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A	SOCIAL SCIENCES
B	PHYSICS AND MATHEMATICS
C	CHEMISTRY
D	EARTH SCIENCE
E	BIOLOGICAL SCIENCES
F	MEDICAL SCIENCES
G	AGRICULTURE
I	INFORMATICS
J	INDUSTRY
K	MILITARISM

TABLE OF CONTENTS (BY BRANCH GROUPS)

A   SOCIAL SCIENCES

J   INDUSTRY

A   SOCIAL SCIENCES

ALTERNATIVE COMMUNICATION IN WORK WITH CHILDREN WITH SPECIAL NEEDS IN UKRAINE

[a]OLEG LISOVETS, [b]RUSLAN NOVHORODSKYI, [c]HALINA BEJGER, [d]SVITLANA BORYSIUK, [e]NINA OSTANINA, [f]TETIANA HORDIIENKO

[a,b,d-f]*Nizhyn Mykola Gogol State University, 2, Grafska Str., 16600, Nizhyn, Ukraine*
[c]*State Academy of Applied Sciences in Chelm, Poland*
email: [a]*lisooleg@gmail.com,* [b]*novgorodskiy__777@ukr.net,*
[c]*h.bejger@wp.pl,* [d]*svit1anaborysiuk@gmail.com,*
[e]*3777.nina@gmail.com ,* [f]*h0rdienkotana@gmail.com*

Abstract: The article discusses the problem of teaching schoolchildren with disabilities; talks about the possibilities of alternative communication as a modern technology in working with this category of children. As part of an empirical study, the level of use of alternative and additional communication (ACC) tools in working with children with special needs by pedagogical workers was analyzed, based on a survey of 20 respondents-pedagogical professionals. The theoretical and practical significance of the study lies in the fact that it contributes to the solution of a scientific problem of important socio-cultural significance, opens the direction of scientific research related to the theoretical and methodological provision of pedagogical support for children with special educational needs in the education system based on the use of adaptive communication technologies.

Keywords: children with special needs; alternative communication; methodological support; communicative activity, social work.

1 Introduction

Currently, the number of children with special needs is increasing in Ukraine, determining the necessity of implementing a social support model in the practice of social and pedagogical work for their families. The role of pedagogical and social workers in this process is crucial.

Society shows a growing interest in improving the conditions of education and upbringing for these children, particularly in the communicative sphere. Legislative acts have been adopted at the state level in Ukraine to create an inclusive education system, addressing issues in the inclusive education sphere comprehensively. Additionally, a specific system for training specialists in the inclusive field is being developed.

Speaking and communication are fundamental elements of social interaction. For most people, learning to communicate is not a challenging task. However, there is a significant number of individuals who have limitations in using speaking for full-fledged communication. Some of them may not be able to use verbal means at all. In other cases, the level of speaking development may not allow performing all necessary communicative functions. In such situations, there is a need to use alternative means of communication, which can complement or substitute verbal speaking, such as Alternative and Augmentative Communication (AAC) systems.

Scientific research and practical experience of researchers confirm that the use of alternative communication in children does not hinder language development - on the contrary, it can contribute to its development. Several scholars, including N. Bazyma, Yu. Boychuk, L. Zalanovska, Yu. Rybak, T. Skrypnyk, M. Sheremet, D. Shulzhenko, and others, have dedicated their research to this topic and have made a significant contribution to addressing various aspects of the problem socialization of children with special needs. Research on the communicative sphere of children with special needs aimed to study various aspects. Researchers explored the genesis and factors that could complicate communicative activities (N. Babych, H. Bilavych, Yu. Boychuk, and others). The studies also covered the impact of communication on the psychological development of personality at different stages of age development and its correlation with the process of personality formation (L. Zalanovska, S. Kobchenko, Ye. Kozir, and others).

According to the results of analysis of theoretical studies, the number of individuals with difficulties in communication activities is steadily increasing each year. Such an increase in

communication skill impairments can be caused by various factors, including genetic, medical, social, psychological, and pedagogical factors. It is important to note that in modern society, the rise in the percentage of individuals with speaking development disorders coincides with the improvement in the quality of medical, psychological, and socio-pedagogical diagnostics. Accordingly, the current challenges in implementing an early intervention system for AAC include the following:

1. There is no defined need for the use of alternative and augmentative communication (AAC) tools among the population of Ukraine.
2. Service providers who could potentially implement an AAC system in their work have not been identified.
3. There is no strategy in place to ensure that users have access to technical AAC resources.
4. There is a lack of a systematic informational campaign regarding the AAC system in Ukraine.
5. Only sporadic initiatives exist for the training and methodological support of professionals in education, social services, healthcare, and other fields on the topic of AAC.

The aim of the article is to theoretically analyze and practically investigate the level of utilization of alternative and augmentative communication (AAC) tools in working with children with special needs by educational professionals.

