficiency is the main criterion in decision-making - Innovation - Responsibility - Meritocracy  - The power / hierarchy is not relevant - Empowerment - Organizational			

		stakeholders is increasing - The organization works on the principles of family values
Teal	- The organizations act as living organisms - Equal rights - Motivational approach to the use of internal potential	- Self- management, hierarchy is absent - Integrity - There is an evolutionary goal shared by all employees

Let us consider the examples of some foreign and Russian companies that have implemented the ideas of teal organizations in their activities. However, we believe that not all the organizations can be called purely teal. In other words, they are of a "mixed type: consistently applying the evolutionary teal approaches in some areas of their activity, they use the traditional orange-green approaches in others" (Lalou, 2017).

The first successful example of introducing teal ideas is the company Buurtzorg, whose employees care for the sick and the elderly. The company moved from the orange organizational model to teal. How it works in the usual institutions providing medical services, the time of examination and care of each patient is scheduled by the minute. The average medical staff does not have time to properly monitor the health status, the effectiveness of the staff is reduced. Thus, the result of such work is not successful. Subsequently, the founder of the company Buurtzorg, Jos de Blok, introduced teal ideas in his company, which completely changed the whole system of work. As a result, Buurtzorg has become an unusually successful enterprise, the number of employees has increased from 10 to 7,000 nurses, and the quality of service has reached an unprecedented level in seven years" (Lalou, 2017). The doctors and other medical personnel are personally responsible for the provided medical service, determine the number of patients they need to examine. Moreover, the decisions on office matters, vacations, tasks, productivity are also taken collectively, without a definite leader. As a result, the quality of customer service has increased tremendously (Lalou, 2017).

The next example of successful implementation of teal idea is the company specializing in e-commerce - Next Jump. An interesting position of Next Jump is the fact that the employees are given jobs and tasks for which they do not yet have enough skills and experience, but they help them to cope with new tasks as much as possible. Thus, the company promotes the development of its employees. Also, Next Jump does not find a solution in the dismissal of employees even in the most difficult economic situations. According to the head of the company Charlie Kim, "You will not fire your children from a family business" (Villalobos Antúnez & Bello, 2014)

Another teal example, described in Lalou's book, is the company Patagonia with a staffing of 1,350 people, which has been initially engaged in the production of climbing hooks, and has further grown to "the leading manufacturer of outdoor clothing and striving to have a positive impact on the environment" (Lalou, 2017). Thus, the main principle of the company is the environment protection. In the name of implementing this goal, the company cooperates with the suppliers that provide products that are also produced according to the principles of ecological purity. The risky decisions taken in the name of preserving the goal of producing the environmentally friendly products brought more significant profits than losses. Thus, strict adherence to the evolutionary goal is the key for the company's success(Lalou, 2017).

Let us consider some Russian organizations that seek to adopt the benefits of teal ideas and introduce them into their companies. Of course, this idea is relatively new and unusual for Russian reality. However, despite this, such Russian organizations as Sberbank, VkusVill, Fabrika Okon, Ascona partially apply the teal methods (Lalou, 2017).

Five branches of Sberbank of Russia in Balashikha experiment with the organizational method inspired by the teal ideas. There are no ordinary managers in these branches, now they are coaches who do not give ready-made solutions to the employees, but only help them in taking and making decisions collectively. At the moment, the most important goal is maximum customer satisfaction, but not the financial profit or KPI, as it has been before. According to the coach Natalia Kuznetsova: "Our department works on the first goal - customer satisfaction. We change the thinking of our employees. The employees have begun to think more not about the plans that we do not have now, but about what the customer wants from us" Alekseeva & Chernov, 2017). Thus, the employees perform their tasks keeping in mind the evolutionary goal of customer satisfaction. According to German Gref: "In this sense, everything is completely different from what it is customary in the bank now. Wonderful coaches in the offices and very interesting results of the first months of work. And I think that this is the right way for us to move forward. The whole team has a sense of ownership: they feel responsible for building long-term relationships with the customers, and this greatly increases the involvement and satisfaction of people with work. Very many processes are transformed. We see the most important thing - the gleaming eyes of our customers. For the sake of this it is worthwhile to carry out similar experiments" (Alekseeva & Chernov, 2017).

Another example of the Russian teal organization is the company VkusVill. According to the founder of the food networks Izbenka and VkusVill, the buyers are the main value, and the closest people to the buyers are the sellers, therefore their opinions are taken into account when making the important decisions. The office workers have a fairly flexible work schedule, someone starts his/her work in the morning, someone comes later. Since it is impossible to introduce a free schedule in the stores, the sellers themselves and their colleagues negotiate the operation schedule. There is also a system similar to KPI, which is based on corporate promises, but they are set by the employees. The promises are established between the employee and the customer. Thus, the earnings of an employee depend heavily on how well the promise is fulfilled: "Every employee is an entrepreneur within the framework of one big company. If he/she works badly, he/she does not get profit" (Zhytkova, 2018). The company's success can be expressed as follows: "He has created a network from scratch for seven years, which brought 5.6 billion roubles of revenues and 278 million roubles of profit last year, according to SPARK" (Zhytkova, 2018).

# 4 Summary

By evaluating the experimental companies of F. Lalou and the results obtained by him, we can conclude that the innovative model of teal organizations is quite promising. The scope of this model is quite extensive: medicine, commerce, financial industry and even electricity.

However, when evaluating this model from different sides, a dual opinion arises. We see that, working according to the "teal" rules, both sides, the employer and the employees, feel comfortable and this is very important. In today's world, the employers have seriously begun to realize the importance of the comfort and well-being of the employees for revealing their potential, motivation. The teal model takes care of the employees best of all others: gives the right to choose, the right to make decisions, self-development, thereby building a road to the development and growth of the company. However, it is important to note that success in these types of organizations will depend largely on how correctly the following three most important principles are applied: self-management, integrity and evolutionary goal. Also, according to F. Lalou, the division of values of the teal worldview by the top management and the owners is an important component. Thus, he gives an example of AES (Applied Energy Services) operating in the energy sector, which has been an advanced company that has introduced the principles of self-government into its organizational model. The company grew at a rather rapid pace, had 40,000 employees, thereby acquiring a prestigious position in the electricity industry. However, the time has come when the views on the principles of self-government among the investors and the members of the boards of directors began to drastically differ, and, as a result, the company returned to the former "proven" principles of the organizational model (Lalou, 2017).

Speaking about the effectiveness of the teal model of the organization, it is difficult to give a particular estimate in this case. Frederic Lalou in his experiment studied many companies and various industries with a varying number of employees and received quite positive results. But nevertheless, the teal model is new and it is difficult to specify its effectiveness. It is also worth noting that F. Lalou does not fully disclose the whole nature of the teal idea, so there is also a risk that the requirements for implementing this model can be underestimated (Freeman, 2016). Another important component is that each stage of mankind consciousness can be characterized by a "shadow" (Dębowski & Konkel, 2017). Yet, F. Lalou asserts that we are at a stage where we do not need to try to change or improve the past models, but immediately switch to a new one (Laloux, 2015).

#### 5 Conclusions

Thus, the model of teal organizations is an idea of the principles of work of the future companies. The paper considered some examples of the introduction of "teal" ideas, which brought significant success to the companies. Nevertheless, it should be borne in mind that each idea has its own merits and demerits, and the teal model is no exception. In general, the modern world began to realize that it is respect for the personal internal potential of each employee, a vision of not a machine, but a person in him/her can lead to great success. Thus, the idea of teal organizations is an excellent example, directing the employees to know themselves, their abilities, their potential and apply them to the development of the organization.

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#### TRADE-ECONOMIC COOPERATION BETWEEN RUSSIA AND THE EU: PROBLEM STATEMENT

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Abstract: In the context of a complication in recent years of economic and political connections between the countries entering the European Union and the Russian Federation considers difficulties and problems of forming of trade and economic relations between them in the long term. Need of search of new strategic partners in the world market both for the Russian Federation and for the countries of the European Union is proved in article. The possibilities and the prospects of forming of commercial and economic relations between the Russian Federation and some other countries, for example, India, Iran, and China are considered. In turn, in article the prospects of development of trade relations of the countries of the European Union with the ASEAN countries, Canada and also expansions of cooperation with India and China are estimated. In work the analysis of statistical data, concerning development of trade relations between the Russian Federation and the countries of the European Union is carried out further, change of the amount of import and export of goods and services for the last few years is estimated (before imposition of sanctions). Besides, in article the possibility of renewal of trade and economic cooperation between the Russian Federation and the countries of the European Union as probability of smoothing of influence of sanctions in the long term is proved.

Keywords: Trade relations, import, export, strategic partner, import substitution.

#### 1 Introduction

The political relations of Russia and the countries entering the EU never developed easily and without complications. There were periods of frank hostility; there were periods of friendship, cooperation and even discussion of a possibility of association. Nevertheless, how political relationship of the closest neighbors developed, in the trade and economic plan between these influential economic forces of the relation remained pragmatical stable. The geographical neighbourhood and also technological and resource dependence and competability did Russia and the countries of Europe by the trade partners major for each other, at least in a short time interval. However, in spite of the fact that have trade and economic relations of the closest neighbors serious value for both parties, international trade of the Russian Federation is less differentiated, and as a result, Europe, more dependent on the countries. Historically the share of import and export with the countries of Europe made not less than 50% of all Russian import and export while the share of the European import and export, falling on Russia of this figure did not reach, and there were much less, no more than 15% of all world trade of the countries of Europe. The trade turnover of the Russian Federation and the People's Republic of China never exceeded 20% of a trade turnover with EU countries that it is difficult to explain only with low transport expenses or the best quality of goods from Europe.

# 2 Methodology

The methodology of a research is presented by general scientific methods of knowledge, a historical and statistical method and also method of expert evaluations. For assessment of trade and economic relations of the EU and the Russian Federation the data submitted on official cite of the European Commission and the official site of permanent mission of the Russian Federation at the European Union and also statistical data of Federal State Statistics Service are used.

# 3 Results and Discussion

In the foreign trade Strategy of the EU approved by the EU Council of 27.11.2015 it is said that the EU is strategically interested in close economic relations with the Russian Federation. However development of future relations in many respects depends on domestic and foreign policy of the Russian Federation (Raven, 2002). And all this that the European Commission at the moment can tell about trade and economic relations with the Russian Federation (Konyakhina, 2012; Kast-Aigner, 2009; Mihailova & Solnyshkina, 2017; Solnyshkina & Mikhailova, 2017). Let's pay attention that mutual trade of the

EU and the Russian Federation makes more than 200 billion euros a year (285,8 billion euros), and earlier - more than 300 billion euros (338,5 billion euros in 2012). It is impossible to ignore figures, so significant for both economies.

Until recently Russia was trade partner of the EU, the fourth on the importance (after the USA, China and Switzerland), and the EU - the first trade partner of Russia. Trade between two economies showed dynamic growth rates up to for 2008 when the tendency was interrupted as a result of the economic crisis and the unilateral measures taken by Russia, which negatively affected trade relations. Since 2010 mutual trade resumed growth, having reached record level in 2012. In 2011 the trade turnover between the EU and the Russian Federation made 307,4 billion euros.

Import from Russia for the EU is on the second place after import from the People's Republic of China (199 billion euros or 11,6% of the total amount of import of the EU in 2011). The EU exported to Russia machines and the equipment, chemicals, medical and agricultural production (Teneneva, 2013). Imported raw materials, in particular oil and gas from Russia. The EU was also a serious investor in economy of Russia. Up to 75% of direct foreign investments it was the share of EU member states.

The European Union and the Russian Federation officially fastened for a long time bases of the cooperation in the world market (Tognini-Bonelli, 2001). Confirmation to that is the Partnership and Cooperation Agreement of 1994 and numerous discussions on both sides about need of development of more comprehensive agreements, need of transition to the obligations having big validity, first of all, in the field of economic cooperation, exchange of goods and services, investments. In 2003 the Russian Federation and the EU began cooperation within the Program of common interests. An attempt of development of the new version of agreements was made at the summit to Khanty-Mansiysk in 2008. Following the results of the summit to Rostov-on-Don in 2010 the Program of partnership and modernization including joint aspects of modernization of economy was adopted. For development of trade relations with the EU Russia in 2012 joined WTO.

At the same time in recent years, namely since 2014, the economic and political relations between Russia and EU countries significantly became complicated, and all Programs were suspended. The European development banks suspended all projects on financing. As a result, in 2014 the amount of import of goods of the EU to Russia was already 181 billion euros, the amount of export - 103,3 billion euros. The amount of import of services of the EU to Russia was 12,4 billion euros, the amount of export - 28,9 billion euros. In total commodity turnover with all EU countries in January-December, 2014 decreased whereas with the USA, on the contrary, increased, having made 105,6% to the level of 2013.

It is possible to explain, of course, decrease in trade relations between the EU and the Russian Federation external factors, such as consequence of a world economic crisis and reduction of demand in Russia, etc. But as far as it would be right? It is obvious that it is not the only reason, and even not decisive. The main is a political deterioration in the relations between two European forces since 2014, introduction of economic restriction of the EU against the Russian Federation, and reciprocal embargoes and countersanctions from Russia to the European Union (Biber & Reppen, 2015; Biber, 2004).

Need of search, both the EU, and the Russian Federation was result of new partners in the world market. The EU initiated negotiations with the ASEAN countries, India and Canada and also the countries located at the southern and eastern frontiers of the EU; negotiations with Japan. Negotiations with the USA and also on further improvement of arrangements in the field of investments are begun with KHP (Villalobos Antúnez, 2001; Kolesnikova & Kamasheva, 2017).

As a result, commodity turnover of the EU - India made in 2014 72,5 billion euros against 28,6 billion euros in 2003. In 2014 the amount of import of goods of the EU to India was 37,1 billion euros, the amount of export - 35,5 billion euros. The amount of import of services of the EU to India was 11,1 billion euros, the amount of export - 11,8 billion euros. Significantly volumes of commercial transactions with China increased: for the sum more than 1 billion euros a day. In total, in 2014 the amount of import of goods of the EU to China was 302 billion euros, the amount of export - 164 billion euros. The amount of import of services of the EU to China was 22,6 billion euros, the amount of export - 31,7 billion euros.

Need of search of new strategic partners became relevant also for Russia. In May, 2014 the Russian Federation concluded the gas contract with China for 30 years according to which Russia will deliver to China up to 30 billion cubic meters of gas a year. Between China and Russia multi-billion contracts in power branch are signed, the contract with India for construction of power units of the NPP, etc. is concluded. These are not all directions studied by the Russian Federation in the conditions of need of search of the new directions of development of trade and economic relations, it is obvious that import substitution, there is it even successful, will not solve fully a loss problem for Russia of the EU as trade partner. Support of export promotes import substitution and at the same time attraction of investments into the Russian Federation. In 2016 the People's Republic of China becomes the largest importer in the Russian Federation of cars and the food equipment.

What concerning Europe? The Russian producers pay attention to practice of anti-dumping measures in recent years from the European Union which becomes more and more rigid and, according to them, less reasonable. Anti-dumping duties (from 12 to 70%) many times exceed levels of import tariffs (about 3,5-4,0%). Such reception, doubtful from the point of view of rules of the WTO, as "power adjustments" as a result of which the size of a margin of dumping sharply increases is widely applied. Incorrectly, from our point of view, some intermediate revisions of anti-dumping measures come to an end. On what goods get to coverage of these measures, it is possible to judge what industries of the EU experience the greatest difficulties in the conditions of crisis. And the tendency demonstrates that it is impossible to exclude the political background.