2 Method

The methodological basis of the study included the following: humanistic approach; a personality-oriented approach, the essence of which is to reveal the nature and conditions for the implementation of individual developmental functions of the educational process; activity approach, which considers communicative interaction as a means and condition for personal development; an integrated approach, which is based on the unity and coordination of the structured components of education, connections, and relationships, as well as the interdependence and mutual influence of relationships within the system.

3 Results and Discussion

Communicative activity in children is closely related to the process of learning, which includes perception, thinking, memory, and other aspects. This process can only be facilitated in the context of specially organized education, particularly through developmental communicative teaching. Specially structured learning of forms and methods of communicative interaction between children and adults, as well as peer interactions during their joint activities and interpersonal interactions, aims to develop new communicative skills and structures in the child's personality. Such an approach not only anticipates potential negative phenomena but also contributes to addressing existing issues in the child's communicative and personal development [1].

Modern researcher M. Sheremet notes that communicative activity has its structure, consisting of certain indicators. According to M. Sheremet, these indicators ensure the level of development of communicative skills in children with special needs. Firstly, an important component is communicative qualities, including the ability to establish contact and address the interlocutor, the ability to listen and understand the thoughts of others, the ability to navigate in a communication situation, and the ability to select and present material in language. Secondly, this includes communicative actions, covering intonation, emotional and expressive design of speaking, as well as the ability to sense the mood of the interlocutor. Thirdly, these are speaking skills related to the presence of vocabulary, mastering lexical and grammatical means, as well as correct pronunciation of sounds and syllables. It is important to note that

the development of communicative skills in any activity involves four interrelated directions: teacher-student communication, interaction with other students, communication in small groups, and communication in the classroom[10; 11].

It is important to remember that the communication process itself has components, including:

- Expressive-mimic component (eye contact, body language, which includes facial expressions, gestures, pantomime, paralinguistics, and extralinguistics);
- Object-action component (which includes proxemics, paralinguistics, extralinguistics, and pantomime). These are representational means that arise during joint activities of the child with the adult, through which children demonstrate their readiness for interaction with adults and indicate the type of interaction they invite to;
- Speech component, manifested in expressions, questions, answers, dialogues, etc.

It should be noted that communicative activity is considered as a set of speaking acts, and a speaking act is a specific case within the communicative activity process. Therefore, it should comply with all characteristic regularities of this process.

Researchers of communicative activity, such as H. Kostyuk and O. Zaporozhets, propose examining the structure of communicative activity through its main components: the subject of communication, communicative needs and motives, types and forms of communication, means and results of communication. It can be stated that the characterization of an individual's communicative activity at any age is impossible without considering its structural organization, content, and the completeness of communicative skills implementation, the degree of mastery of both verbal and non-verbal means of communication, as well as the content and stability of communicative motivation. Therefore, let us analyze some features of communicative activity of children with special needs.

Modern researchers of communicative issues in children with special needs have identified several characteristics of their communicative sphere, including (H. Bilavich [1], M. Kopchuk-Kashetska [1], M. Sheremet [10], and others):

1. Communicative activity of children with special educational needs can be diverse and varied depending on the type and degree of their educational needs. Typically, this activity includes the use of various forms of interaction and means of communication. Some children may use verbal communication, while others may employ non-verbal methods such as sign language, facial expressions, symbolic communication tools, or alternative communication systems. The communicative activity of children with special educational needs contributes to facilitating their adaptation to new conditions and interactions, fosters the formation of relationships, and promotes the development of social skills [9].
2. Additionally, it is important to consider the communicative activity of children with special educational needs in the context of their social environment, where they interact with peers, teachers, families, and other community members. Communication plays a crucial role in the development of language, social skills, adaptation, and mutual understanding.
3. In the communicative activity of children with special educational needs, it is essential to take into account that, on the one hand, they show a desire to interact with their surroundings, and on the other hand, they may not always exhibit sufficient initiative for this purpose.
4. The communicative behavior of children with special needs is characterized by difficulties, especially in the process of acquiring educational material. They may have limited motivation for communication, and due to a restricted vocabulary (impairing their ability to express their thoughts precisely and diversely) and pronunciation peculiarities, the structure of their speech may be disrupted (pronunciation problems can affect the clarity of the child's speech and ability to interact in verbal expressions). These factors significantly impact the communicative-cognitive abilities of children with special educational needs and can affect their readiness for school learning [1].
5. By organizing appropriate psycho-pedagogical conditions in the communicative sphere of children with special educational needs, a certain dynamic can be achieved. Individualized methods and means can be applied to improve the communicative activity of children with special educational needs, such as working with specialists (speech therapists, psychologists), using communication-supporting technologies, and considering the specific needs of each child. The overall goal is to create a supportive environment for the development of communicative skills that takes into account the individual characteristics of each child and promotes their full inclusion in educational and social processes.
6. In their communicative activity, children with special needs face difficulties in formulating and expressing their own thoughts and ideas.
7. Children with special needs have limited speech mobility. Some children may use restricted means of communication, such as gestures, mimics, or alternative and augmentative communication (AAC) methods.
8. The mentioned characteristics may require individualized strategies and approaches to support effective communication and the development of communication skills in children with various speech and language disorders (incorrect pronunciation, substitution and distortion of sounds, omission of sounds, imperfect differentiation of sounds, presence of involuntary pauses, limited vocabulary, grammatical imperfections, reading and writing difficulties). All these features influence the learning of ways to form and use sounds to create syllables and words (phonetics), the assimilation of combinations of the smallest units of language (morphemes), and the formation of words (morphology), the construction of sentences, coherent texts, etc. (syntax), the meaningful determination of word and sentence meanings (semantics), resulting in the development of impaired communication - both oral and written -based on linguistic skills [5; 8].