There are no more bilateral summits which were taking place earlier twice a year which often came to an end with important joint initiatives. The offer on creation of a common economic space read by the EU, and then supported by Russia from Lisbon to Vladivostok, or in the Russian formulation - from Atlantic to the Pacific Ocean is not studied for the first time.

There are claims to Russia from the EU, and the EU from Russia on settlement of disputes within the WTO. The permanent representative of Russia to the EU, the Ambassador Extraordinary and Plenipotentiary V.A. Chizhov emphasizes that settlement of these disputes, discussion of controversial issues, including on the WTO platform, in a modern situation gradually loses any meaning.

How long-term can be the current deterioration in the economic relations between Russia and the European Union? Let's emphasize once again that this deterioration is only partly connected with objective factors - economic downturn in world economy and drop in oil prices. The main reason is the investigation of human decisions.

Undoubtedly, the Russian Federation will continue further development of import substitution and will be guided further in external purchases by other suppliers (the People's Republic of China, Iran, India, etc.).

However from our point of view, economic sanctions are capable to cause a serious loss in the short-term period, but the effect weakens as soon as business and the governments find ways to bypass formal restrictions and to reestablish economic relations.

As confirmation of this assumption serve the following data: by data for 2017, the trade turnover between Russia and the largest western countries for the first time in three last years increased to 26% in comparison with the same period of last year. In spite of the fact that this indicator is 45% lower than the level of 2013, it says about restoration of trade and economic relations of the countries contrary to sanctions that it can be estimated as a positive factor.

In total, the trade turnover between the Russian Federation and the EU by data for 2017 increased to 285,8 billion euros (+17,9%), between the Russian Federation and the USA - for 12,5%. The highest rate of growth of a trade turnover - with France (+26,5%), Germany (+19,5%), Italy (+17,3%).

In 2016 work of the Russian-German strategic working group on cooperation in economy and finance (SRG) and the Russian-French council for economic, financial, industrial and trade problems (CEFIC) dismissed earlier in 2014 and 2015 according to is restored.

These tendencies speak about renewal of trade and economic cooperation between the Russian Federation and the EU that cannot but be estimated by us as a positive factor. Certainly, it is necessary to restore the lost atmosphere of trust in mutual business relations. Certainly, the political tension will remain further, and it is necessary to develop trade and economic relations in such conditions.

#### 4 Summary

Generalizing all above, it is possible to draw the following conclusions.

In total, 7% of world's population (28 states) and 25,8% of world GDP are the share of the European Union, and trade with other countries makes 20% of the volume of export-import transactions in the world (without trade between EU countries). It does the European Union by the largest player in the world trade markets and also the largest importer and the exporter, the largest investor, the largest economy in indicators of GDP and the largest recipient of direct foreign investments, in the modern world trade is not only movement of goods. Within the difficult political and economic relations both Russia, and the EU are forced to look for new strategic partners in the world market, however would be inexpedient on the relations of these two largest economies, being geographical neighbors, to put an end. Development of trade and economic relations between the closest European neighbors will continue, let and in new, politically difficult conditions. The Russian Federation, unlike the countries of Europe, is rich with natural resources and has broad sales market. The Russian Federation is strategically located between the EU and the Pacific region, is the channel of transportation between the East and the West. It is necessary to take all above-mentioned into account. Also it is possible to believe that trade and economic relations between the Russian Federation and the EU will remain and in the future. As, however, also the political tension and statements for need of concessions and improvement in questions of cooperation and achievement of closer economic cooperation will remain from

# 5 Conclusions

Now both the EU, and the Russian Federation are in search of new strategic partners in foreign market, sign new contracts, I sign new agreements. At the same time, the trade and economic relations built for many years would be wrong to be stopped absolutely, would be incorrect to break off cooperation within trade in goods and services of two strategically favorably located forces of Europe. In the new, complicated in the political plan conditions, trade and economic relations of the European Union and the Russian Federation have to continue to develop.

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#### EMOTIONS IN HUMOUR OF CHILDREN AND TEENAGERS

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Abstract: In modern psychological researches need of studying of emotions for humour, interrelation of cognitive and emotional aspects of humour is emphasized. The role of positive humour in strengthening of the interpersonal and group relations is noted, positive emotions are considered as the adaptable mechanisms strengthening mental and physical health of the person create physical, intellectual and social resources which the person can use for overcoming vital difficulties. However excessively strong or negatively painted emotions, on the contrary, are capable to lead to the conflicts and difficulties in the interpersonal relations. The objective of this research consisted in studying of positive and negative components of humour at children of preschool, younger school and teenage age. 264 examinees participated in a research. The author's technique "Amusing plots" and also content the analysis of ridiculous stories of children of preschool and younger school age, teenagers was used. As a positive component of humour situations of interaction of children were considered, falling situations were carried to negative — By means of the correlation analysis of Pearson feedback between actions of interaction and falling was revealed (t=-67, at p < .05). Falling situations a thicket were presented comical to the children of preschool and younger school age and teenagers defining the surprise moment in a situation was. The choice as ridiculous situations of interaction confirms pronounced communicative function of humour at children and teenagers. The repertoire of social interactions in descriptions of preschool children and school students changes from game activity to the wide social relations.

Keywords: humour, emotions, children, younger school students, teenagers

#### 1 Introduction

Russian researches of an emotional component of humour

The humour, is a thin and difficult product of culture, and the Russian researchers of humour write about need of observance of a measure of its use. The humour reflects the positive attitude towards the person, a subject and is expressed in mild laughter and a benevolent smile (Nikitina, 2008); favorable good nature (Propp, 1999); mild playful relation of the author to a subject of a statement (Popchenko, 2005). However, crime or misfortune cannot be an object of ridiculous, it should not cause sympathy: the grief, sufferings, troubles of people turn laughter into ethically inadmissible action (Latyshev, 2003). Laughter stops being the benefit, according to Stankin (Stankin, 2007) when aggression passes for a framework of roughness, cynicism. As an emotionally rich form comic, directed to underlining of social injustice, it is possible to consider satire (Kulinich, 2004). The satire is directed to negative lines of derided, criticizing imperfection of the world and human defects (Okriashvili, 2017; Villalobos Antúnez, 2016).

Foreign researches of an emotional component of humour

In the researches Aillaud, M & Piolat, A. need of studying of interrelation of cognitive and emotional aspects of humour is approved, results of an empirical research of emotions are presented, importance of effect of surprise and also the positive and negative emotions caused by process of humour is emphasized (Aillaud & Piolat, 2013).

Laughter, according to Bergson is the strongest emotion having a social significance. On character of the emotions caused by this or that look comic laughter can be distinguished, cruel, love, caustic, sarcastic, tormenting, touching, contemptuous, rough, tragicomic, healthy, sick. Excessively strong emotionally charged emotions (pity, sympathy) "kill" laughter (Bergson, 1900; Leviathan, 1991).

Martin emphasizes that the humour acts as the mechanism of regulation of emotions. It can cause strengthening of such positive feelings as feeling of wellbeing and satisfaction, to promote liberation, to lead to weakening of negative feelings, anger and alarm. However if the humour is used to get rid on purpose temporarily of a stress or to strengthen positive emotions, showing the superiority at the expense of aggressive types of humour, sarcasm, then further it can result in difficulties in the interpersonal relations (Rod, 2009).

Comic revaluation can reduce the caused negative emotions because the humour can help to feel better when the person faces negative incentives (Kugler & Kuhbandner, 2015). Good perception of emotions and skills of their regulation can promote bigger susceptibility of humour in everyday life (Papousek et al, 2014). Perception of humour also causes pleasant emotional reaction and strengthening of positive emotions, improvement of mood (Szabo, 2003). The emotional nature of humour is also clearly shown by the researches with application of scanning of a brain showing that presentation of comic animated films makes active the known scheme of a reinforcement in the limbic system of a brain (Mobbs et al, 2003). The participants consider more amusing the concrete animated film, the these parts of a brain become more active stronger.

Fredrickson offered the model "expand and create" describing psychological functions of such positive emotions as joy. The author believes that positive emotions expand borders of focus of attention of an individual, allowing to solve more creatively problems and to expand the range of options of behavioural reactions, unlike negative emotions which tend to narrow focus of attention and to motivate the person to participate in certain actions (Fredrickson, 2001; Fredrickson & Branigan, 2005). Positive emotions can play an important role in regulation of the interpersonal relations, Shiota notes the Emotion of joy is effective in the intergroup relations, at romantic communications, friendship (Shiota et al, 2004). The joy connected with the general laughter can help to define people with common interests, to choose and attract partners.

Crawford (2011) believes that programs of training in skills of humour help with improvement of emotional wellbeing by increase in self-efficiency, positive thinking, optimism and perception of control, at the same time reducing negative thinking, perception of a stress, depression, alarm and a stress.

### 2 Methodology

# 2.1 Chyba! Záložka není definována. Participants

35 children of 5-7 years of Russia (5-7 years) (20 boys and 15 girls) participated in a research.

174 school students of elementary school (92 boys and 82 girls) agreed to participate in a research. The consent of parents to work with preschool children and with school students was received.

55 teenagers aged from 11 up to 15 years participated in a research on a voluntary basis: 24 girls and 31 boys.

#### 2.2 Procedure

Studying of an emotional component of humour at children of preschool age was carried out by means of an author's technique "Amusing plots" to Children suggested to consider the beginning of a plot, and then to finish a plot one of 2 offered options. Plots were offered to be created amusing, ridiculous. Also children ridiculous stories asked to compose.

To children of younger school and teenage age suggested to invent a ridiculous story.

#### 3 Results And Discussion

# 3.1 Preschool age

In total 315 elections of children of preschool age by a technique "Amusing plots" were received and analysed.

Falling was represented to children of preschool age ridiculous in 28% of cases, interaction – in 15% of cases.

Examples of descriptions of falling:

Enzhe the M (6,1) "Built, built a tower, and suddenly collapsed"; "Went, went, did not look and fell"; "Ran, ran, the ball squeezed out and missed a mouse". Amir I. (6,4) "Built a tower and it fell". Safina Z (6,0) "The hare did not keep and fell in a snowdrift. It is the ridiculous story, it is not necessary on - kind". Dima "Is funnier than M (6,5) as the lock collapsed how the boy constructed it what there ridiculous?".

Examples of descriptions of interaction:

"When friends together play Chinghiz Highway (6,6), it is good". Polina "Will be so better than M (6,5), and evil chanterelle – it is wrong". Ulyana F. (6,8) "A cat play with a mouse with each other it is amicable". Safina Z. (6,5) "The tiger and a fox together come into a lodge because the tiger fell in love with a fox. It is the kind fairy tale".

In ridiculous stories of children the stories of children connected with falling of people, children, objects, animal from any height (16%) often met: "Fell down from a horizontal bar a sofa"; "The person swung a sledge hammer and dropped it to himself on the head"; "A cat, catching mice, fell"; "The boy stumbled and fell in a snowdrift"; "The wolf fell from a tree, having been frightened of shout of little squirrels";

The stories describing situations of communication, interaction with parents, small children, animal are carried to the interaction group (10%). Game interaction was carried out by heroes of children's stories within social norms, gave to heroes of stories pleasure. Family members, animal ("It was cheerful when the dolphin touched my person and we wanted to communicate with each other became heroes of stories"; "The father tickled".

#### 3.2 Younger school age

Younger school students made 170 ridiculous stories.

Examples of descriptions of falling:

Maxim U. (9,10) "There was along the street a girl with an umbrella. Suddenly strong wind blew, and it flew up together with an umbrella. It flew by by multi-storey house. Looks, at a window the monkey sits. - the Girl, the girl, and you where fly? - I do not know what difference. The monkey caught the girl's leg, and they departed together. Flew by by a dog, she seized a leg too, but not girls, and a monkey. But here the umbrella did not sustain, and they were gone off with a bang in a pool". A lily To. (10,1) "I walked in the park. I went and fell in a pool. Also began to be angry with herself! - Here the infection all got wet! - Here I am a bungler!!!! While I went home passersby laughed! I came home. Mother began to laugh over me, I went to the room and sat there!". In descriptions of a situation of falling children often speak about transformation and violation of norms and rules:

Alyosha "Once in the 4th class "D" studied Century (10,1) the boy by the name of Kirill Ulyanov. He was a hooligan, but studied as good marks, he exchanged words with teachers eternally. One day Kirill came to school and the lesson began. Spoke to Kirill do not shake on a chair. And suddenly it shook and fell from a chair! End".

Examples of descriptions of interaction:

Alina M.(10,2) "Once upon a time there was Emil in Kazan. He loved Nastya, and his Nastya, but they could not find each other 4 years, and then found and got married".

Katya of Page (9,5) "Once upon a time there was a girl Yulya. Yulya was able to dance well and went to dances. Once Yulya together with the girlfriend on dances burst out laughing. Girls long could not cease to laugh. The rest the girl it became ridiculous from loud and fervent laughter of Yulya and her girlfriend too. In a dancing class there was a noise. Not for nothing say that laughter infectious!". Kirill K. (9,10) "Somehow time I went with mother to circus and on the street the dog ran. She so ridiculously ran behind a tail and to me was so ridiculous.

Then we came into circus, and in circus the conjurer showed ridiculous focuses and to me was ridiculous".

#### 3.3 Teenage age

60 ridiculous stories of teenagers were analysed.

Examples of descriptions of falling:

Alyosha S. (13 years) "In the summer when I rode from the Vaniny roof. I hit in a stone fence. I laughed". Alina of M (13) "Once in elementary grades my friend wanted to sit down on a chair, but the schoolmate moved away him, and it fell". Elza of N (11) "At us is the two-storeyed house. When I went down from the second floor a floor was wet and I fell". Mischa N. (12 years) "We went by bicycle with Maxim and the Azat. The Azat fell in a roadside". The Azat N. (13 years) "The most ridiculous case when I ran yesterday and stumbled about a wire and fell. It was not sick, and is ridiculous".

Examples of descriptions of interaction:

Denmark To, (12 years) "Once we with parents went to shop behind jeans. We went with the acquaintance Albina. We came into an office and got confused from where we came and then went in the opposite direction. Albina very strongly laughed, and I joined". Anwar N. (11 years) "And still I remember when I came home from school and my brother (he is 1 month old) laughed also a smile from ear to ear".

#### 4 Summary

Falling is often chosen by children of preschool age in a technique "Amusing plots" (28% of elections). Making independently ridiculous stories, children also specify falling of animals, people, objects (16% of stories). In the research Havigerova directed to studying of humour at preschool age 223 comical situations were analysed (Havigerova & Holeckova, 2015). It was revealed that children of preschool age laughed at the situations classified as jokes: the accidents caused intentionally by other person. Similarly and in our researches children as ridiculous situations allocate falling (Garanina & Artemyeva, 2017; Kolojarceva & Artemyeva, 2017). "Amusing plots" choose an interaction situation in a technique in 15% of cases. Describing positive emotions, joy during the games with friends, children point to norm, the rule to be kind, to be on friendly terms, together to play Independently made ridiculous stories of children also contain situations of game interaction (10% of stories) (Akhmetzyanova et al, 2012; Artemyeva, 2016).