For instance, children with sensory impairments, such as hearing disorders, are characterized with the following: hearing impairments in children cause difficulties in the communicative sphere (segmentation of sounds and words in speech flow; delay in receptive language; delay in expressive language; cognitive delays). Children may experience challenges in memorizing and understanding auditory information; delays in the development of expressive oral language are possible; there is an impact on syntax and semantics, as well as impact on the development of vocabulary [8; 6].

Children with visual impairments will exhibit signs in the communicative sphere, such as performing repetitive stereotypical movements (rocking or rubbing their eyes), dependency on others, not perceiving nonverbal communication, and not using it. They require special tools, such as Braille font, special computer programs, mobile applications, etc. [8].

Children with musculoskeletal disorders will require specialized equipment: communication boards, complex electronic communication devices, software, and mobile applications. They may have speech disorders, not pronounce certain sounds or distort them; involuntary movements in the speech apparatus are observed; often, these children have difficulty recognizing sounds by ear, and limited vocabulary.

Children with emotional and behavioral disorders constitute a category of children whose behavior goes beyond acceptable norms and differs significantly from what is considered typical for their age. These disorders include persistent and long-lasting behavior problems, socially and culturally unacceptable behavior, behavior negatively impacting academic achievements,

and behavior that cannot be explained by health issues, sensory or social violations [8].

Certainly, it is not possible to analyze the fundamental communicative characteristics of children with special needs comprehensively within the scope of one research. However, we would like to emphasize that these characteristics should be taken into account by educational professionals and social sphere specialists when implementing various alternative and augmentative communication tools.

As previously noted, communication is recognized as a key factor in the development of individuals with special needs, as through interaction with their environment, a child gains experience and acquires new knowledge. While all children feel the need for communication, not all of them can implement it. Serious impairments in motor and speech activities, a reduced level of intellect, and disorders within the autism spectrum can make the use of verbal communication challenging or impossible for such children. Their language, often incomprehensible even to close relatives, may be limited to isolated vocal reactions at best. The absence of verbal language complicates social adaptation and the establishment of interpersonal relationships for these children. However, these difficulties are not insurmountable. The use of special technologies, successfully applied in Western and Northern Europe countries for over 30 years and more recently in Ukraine, can help teach children to express their desires and feelings, as well as build relationships with both family members and others. One of such technologies is the Alternative and Augmentative Communication (AAC) system, which is based on the use of non-verbal means of communication.

Communication can take various forms, including speaking, gaze, text, facial expressions, touch, body movements, gestures, sign language, symbols, drawings, as well as the use of speaking-generating devices and more. Alternative and augmentative communication (AAC) tools are among the most well-known and frequently used instruments for the language development in children with special needs. These tools encompass various methods and forms of non-verbal communication and utilize diverse types of instruments widely employed by professionals, educators, and caregivers (parents).

Alternative and Augmentative Communication (AAC) is a field at the intersection of speech therapy, psychology, education, and medical practice that addresses the communicative and cognitive needs of individuals with significant and complex disorders of communication and speech development. Such disorders involve disruptions, including impairments in both expressive verbal speaking and comprehension of speaking, encompassing oral and written communication methods [7].

Alternative and Augmentative Communication (AAC) is a mode of interaction used during communication for functional support or as an alternative to speaking for individuals with significant speaking difficulties [4].

AAC serves as a tool that enables individuals who cannot use verbal speaking to communicate. Additional communication refers to auxiliary or supportive means of communication. The term "additional" emphasizes that interventions in alternative forms of communication have a dual purpose: supporting existing speaking and providing an alternative means of communication in the absence of the ability to speak. All communicative systems that do not use oral speaking as the primary means of information transmission are called "additional" and "alternative".

Today, in the research of scientists, alternative communication includes the use of gestures, facial expressions, pictures, photographs, and technical means to enhance a child's interaction with both peers and adults. The chosen communication system is of significant importance as it facilitates the adaptation of a child with special educational needs to society and stimulates the development of cognitive processes and language. The concept of AAC emerged in the late

1970s and early 1980s as part of a large international project addressing severe speaking disorders, implemented by England, Canada, the United States, and Sweden. This project laid the foundation for the establishment of the international organization called the "International Society for Augmentative and Alternative Communication".