15% of stories of younger school students contained the description of falling in a pool, dirt, snow; falling of children from a chair and during the game; falling of various objects (a stone, a case) on children and adults, falling on ice; falling of the child and animals (a kitten, a hedgehog, a puppy) in a hole, a ravine. Dowling, studying idea of school students of humour by means of a method group focus, notes that accidents as ridiculous are noted by boys. In our research, gender distinctions are not revealed, both boys and girls allocate falling as a ridiculous situation. According to Dowling, school students use humour to cope with the daily stressful situations connected with the interpersonal relations at school and in house conditions (Dowling, 2014). Elements of playful culture serve for smoothing of group interaction (Fine & De Soucey, 2005). 12% of stories of younger school students contained the description of interaction with other people: friendship, love, pleasant communication of people with each other, cheerful games with with each other and with animals (Artemyeva, 2017; Kolojarceva & Artemyeva, 2017). 33% of the stories made by teenagers are connected with falling of people, objects; 8% of stories reflect interaction between people.

# 5 Conclusion

Chyba! Záložka není definována. The falling situation often meets in independently made ridiculous stories of children and teenagers and also at the choice in a technique "Amusing plots". At the

description of humour of a situation of falling, children of preschool age point to the surprise moment. The humour in playful way allows children to express fears of adulthood, experience and fears of these relations in less menacing, comfortable form.

Allocation of situations of interaction at preschool children, younger school students and teenagers, allows to claim that the humour possesses pronounced communicative function: laughter causes on communication, helps to come into contact. In difference from preschool children who derive pleasure from joint game activity younger school students and teenagers allocate situations of love, friendship, pleasant communication with each other, interaction during performance of any activity. Positive emotions play an important role in regulation of the interpersonal relations, the joy connected with the general laughter can help to define people with common interests, to choose and attract partners, to reward joint efforts and to strengthen interpersonal relations and unity of group.

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#### HUMOR AND TENDENCY TO VIOLATION OF SOCIAL NORMS IN ONTOGENESIS

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Abstract: In psychology, philosophy, cultural science comic often is considered as an aberration. In culture by means of humor need of people for symbolical violation of social norms is implemented. The humor allows mentioning forbidden in the society of a subject, to criticize norms and the bans, without being afraid of punishment. Studying of dependence between humor at preschool, younger school age, at teenage age and in young years and aspiration to violation of norms and rules was a research objective. 578 examinees participated in an empirical research: 40 children of preschool age (5-7 years); 174 younger school students (7-10 years); 55 children of teenage age (11-55 years); 309 students (17-24 years). Were used: author's technique "Amusing plots"; content analysis of ridiculous stories; Questionnaire of styles of humor (HSQ) and Scale of mastering the help of humor (CHS) of R. Martin; technique of Oryol "Diagnostics of tendency to deviant behavior". It was revealed that throughout preschool - younger school age the quantity of the ridiculous stories connected with violations of hygiene, the relations with adults, discipline and the schedule in educational institution increases. Only in group of children of preschool age as ridiculous situations of violation of game interaction are allocated. At teenagers opposite for the first time as ridiculous offense situations are specified. The tendency to violation of social norms is revealed, first of all at the students using aggressive and self-deprecating humor.

Keywords: humor, social norms, rules, preschool children, younger school students, teenagers, students

#### 1 Introduction

# 1.1 Interrelation of laughter and aspiration to violation of social and moral standards in philosophy

The divergence of objective properties of a subject and the available idea of norm in consciousness of the person is a fundamental prerequisite comic. The double aspect of perception of the world and human life existed already at the earliest stages of cultural development. In folklore of the primitive people near serious cults there were also humorous cults deriding the deity. The national culture of the Middle Ages and the Renaissance was studied by Bakhtin who considered that in the conditions of the developed political system all humorous forms emphasized informal aspect of the world and the human relations. The carnival cancelled norms, the hierarchical relations, the bans and privileges, temporarily exempting the person from the dominating ideology. Often laughter was directed on laughing (Bakhtin, 1990). The person laughed over by itself, at the failures and misadventures (Likhachev & Panchenko, 1976; Villalobos Antúnez, 2015). In mocking comic, most often there was a contradiction between phenomenon form and content; there was a contrast between norm and an ideal. The contradiction to norm generated external comedy, a contradiction to an ideal - comedy of internal inferiority, negligibility (Propp, 1999). The humor allows rethinking reality, to clean from dogmas; it provides not just entry of the individual into society and adoption of its norms and laws, but also certain flexibility in interpretation of these norms (Sychev, 2003; Dashkin, 2017).

# 1.2 Humor as symbolical violation of social norms in psychology

Cognitive, emotional and behavioral components of humor have social measurement. Psychologically laughter removes a duty to behave on the norms existing in this society from the person (Likhachev & Panchenko, 1976). The role of an appropriate joke which allows discharging tension was allocated by Dmitriyev (Dmitriyev, 1998). Laughter shows senselessness and the absurdity of the cause and effect relations existing in the social world, conventions of human behavior (Gusev & Tulchinsky, 1985). In humor it is possible to violate temporarily all rules (Svebak, 1974). The comic relations take place in various cultures, they perform function of regulation of social interactions and maintenance of social stability (Apte, 1985), allowing to find feeling of freedom and own advantage. The social function of humor directed to regulation of relationship in

group and social system was studied by Ziv (Ziv, 2010). According to the author, the humor is used for expansion of limits of social relevance. The author believes that he to the person more likely will escape violation of various taboos punishment if to do it in comic, but not in a serious manner (Ziv, 2010). Long and Grasser specified that the humor can be used not only for check and violation of social norms (Long & Graesser, 1988), but also for coercion to their performance, implementation of indirect control over behavior of others. Malkey and Kane believed that function of jokes can be more connected with social expression by that which is tabooed in culture ((Mulkay, 1988; Kane et al, 1977). The Oring assumed that besides sex and aggression the humor is often used to transfer various subjects which cause some awkwardness in this culture (Oring, 1994).

The analysis of concepts of humor allowed selecting its following characteristics: dynamism; an opportunity to actively discuss the issues forbidden in society and to use contradictions; allows lifting and discussing a wide range of social problems, without being afraid of punishment for it.

#### 2 Methodology

#### 2.1 Paticipants

Preschool children. 40 children at the age of 5-7 years of Russia (27 boys and 23 girls) participated in a research.

Younger school students. 174 school students of elementary school of Russia (92 boys and 82 girls) agreed to participate in a research. The consent of parents to work with preschool children and with school students was received.

Teenagers. 55 teenagers aged from 11 up to 15 years: 24 girls and 31 boys participated in a research on a voluntary basis.

Students. 309 students of various institutes and faculties of Kazan Federal University, aged from 17 up to 24 years participated in a research. Women's selection made 249 people, men's - 60. Participation in an experiment was voluntary, free.

# 2.2 Procedure

- 2.2.1. Preschool children. The standard behavior of children when using humor was studied by means of an author's technique "Amusing plots".
- 2.2.2. Younger school students. Children of younger school age were offered to invent a ridiculous story, then asked to remember a ridiculous case from the work of art or the animated film.
- 2.2.3. Teenagers. Teenagers asked to remember and write down a ridiculous case from their life.
- 2.2.4. Students. For studying of styles of humor of students the Questionnaire of styles of humor developed by Martin with coauthors, adapted by Ivanova with colleagues was used; The Scale of mastering the help of humor, a technique is adapted by Artemyeva; technique of Oryol "Diagnostics of tendency to deviant behavior" (Martin, 1996; Ivanova et al, 2013; Artemyeva, 2013; Kleyberg, 2007).