According to M. Chaika, H. Usatenko, and O. Kryvonohova, AAC is a set of tools and strategies that a person can use daily to perform tasks in the process of communication. It includes various means of communication, special techniques, and communication systems [4].

Information from scientific literature considers alternative communication as a means to teach and, if possible, compensate for permanent or temporary limitations in the life and social interaction of individuals with various developmental disorders. Many children with special needs have impairments in the perception and reproduction of language and speaking, both oral and written, and alternative communication serves as an effective means for them to communicate [3].

The use of AAC is possible for both children and adults and can be temporary, limited to a specific period, or used throughout one's entire life. Each individual has the opportunity to choose communication tools that meet his needs and can combine different means and forms of communication, such as facial expressions, gestures, pictograms, and words.

Alternative communication, by its purpose, replaces speaking that is absent or inadequately developed in a child or adult. At the same time, augmentative communication merely supplements existing speaking. In scientific literature, one may also come across the concept of "total communication" – any means and strategies that can be used to enhance the communication of a child or adult. In other words, it is an approach that characterizes the communication process as a spectrum of verbal and non-verbal means of communication [4].

We can also note that alternative communication provides the opportunity to:

- Understand directed speaking (the ability to perceive and understand the expressions of the child, who may have speaking impairments or peculiarities). This involves careful consideration and interpretation not only of the verbal part of speaking but also of non-verbal signals, gestures, facial expressions, or other forms of expression).
- Respond, communicate about oneself, and express own thoughts.
- Support motivation for communication by creating a stimulating and positive environment where the child feels that his communication attempts are valuable and important. This includes natural interaction, interesting topics, using the child's interests, positive reinforcement, and game situations where communication becomes part of the play.
- Build an effective communication system for the individual and his surroundings (creation of an interactive and mutually beneficial verbal and non-verbal platform that enables interaction and information exchange between the personality and environment of the child. This may include: communication tools, individualized learning, the development of a teaching and support program for the child with special needs; providing opportunities for the child to interact with his surroundings; promoting active participation and inclusion in communicative processes; technical support; ethics and confidentiality; social adaptation. The ultimate goal is to create a system that facilitates quality and effective communication, eases the expression of thoughts and desires, supports social interaction, and contributes to the child's inclusion in society as a whole.
- Achieve social integration, avoid isolation (enable full participation and interaction of children with special needs in the social environment). This may include providing opportunities for children with special needs to participate in various social activities and events, such as education,

sports, arts, games, and other forms of interaction; preventing feelings of separation or exclusion of children with special needs, ensuring their participation in shared activities with other children; creating an environment that considers the individual needs and abilities of each child, providing adapted approaches and resources; developing programs and methodologies aimed at including children with special needs in educational institutions and ensuring their education in an inclusive environment; involving parents, educators, classmates, and other community members in supporting the social integration of children with special needs; initiatives to raise awareness in society about the needs and opportunities of children with special needs, as well as improving mutual understanding; providing children with special needs access to necessary psychological and social support to improve their well-being and social welfare.

▪ Implement the right to education, access to information [4]; 19].

We share the opinion of L. Frost that the main goals of using alternative communication include creating an effective system of interaction, developing skills for independent and clear communication of new information to others, and fostering the child's ability to express thoughts using symbols.

The use of AAC tools in the development and education of children with speech disorders significantly expands the possibilities of using symbols, signs, and pictograms in correctional and developmental work. According to modern researchers such as M. Chaika, H. Usatenko, O. Kryvonohova, D. Shulzhenko, and others, after the emergence of the first verbalizations and their association with images or real objects or phenomena, there is a significant reduction in the need for using AAC tools in communication. It is important to note that the use of AAC tools does not limit the development of verbal communication; on the contrary, it contributes to stimulating one's own verbalizations. In cases of severe speaking delay in a child, the priority is always to support the development of communication and speaking, starting as early as possible. That is, during pedagogical communication at any age, especially in educational institutions, the acquisition of alternative means of communication takes place. Each person can choose the means of communication they find convenient and combine different forms of communication, such as facial expressions, gestures, pictograms, and words.

As a result of collaboration between the Ministry of Education and Science of Ukraine, various educational institutions in Ukraine, and public organizations and foundations, methodological recommendations have been developed for the use of alternative and augmentative communication (AAC) methods in educational institutions. Based on individual developmental communication system characteristics, groups of AAC users were identified in educational institutions. These groups include the following.

The first group of AAC users consists of individuals who use augmentative communication as an expressive means. These individuals understand speaking well but cannot verbally express their needs. Typically, this includes people with cerebral palsy, various disorders of the nervous system, impairments of the speech organs, speech deviations resulting from injuries or infections of the brain, and so on [7; 9].

The second group consists of individuals who face difficulties in mastering speaking. They may learn to speak, but their speaking development is delayed (for example, children with intellectual disabilities, motor aphasia). This group also includes individuals whose speaking is understood only when special additional means are used (for example, in the case of autism). Among such means, there may be everyday gestures, facial expressions, voice modulations, etc. [7; 9].