# 3 Results and Discussion

# Chyba! Záložka není definována. 3.1 Preschool children

The qualitative analysis of answers of children, allowed revealing that children, choosing, this or that option of development of a plot, often pronounced norm. 4% of children of preschool age indicate violation of norm and the rule during creation of amusing plots. Often children realize that ridiculously happens when the norm is broken: "Because that is wrong, and is ridiculous!" (S.K., 6 years), "It is the ridiculous story, it is not necessary on – kind" (Z.C.,6 years),

Often the norm is shown in situations of interaction of children in a game: "When friends together play, it is good" (Sh.Ch., 6,5 years), "It is necessary to be on friendly terms, it will be so better, and an angry fox – it is ugly" (M. P.,6,4 of years), "The furnace pies alone not really well, boringly and alone" (L. S., 6,4 years).

The norm is often specified by children at the description of rules and standards of hygiene and safety rules: "Ate badly as pigs" (M.E., 6 years), "Who dirty, becomes a pig" (I.A., 6 years), "It is impossible children's to dress" (S.N., 6 years), "Doggies were tidied up and began to play a ball" (L.M., 7 years), "Is ridiculous that doggies dressed children's things, they strangers" (Z.S., 6 years).

#### Chyba! Záložka není definována. 3.2 Younger school students

Violation of norm in stories from personal experience school students

The stories connected with violation of the rules of behavior, norms entered into this group. 12% of children of younger school age indicated violation of norm and the rule by drawing up ridiculous stories from personal experience. Situations in which children broke norm more often were revealed: violation of school rules, rules of hygiene.

- Violation of school rules, norms: "Once upon a time there was a boy the hooligan. In one day he could do a heap of everything. Here it went to school and threw a ball in a wastebasket. Came into school and jumped on a chair, broke it. When went to the dining room, a fork in the director throw sausage" (P.Sh., 9 years).
- Violation of the rules of hygiene: "Went along the street of people. Saw a cake. Dropped it, but all the same ate it. It was tasty. Tasty sand" (U.V., 9 years).

Violation of norms, the rules of conduct selected by school students from works of fiction

Calling ridiculous situations from works of fiction of 15% of the school students participating in an experiment called situations of violation of norm and rules.

- Violation of school rules: deception. "There two boys were late in school and wanted to tell lies to the teacher, but did not agree and dishonored in all class. (The fire in wings or a feat in ices)" (Y.M., 8 years).
- Unwillingness to study, progress "The fact that the boy did not know grammar when Malvin was taught by him idled. He did not know how many 2+2" (Buratino's Adventures) (A.P., 9 years).
- Standards of behavior "Very much made laugh me that Denis, by the nonsense threw out porridge on the street, and got on elderly mister who was just going to be photographed (Secret becomes obvious)".

Teenagers. Allocating ridiculous episodes, teenagers specify the situations connected with offenses, violation of school rules and safety rules.

- Offense. "Once I with the friend broke a window. The first time was thrown by my friend and did not get. The second time I threw, got. In a window the crack went. Last time the friend threw and broke a window" (K.A., 12 years).
- Deception of the teacher. "One schoolmate brought a column in school and began to joke with the teacher. Turned on the music and told that he is called, he was released, and he just stood behind a door" (E.S, 13 years).
- Violation of safety rules. "When I was small, I climbed over a fence and ran to the girlfriend Adelina" (F.P., 15 years). Students. Results of interrelation of humor and tendency to violation of social norms and rules are presented in table 1.

Table 1. Correlation communications of styles of humor and tendency to the rejecting behavior at students

Scales	Affiliative humour	The self- supporting humour	Aggressive humour	Self- deprecating humour	tendency to addictive behavior	tendencies to self-damaging and to behavior	to aggression	willed	tendency to delikventny behavior
Mastering by humour	.26**	.50**	.21**	.27**					
Affiliative humour		.19**		.29**				-	
Chyba! Záložka nen definována. Self- supporting Chyba Záložka nen	- !		.16*	.22**					
definována.									
Aggressive humour		.12*		.30**	.33**	.28**	.28**	.25**	.27**
self-deprecating humour					.20**	.18**		.25**	.18**

Note. (R) indicates reverse keyed items.

In a research communication between two types of humor (aggressive humor, self-deprecating humor) among themselves (r = .30) and 4 scales of the rejecting behavior at students is revealed. The aggressive (self-deprecating) humor has weak correlation communications with tendency to deliquent behavior of r = .27 (r = 18), with tendency to addictive behavior of r = .33 (r = .20), with tendency to the self-damaging and self-destroying behavior of r = .28 (r = .18), with strong-willed control of emotional reactions of r = .25 (r = .25) respectively. Communication between aggressive humor and tendencies to aggression and violence is revealed (r = .28).

# 4 Summary

Chyba! Záložka není definována.In ridiculous stories of children of preschool and younger school age, the description with violations of norms and rules increase from 4 to 12% (in

independent stories of children), to 15% in the stories made on the basis of fiction. The qualitative analysis of answers of children of preschool age, allowed to reveal that violation of norm in interaction situations in a game, violation of the rules of hygiene and safety, those norms which are developed by parents and tutors at preschool age is represented to children amusing.

Situations in which school rules, rules of hygiene were violated seemed to younger school students amusing. Obviously, the school student's position, socially controlled educational activity promote that younger school students "meet rules", realize the requirement to subordinate the behavior to school norms and rules (Bayanova et al, 2016). Increase in quantity of ridiculous stories in a cultural product of society – fiction is connected with it. In our research, in ridiculous stories of children, rules of school discipline and the schedule, the relations with teachers and parents, hygiene are violated. Similarly in the research

<sup>\*</sup> p< .05

<sup>\*\*</sup> p< .01.

Dowling situations of misconduct, the relations with teachers and hygiene Are described (more violations of the physiological plan) (Dowling, 2014).

In difference from younger school students, teenagers as ridiculous allocate the situations connected with offenses. A number of foreign researchers established dependence between negative styles of humour and aggression, asocial behavior of teenagers and adults. In the research conducted by McGee it was revealed that teenagers who laughed more often and initiated humour showed unprovoked verbal and physical aggression and reciprocal aggression in communication with peers more often (McGhee, 1980b; McGhee, 1980a). In the research Damico it is revealed that the children inclined to humour showed more negative attitude to teachers and the principal, broke discipline in a class more often, were more undisciplined (Damico & Purkey, 1978). In the relations with peers for maintenance of the social status aggressive teenagers often resort to humour (Bowker & Etkin, 2014).

In Martin research it was established that the students having high rates on a mastering scale humour are more active, sociable, self-assured, independent. Our researches (Artemyeva, 2016; Garanina & Artemyeva, 2017; Kolojarceva & Artemyeva, 2017). confirm data of foreign psychologists that estimates on a mastering scale humour positively correlate with orientation to surrounding people, sociability, good adaptability by Wednesday, self-confidence (Saifullina & Akhmetzyanova, 2017; Akhmetzyanova, 2017). Our research allows to claim that negative styles of humour (aggressive humour, self-deprecating humour) are connected with tendency to violate public rules, weak social control of behavioural reactions or unwillingness to control behavioural manifestations (Artemyeva, 2017; Kolojarceva & Artemyeva, 2017).

#### **5 Conclusion**

Throughout preschool - younger school age the quantity of the ridiculous stories connected with violations of hygiene, discipline and schedule in educational institution increases; the relations with adults (is more often with teachers). Only in group of children of preschool age as ridiculous situations of violation of game interaction are allocated. At teenagers opposite for the first time as ridiculous offense situations are specified. At students the dependence between negative styles of humor and tendency to violation of social norms is revealed. Both at men, and at women the aggressive humor is connected with the majority of scales of the rejecting behavior. However at women these scales are connected also with self-deprecating humor. The aggressive humor of women also finds communication with aspiration to the self-damaging behavior, readiness to realize various forms of autoagressive behavior.