The third group of AAC users includes individuals for whom oral speech poses challenges (e.g., in cases of serious complex disorders, hearing impairments, autism) and who constantly or

for an extended period require alternative means of communication. Users in this group must be trained both in understanding speech and in the ability to communicate. The main goal is to create conditions for understanding another communication system and learning its use without relying on oral speech. In this case, supportive communication is a full alternative to absent oral speech [7; 9].

Educational professionals play a key role in interacting with children with special needs. The use of AAC tools can significantly facilitate their work and improve communication with this category of children.

In our empirical study, 20 educational professionals (social pedagogues, teacher assistants) and social workers in the city of Nizhyn (Ukraine) participated. Through a survey (which contained 15 questions revealing the features of professionals' activities regarding the use of alternative and augmentative communication) and observation of their professional activities, we revealed the level of professionals' awareness regarding the understanding of basic concepts, types of AAC, methods of its implementation, ways of interaction with other professionals in the specified field, and obstacles to the application and implementation of AAC in their professional activities. We also explored the impact of AAC on the communication outcomes of children with special needs – whether it led to improvement or resulted in no changes.

According to the results of the survey and observation of the professional activities of educational professionals (social pedagogues, teacher assistants), and social workers, we obtained the following results. The first question of the survey, "What level of education do you have in the field of social work or a related field?" (see Table 1), allowed us to find out that not all participants in the survey have a direct professional education, but they work as educational professionals and in the social sphere, possessing significant work experience. From their responses during communication, we understood that acquiring professional education for more effective professional activities is part of their plans. Out of the 20 surveyed participants, 16 (80%) have a direct education, while only 4 (20%) have pedagogical education and have undergone many professional development courses.

Table 1:Responses to Question No.1 "What level of education do you have in the field of social work or a related field?"

No.	Professional Education Level	Number of respondents	%
1	Professional Education	16	80%
2	Non-Professional Education	4	20%

The responses to the next question of the survey, question 2 – "Do you have experience working with children with special needs?" - were distributed as follows (see Table 2):

Table 2: Responses to question No 2 "Do you have experience working with children with special needs?"

No.	Professional Education Level	Number of respondents	%
1	Yes	20	100%
2	No	0	0%

Therefore, we can note that in their professional activities, both social pedagogues, teacher assistants in educational institutions, and social workers in social institutions had practical experience in interacting with individuals with special needs.

Next, answers to question 3 "What categories of children with special needs do you work with?" (select all that apply)" were distributed as follows (see Table 3):

Table 3:Answers to question No. 3. "What categories of children with special needs do you work with? (select all that apply)

No.	Professional Education Level	Number of respondents	%
1	- Children with hearing	5	25%

No.		Number	%
	impairments		
2	- Children with speaking disorders	9	45%
3	- Children with autism spectrum disorders	13	65%
4	- Children with autism spectrum disorders	11	55%
5	- Others (specify): _____		

From the survey results, we understand that the majority of respondents encountered children with special needs with various pathologies in their professional activities. Specifically, 5 (25%) professionals had experience working with children with hearing impairments, 9 (45%) worked with children with speaking disorders, 13 (65%) worked with children with autism spectrum disorders, and 11 (55%) had experience working with children with musculoskeletal disorders. Therefore, we can say that almost all respondents had professional experience with different categories of children with special needs.

The next question 4 "Have you had special training/courses on the use of alternative and augmentative communication (AAC)? If yes, please specify them" yielded the following responses from the surveyed professionals (see Table 4):

Table 4: Responses to question No. 4. "Have you had special training/courses on the use of alternative and augmentative communication (AAC)? If yes, please specify them"

No.	Did you have special trainings/courses in AAC	Number of respondents	%
1	Yes	9	45%
2	No	11	55%

From the obtained responses and discussions with the professionals, we concluded that 9 (45%) of the experts participated in various training sessions, courses, and other professional development activities dedicated to AAC. These professionals received training in using sign language with children who have hearing impairments. They also mentioned using simple AAC tools such as objects, social gestures, photographs, symbols, and other images. On the other hand, 11 (55%) respondents did not undergo such training and did not plan to, stating that children with various conditions were only marginally present in their professional activities.

Question 5 "What types of alternative and augmentative communication are you familiar with?" Name or mark them" was aimed at finding out the awareness of specialists about the means of alternative and additional communication and their varieties. The answers to this question were distributed as follows (see Table 5):

Table 5: Answers to question No. 5. "What types of alternative and additional communication are you familiar with?" Name or mark them"

No.	Types of alternative and augmentative communication	Number of respondents	%
1	Sign language	9	45%
2	Symbols, pictograms, images	7	35%
3	Combined means of communication	2	10%
4	Simple electronic means	5	25%

According to the survey results, we found that 9 (45%) respondents were familiar with sign language, 7 (35%) professionals had the opportunity to use symbols, pictograms, and images in their activities for communication with children with special needs, 2 (10%) were aware of combined AAC tools, and 5 (25%) respondents were familiar with simple electronic AAC devices (computers and tablets with eye-tracking function, photo albums, touch screen communicators, talking toys).