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# VERBALIZATION OF THE "RICH / POOR" DICHOTOMY IN THE RUSSIAN AND ENGLISHLANGUAGE OF MASS MEDIA $\,$

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Abstract: The article deals with studying of one of the basic cultural and psychological oppositions forming the cognitive value-appraisal picture of the world, the rich and the poor dichotomy and its verbalizations in the language of mass media. Specificity of representation of the rich/poor bipolarity as dominants of the journalistic text and as one of the ways of linguistic cognition of the world is defined. The method of continuous sampling, method of component-definitional analysis, descriptive method, including observation and classification of the material under study, and evidently the contextual analysis have been used as the major methods of research. At first, the microcontexts are analyzed, where the poor/rich dichotomy is considered as the subject-bearers of the feature. The paradigmatic set of nominations of subject-bearers of the rich/poor feature by occupation, age, social status, etc., is revealed. Secondly, the analysis of verbalization in the newspaper text of the items of possession of the poor/rich (nominations combined by the meaning of "food", "clothing", "housing", etc.) is presented. Thirdly, the analysis of contexts depicting the style and lifestyle of the poor/rich is given. The rich/poor binary code in the linguistic space of the Russian and English mass media has exposed a wide range of lexico-semantic links promoting formation of semantic sets and paradigms based on synonymy and antonymy, phraseological and associative representations and images, valence of the word and its contextual interaction.

Keywords: linguoculturology, language of mass media, multi-structural languages, opposition, paradigmatic relations.

#### 1 Introduction

Recently in linguistics there has been a transition to new paradigms of the language study: anthropocentric and culturological, where the language is viewed not as a static linguistic system, but as a tool of communication, reflection of the world, integral component and bearer of the ethnos culture (Likhachev 1993; Maslova 2005, Safin et al, 2015; Villalobos Antúnez, 2016). Most of information about the world comes to the man through a linguistic channel, so people live rather in the world of concepts created by them for intellectual, spiritual, social needs than in the world of objects and things.

Contemporary studies of the phenomenon of bipolarity are carried out within the framework of the anthropological paradigm, being one of the core trends of the linguistic surveys at the turn of the 20th and 21st centuries, whereupon the person, the bearer and the user of the language are placed at the forefront. It still remains attractive to look into functioning of the binary oppositions in the mass media language, where the most important functions include information value and impact on the recipient. The informational function of journalistic texts is that the author intends to inform the widest possible range of readers about the problems vital for society. Being at a considerable distance by space, the author of the mass media text seeks to approach the addressee by time, topic of communications through use of the speech stylistic means, whereunder verbalization of the rich/poor dichotomy is one of the methods for "reviving" the speech on pages of the mass media.

# 2 Methodology

In the course of researching, we have relied on the previous experience of studying the semantic-functional features of linguistic units in the area of artistic and journalistic text (Nurullina & Usmanova, 2016; Safonova & Chupryakova, 2017; Farkhoutdinov & Isavnin, 2017) and comparative-typological study of the unrelated languages (Fatkhutdinova 2014; Khusnullina et al, 2017; Yusupova & Lu, 2017). The linguistic research has been conducted on the basis of the two multistructured languages: the Russian and English ones, and includes extensive factual materials (more than 250 expressions and microtexts, including judgments about the rich and/or the poor, extracted by continuous sampling from various mass media

publications). In the course of study, we have applied the method of continuous sampling; statistical method; method of component-definition analysis (as exemplified in explanatory dictionaries) (Ozhegov 2010, Cambridge Dictionary Online); descriptive method that includes observation and classification of the material under study and the contextual analysis.

#### 3 Results and Discussion

We have created a scheme, whereunder the linguistic expression of the notions of poor and rich in the contemporary mass media has been analyzed. Firstly, analysis of the contexts, where the poor/rich is considered as the subject-bearer of the feature; secondly, analysis of the representation objects of possession of the poor/rich in the text; thirdly, analysis of the representations associated with lifestyle of the poor/rich.

- I. Analysis of the contexts where the rich/poor dichotomy is interpreted as the subject-bearer of the feature has revealed a paradigmatic set of nominations of the subject-bearers of the feature "rich" by occupation:
- 1) nominations united by the meaning of "entrepreneur" (merchant, manager, businessman, etc.); 2) nominations united by the meaning of "official" (minister, deputy, President, mayor, etc.); 3) nominations united by the meaning of "management professional" (administrator, supervisor, director, et.); 4) nominations, united by the meaning of "the person engaged in the oil industry" (oilman, oil tycoon, oil king, etc.); 5) nominations united by the meaning of "the person engaged in jurisprudence" (prosecutor, legal adviser, lawyer, judge, etc.): The wealthiest people in Saint Petersburg are financiers, the poorest are nursery teachers and public catering staff. (AiF 07.05.08) It appeared to be that mayors not only assign stratospheric salaries for themselves, but also try to ensure a deep-pocket old age at public expense. (AiF 19.08.15)

As it can be seen from the examples, the paradigmatic rows are used in speech as aspectual nominations of the persons gaining high/the highest profits. The paradigm of nouns and adjectives grouped within the meaning of "rich" is also updated: rich man, tycoon, financial tycoon, millionaire etc.: And in Russia they are traditionally considered to be "oligarchs" and just wealthy citizens. (AiF 28.10.15) These guys are millionaires, they make the laws, they make the rules and regulations. (The Washington Post, November 10) The type of nominations that denote graduality of the feature "rich" is formed: super-prosperous, super-wealthy, dollar tycoon, multi-billionaire. Along with activation of intermediate nominations of subjects in the speech considered as rich, the negative meanings are verbalized in the newspaper texts under study. In such statements, a negative generalized-composite image of the rich occupying the highest level in the hierarchical ladder is formed through negatively connoted linguistic units: They are the influential people, who have become multi-billionaires following thievish privatization according to the Western scenario. (AiF 04.11.15)

In the journalistic discourse, there is a trend towards personalizing the subject-bearers of the feature "rich" (linguistic personalization tools include the proper names: Bill Gates, Mark Zuckerberg, Roman Abramovich, etc.): Mark Zuckerberg, the founder of Facebook, is now officially a billionaire. Until now, Mr. Zuckerberg has been staggeringly rich only on paper. (The New York Times, May 24, 2012)

Let us consider the paradigmatic set of nominations of subjectsbearers of the feature "poor". With that, it should be noted that the denoter of any member of the row systematically acquires an additional seme "poor; having no means for provision of average standard of living":

1) nominations united by the meaning of "the person, who is by occupation on public subsidy". The basic nomination of the

public sector employee is represented by specific nominations (professor, teacher, army officer, doctor, nurse, etc.): It is more difficult for those poor who work. < ... > Thus, for example, the state museum caretakers, nurses in budget medical institutions do not earn enough to fill the typical consumer bundle. (Izvestiya 14.03.07);

- 2) nominations united by the meaning of "the person, who is on public social subsidy, receiving the pension/allowance" (pensioner, disabled person, unemployed, etc.): I have a far more extensive concern not of the billionaires' wealth, but of the poverty of pensioners, for example. (AiF 28.10.15);
- 3) nominations of poor by the age connected with the single meaning "people of mature age" (old people, elderly, poor, etc.): All the "poverty" was burnt: old people, pensioners, poor people. (AiF 22.04.15);
- 4) nominations that indicate membership of the family as poor and associated with the single meaning of "the member of an incomplete and/or large family" (large family, single mother, orphan, etc.): Children from the poor and large families, whose breakfasts are paid from local budgets, are malnourished at the first meal. (Izvestiya 24.02.16) There's something about growing up with a single mother, growing up in poor neighbourhoods and attending low-quality schools that hurts boys much more than it hurts girls. (The Washington Post, December 02)

As it can be seen from the examples, the paradigmatic rows' members are used in speech as aspectual nominations of the persons living on a small salary, pension, allowance, and the paradigm of nouns and adjectives united by the meaning "poor" is updated: tatterdemalion, needy, economically disadvantaged, indigent, insolvent, etc.