The results of answering question No.6-"What specific means of alternative and additional communication do you use in your work? (Check all that apply)" – are presented in Table 6.

Table 6:Answers to question No. 6. "What specific means of alternative and additional communication do you use in your work?"

No.	Types of alternative and augmentative communication	Number of respondents	%
1	Pictograms	2	10%
2	Speech synthesizers	1	5%
3	Graphic symbols	8	40%
4	Gestures	9	45%
5	Others (specify): _____		

From the results, it is clear that 9 (45%) respondents use gestures and sign language in their work, 8 (40%) are familiar with graphic symbols and had to use them in their professional activities, 1 (5%) specialist encountered in his work speech synthesizer; 2 (10%) of the interviewed specialists noted that they had such an opportunity to work with icons in working with children with special needs.

The seventh question of the questionnaire "How often do you use the means of alternative and augmentative communication in your work" showed us the actual work of specialists with AAC means, in particular, we obtained the following results (see Table 7):

Table 7:Answers to question No. 7. "What specific means of alternative and additional communication do you use in your work?"

No.	Use of AAC tools	Number of respondents	%
1	Often	2	10%
2	Occasionally / periodically	7	35%
3	Never	11	55%

From the answers of specialists, we understood that only 2 (10%) often use means of alternative and augmentative communication in their professional work, in particular, sign language, symbols, icons; 7 (35%) of the interviewees occasionally work with such AAC tools, since the objects of their attention are another category of recipients of social services; the other 11 (55%) interviewed specialists do not use AAC tools in their work. Therefore, we can state with confidence that exactly 9 (45%) specialists implement alternative and augmentative means of communication in one way or another in their professional activity.

The results obtained in eighth question of the questionnaire "What difficulties do you encounter when implementing alternative and additional means of communication?" are given is Table 8.

Table 8: Answers to question No. 8. "What difficulties do you encounter when implementing alternative and additional means of communication?"

No.	List of difficulties in the implementation of the AAC	Number of respondents	%
1	Lack of education and training	7	35%
2	Difficulty in understanding needs	5	25%
3	Cost and affordability	11	55%
4	Social acceptance	9	45%
5	High workload	6	35%
6	Interaction with other professionals	4	20%
7	Technical difficulties in implementation	8	40%
8	Uncertainty in use	4	20%

After processing the results of the answers to this question, we singled out a number of difficulties that specialists face in practice. Thus, the questionnaire stated the following:

a) Lack of education and training of 7 (35%) respondents. Implementation of alternative and augmentative

communication tools may require additional skills and knowledge that are not always presented in general training programs for social workers at universities. Therefore, the experts interviewed emphasized this as an obstacle in the implementation of AAC in their activities

b) Difficulties in understanding the needs were specified by 5 (25%) specialists. Some service recipients may have unique communication needs and it can be difficult to determine how to use alternative means of communication to meet these needs in the best way

c) Cost and affordability: 11 (55%) of the interviewed specialists noted that some means of alternative and augmentative communication can be expensive and specialists in practice may face challenges related to ensuring the availability of these means for everyone, regardless of the financial status of the recipients or the institution

d) Social acceptance 9 (45%). The use of alternative and augmentative means of communication can put the recipient of services in a situation of social isolation or facing stereotypes and misunderstandings of society

e) High workload is observed in 6 (30%). Using alternative methods may require more time and resources, as some methods may be less effective or take more time to learn. The interviewees emphasized that AAC in general is painstaking, large-scale, intensive, and work with children with special needs always requires a lot of time, setting and performing many tasks, a high level of activity and a lot of busyness. Unfortunately, in practice, specialists do not have much time for this, since they have many categories of recipients of social services in practice

f) Interaction with other professionals 4 (20%). Collaboration with other professionals, such as teachers, doctors, therapists, speech therapists, may require solving questions about sharing and understanding alternative methods. In practice, such interaction is impossible due to the lack of specialists, lack of time, or reluctance of specialists to cooperate with others specialists

g) Technical difficulties in implementation 8 (40%). The use of some means of alternative and augmentative communication requires a specialist to have not onlybasic theoretical knowledge, but also technical readiness to implement and use them in work with recipients of social services

h) Uncertainty in use 4 (20%). This difficulty is mostly related to the personal qualities of the specialist, who, perhaps due to difficulties or lack of motivation in work, is not confident in his own abilities to apply AAC in professional activity.

Understanding these challenges can help social workers and social educators develop strategies and approaches to overcome these challenges and ensure quality support for their service recipients.

To the next question was question 9 -"How do you evaluate the effectiveness of using alternative and additional means of communication in your work?" The interviewed experts distributed their answers as follows (see Table 9):

Table 9:Answers to question No. 9. "How do you evaluate the effectiveness of using alternative and additional means of communication in your work?"