Analysis of the contexts, where the items of possession of the rich are described, makes it possible to single out the nominations characterizing a high standard of living of the rich. We have identified the following paradigms of nominations of the items of possession, objectifying the current stereotyped perceptions about the rich:

- 1) nominations united by the meaning of "aristocratic food and drinks" (marbled beef, black caviar, white truffle, etc.): ... when the flows of petrodollars run out, starvation will commence among the citizens and not in the government, with the latter having the traditions to eat black caviar even in the besieged Leningrad dying of famine. (AiF 26.04.13);
- 2) nominations united by the meaning of "expensive, high-quality apparel" (Tom Ford costumes, Dolce and Gabbana, Donatella Versace, Giorgio Armani apparel, etc.): The best thing you can do for her is to give a mink coat and a diamond necklace or, as a last resort, to give her telephone number to your friend-millionaire. (AiF 06.06.08);
- 3) nominations united by the meaning of "expensive house" (country house, penthouse, house (in the capital/in the downtown), etc.): Downtown is traditionally considered to be the most desirable, prestigious and therefore expensive place to live in the capital. (AiF 08.04.15) This month, the most expensive new listings consist of several newly constructed homes, including a 24,000-square-foot estate on more than five acres in Great Falls, Va., and three new custom homes in McLean. (The Washington Post, December 15, 2015);
- 4) nominations united by the meaning of "expensive private vehicles" (cross country vehicle, sportcar, Bentley (car), private jetliner, etc.): Another way to protect yourself against theft is to buy a very expensive car: in 2014 only one Rolls Royce was stolen (prices for the model range start from 24 million roubles), two Maserati sportcars and nine Bentley cars. (AiF 30.04.15) Nissan's most expensive car, the Maxima, is re-engineered and restyled for 2016 for a more luxurious and sporty experience and, thanks to a more powerful V-6, delivers 300 horsepower for the first time. (The Washington Post, May 11);

5) nominations united by the meaning of "expensive jewellery" (gold jewellery, diamond products, expensive watches, etc.): The top lots are exhibited from the anonymous private collections: a ring adorned with a large, over 7 carat, diamond of the rarest peach colour (2.5-3.5 million US dollars) and a diamond necklace of sunny-yellow colour (2.0-3.0 million US dollars). (Izvestiya 20.04.10)

In the course of analyzing the contexts, where items of possession of the poor are described, we have identified two major paradigms of nominations of the items of possession embodying stereotyped perceptions about the poor and characterizing the poor's specific "index of life":

- 6) nominations united by the meaning of "inexpensive products" / "simple food" (bread, milk, cereals, etc.: As for the poorest layers and residents of the depressed regions, they were not drinking coffee and cream before and do not see any changes in their current menu. (AiF 04.11.15);
- 7) nominations united by the meaning of "uncomfortable place of residence" (barrack, hostel, Khrushchev-ear flats, etc.): It was then that young people < ... > clearly felt, understood that their unity, their prayer, their love for the Gospel should be filled with service to their neighbours, especially the poor children living in barracks. (AiF 29.11.10) Our home had mud walls, a thatch roof, three small rooms and a mud floor. We had no electricity, no running water, no bathrooms and no heat. (The New York Times, February 12, 2016)

The mass media language has frequent descriptive construction denoting the poor (below poverty line, low income bracket, etc.), prescribing absence / inadequate quantity of money (no money, low money, etc.): ... the deputy of the Communist Party of the Russian Federation, Nikolay Ryabov, in June introduced a bill providing for a differentiated taxation: it was proposed to abolish and to raise it up to 16% for millionaires. (Izvestiya 13.11.15) We also find that the Federal Reserve destroys the value of the currency, what you're finding is that if you're poor, if you make \$20,000 a year and you have three or four kids, and you're trying to get by, as your prices rise or as the value of the dollar shrinks, these are the people that are hurt the worst. (The Washington Post, November 10)

It is worth noting that stereotypical perceptions of the poor accrue a typical specific, containing the notion of a numerical measurement of the item of possession; the phraseological units that symbolize stereotypical perceptions of poverty are activated (to scrape the bottom of the barrel, broke to the wide, to make ends meet, to tighten belts, penniless, etc.): His parents had arrived penniless just a few years earlier but became ardent capitalists and eventually started a meat wholesale business. (The New York Times, December 3, 2010)

Financial status of the poor and the rich is verbalized in the mass media language through use of the lexemes purse and pocket as a part of metaphorical stable expressions: to impact on the purse, fat/light wallet, within the pocket (far beyond means), to cost a pretty penny, etc.

8) Analysis of the contexts describing lifestyle of the rich and the

Lifestyle of the rich is verbalized in the exemplary standard formulations: The fortune is obtained through the work of others; Wealthy people try to get income by all manner of means; Wealthy people lead an idle existence; The wealthy are characterized by spiritual poverty. There is a trend of formation of the values directed by the sociocultural context, which have not become the "common places" yet, but which change the stereotypical perception of the rich: Authorities must clearly show that they are with people, and not with "moneybags". < ... > show that the authorities are with ordinary people, that they will share all the hardships of the crisis with people < ... > That the oligarchs piling debts on debts will pay for greed with their own property, and will not crawl out of the debt pit on the people's coffin. (AiF 27.01.09)

Lifestyle of the poor is reflected in the exemplary standard formulations: Beggars work in good faith; Beggars save cultural and moral values against the difficult circumstances of life: Millions of Americans are working longer hours for lower wages, and yet almost all of the new income and wealth being created is going to the top one percent. (The Washington Post, October 13)

Negating the feature "poor", the newspaper text writers represent the feature "rich" through euphemistic descriptive constructions (not the poorest, there are good savings, good financial condition, etc.): In terms of the average level of pensions across the regions of Russia, the cases when people fix high pensions to themselves for a comfortable old age can only be called swaggers. (AiF19.08.15) and, vice versa, the feature "poor" is rendered through negation of the feature "rich" (to be not rich): As I've said many times before, my parents were never rich people. (The Washington Post, November 10)

#### 4 Summary

In the Russian and English languages, the nominations of subject-carriers of the feature "rich" coincide by occupation, meanwhile the trend towards personalization of bearers of the feature "rich" is traced. The nominations that refer to membership of the family of the poor and grouped by the single meaning of "the member of incomplete and/or large family" are also universal.

Each nomination of items of possession of the rich and the poor in the Russian and English-language mass media highlights a specific "standard of living" of the rich and the "index of life" of the poor. Alongside, the nominations united by the meaning of "expensive house", "expensive private vehicles" and "uncomfortable place of residence" coincide. Lifestyles of the rich and the poor in the Russian and English linguistic cultures are represented by the standard language constructions through the stereotyped expressions (metaphorical combinations, descriptive constructions, phraseological units).

#### 5 Conclusions

Sociologists, political scientists and correspondents write a lot about the rich and the poor, about the dramatic division of society into the rich and the poor. In the Russian and English linguistic consciousness, the rich/poor dichotomy is a universal one, which fact is confirmed by its ability to be used in speech as the basic element of judgment and that each component has got rows of linguistic and contextual synonyms.

In the Russian culture, verbalization of the wealth concept to a large degree shows indifference, even contempt for wealth, has a negative connotation in respect to the financial wealth; in the English mentality, the attitude to wealth is more practical, pragmatic: it largely depends on the person, his aspirations and tenacity.

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