No.	Use of AAC tools	Number of respondents	%
1	Effective	5	25%
2	Moderately effective	4	20%
3	Not effective at all	11	55%

So, we can state that the acquired knowledge, abilities, and skills of working with the means of alternative and augmentative communication are effectively implemented and applied in practice by 5 (25%) of the surveyed specialists, while 4 (20%) are moderately confident in the effectiveness of such work and 11 (55%) believe that such work is ineffective because it should be done exclusively by specialists in the relevant field.

The next question of questionnaire 10 is "Does your organization need more support and resources to implement

effective means of alternative and augmentative communication?". The responses of specialists were distributed as follows (see Table 10):

Table 10:Answers to question No. 10 "Does your organization need more support and resources to implement effective means of alternative and additional communication?"

No.	Need for support and resources	Number of respondents	%
1	YES, it is needed	15	75%
2	NO, not needed	5	25%

It is clear from the answers that the majority of the interviewed specialists are aware of the importance and necessity of using and implementing alternative and augmentative communication tools in the practice of their institutions, in particular, 15 (75%) marked "YES" it is necessary and 5 (25%) indicated that this issue is not is a priority in their work, so it is not relevant.

The results of answers to Question 11 "Does the administration support you in the use and implementation of AAC tools in your work?"are presented in Table 11:

Table 11: Answers to question No. 11. "Does the administration support you regarding the use and implementation of AAC tools in your work?"

No.	Does the administration support?	Number of respondents	%
1	YES, it does	7	35%
2	NO, it does not	9	45%
3	Partly supports	4	20%

Thus, in practice, from the answers of the specialists, we can understand that not all administrations of institutions and organizations where specialists work see the need for the application and implementation of AAC. Specifically, 7 (35%) mentioned that their administration does not support this, while 9 (45%) and 4 (20%) answered that the administration partially supports them in such practices.

Regarding questionnaire question 12 "Do you believe that the use of alternative means of communication facilitates interaction and understanding between professionals and children with special needs?", we received the following answers (Table 12):

Table 12:Answers to question 12 "Do you believe that the use of alternative means of communication facilitates interaction and understanding between professionals and children with special needs?"

No.	Use of AAC tools	Number of respondents	%
1	YES, makes it easier	15	75%
2	NO, makes it difficult	5	25%

From the experts' answers to this question, we can state that 15 (75%) believe that indeed the use of ACC tools will significantly facilitate interaction and understanding between specialists and children with special needs. This enables an individual approach in working with children with special needs, promotes better mutual understanding of speaking and non-verbal signals, especially in cases where standard speech communication is limited in children; it makes it possible to interact more successfully even at the first meetings with children and creates an accessible speaking environment. The use of AAC by specialists will increase their level of empathy and they will better understand and take into account the needs of their service recipients. At the same time, 5 (25%) of the surveyed specialists noted that the implementation and application will only complicate the work because it has many difficulties in implementation.

The next, question 13 "Do you notice an improvement in communication and mutual understanding with children with special needs due to the use of alternative and augmentative communications? If so, which ones?", gave us the opportunity to understand from the words of experts how effective and necessary the introduction and use of AAC tools in their work is:

Table 13: Answers to question 13. "Do you notice an improvement in communication and mutual understanding with children with special needs due to the use of alternative and additional communications? If so, which ones?"

No.	Is there an improvement when using AAC means	Number of respondents	%
1	YES, there is an improvement	9	45%
2	NO, significant changes are not noticeable	11	65%

From the experts' answers, we can note that 9 (45%) of the interviewees emphasized that they see improvements in the use of alternative and augmentative means of communication in interaction with children with special needs, and this leads to numerous changes in communication and mutual understanding. For example, it is increasing the activity of children to constant interaction, which allows them to express their thoughts, feelings, and needs. This allowed children with special needs to participate in joint activities and conversations with adults; it is felt that children have expanded their vocabulary and the ability to express their feelings through alternative means of communication. The use of AAC tools made it easier for children to communicate with their peers, turning it into an element of their play, contributing to the formation of friendship and mutual understanding. Children began to work more actively in group forms of work, developed the skills to independently organize their interaction and communication using alternative means, etc. And only 11 (65%) of the interviewed experts do not see significant changes.

Question 14 was formulated as follows:"How do you interact with other specialists (doctors, psychologists, speech therapists, etc.) for optimal use of alternative and augmentative means of communication for children with special needs?" (see Table 14):

Table 14: Answers to question No. 14. "How do you interact with other specialists (doctors, psychologists, speech therapists, etc.) for optimal use of alternative and additional means of communication for children with special needs?"

No.	How does interaction occur?	Number of respondents	%
1	Information about interaction and communication	11	65%
2	Joint planning and problem solving	9	45%
3	Conducting educational trainings and sharing practical skills	9	45%
4	Development of individual programs for the development of inclusive education	12	60%
5	Support for the family	7	35%

Cooperation of interviewed social educators, teacher assistants and social workers with other specialists, such as doctors, psychologists, speech therapists and others, is key to optimal use of alternative and augmentative means of communication for children with special needs. From the experts' answers, we tried to highlight the following:

1. Close cooperation of specialists should be based on constant exchange of information about interaction and communication, needs, successes, difficulties of children with special needs, etc. This was emphasized by 11 (65%) interviewed specialists.
2. Joint planning and solving tasks as a multidisciplinary team. Professionals should work together to plan and develop individualized plans for children with special needs, taking into account their communication needs. Joint discussion and problem solving helps to create a comprehensive approach to the development and support of children with special needs. 9 (45%) experts supported the above.
3. Conducting educational trainings and sharing practical skills. Specialists can offer training and education by other specialists on the use of alternative means of communication. It is important that all team members have the basic skills and understanding to use these tools effectively. 9 (45%) emphasized the need for such

interaction in the form of training and exchange of practical experience.
4. Development of individual programs for the development of inclusive education. Together with specialists, interviewees can jointly develop individual trajectories of communication development for each child with special needs. 12 (60%) specialists noted the need for cooperation in the development and implementation of individual development programs for children with special needs.
5. Support for the family. Interviewed specialists can help in the exchange of information and involvement of the child's family in the process of using alternative and augmentative means of communication. 7 (35%) respondents indicated the need for such interaction and communication for the family of a child with special needs.

Cooperation and coordination between different specialists is a key element of successful work with children with special needs and the use of adequate means of communication.

The last question of our questionnaire – question No. 15- required experts to answer "What additional resources or support would you like to have to improve the use of AAC?" (see Table 15):

Table 15:Answers to question No. 15 "What additional resources or support would you like to have to improve the use of ADC?"

№	Additional resources	Number of respondents	%
1	Additional training, professional development	9	45%
2	Access to new technical means	5	25%
3	Possibility of consultations with experts	6	30%

So, the answers to this question were distributed in such a way that 9 (45%) of the interviewed professionals need additional training. Of course, these are the specialists who use and implement AAC tools in their professional activities, accordingly realize their importance and understand the need for professional growth and improvement. 5 (25%) of the interviewees noted that it is better to first ensure the technical process of AAC application by means, as these are significant costs. 6 (39%) respondents emphasized that it is better to consult specialists and use their experience and knowledge in this field for the professional implementation of AAC tools (see Figure 1 below).
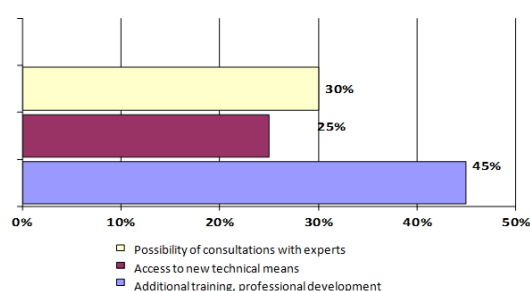
Figure 1 - Survey results for question No.15 "What additional resources or support would you like to have to improve the use of AAC?"

After analyzing the experts' answers, we tried to determine the overall level based on the developed indicators and criteria. For each positive answer to the questionnaire, one point was assigned, while for an inaccurate or negative answer to the survey, the specialist received 0 points. Thus, we can state the following results (see Table 16):

Table 16: Levels of use of alternative and augmentative communication tools by social workers / social pedagogues in their professional activities

No.	The level of implementation of AAC	Number of respondents	%
1	Low (minimum) level (1-5 points)	11	55%
2	Intermediate level (6-12 points)	6	30%
3	High level (13-15 points)	3	15%

A low (minimum) level (1-5 points) of using AAC tools in their work was demonstrated by 11 (55%) specialists who have somewhat limited or no knowledge of AAC tools. They do not use any of the AAC tools in their work. This group of specialists emphasizes that AAC tools are not important for their work and do not support or ignore such initiatives, believing that special education is needed for this. They have no desire to cooperate with AAC specialists and are not engaged in self-education or increasing their level of knowledge in this field.

The intermediate level (6-12 points) of using AAC tools in their work was demonstrated by 6 (30%) specialists who have knowledge of at least one of the AAC types, but may need additional training. They spontaneously use alternative means of communication. These specialists understand the importance of AAC, but perhaps do not always include it in their work and situationally invite AAC specialists to work.

A high level (13-15 points) of using AAC tools in their work was demonstrated by 3 (15%) specialists who use and implement alternative and augmentative means of communication in their work with children with special needs. These are the specialists who understand the types of AACs and their characteristics. They emphasized that alternative and augmentative communication is necessary and effective in working with children with special needs; these are the specialists who successfully cooperate and adopt the experience of others regarding the use of various types of AAC in their work, improve their qualifications in this direction.

Based on our research, we proposed a number of practical recommendations for pedagogical workers (social pedagogues, teacher assistants) and social workers regarding the use of alternative and augmentative means of communication, in particular:

1. When assessing the individual communication needs of a child with special needs, specialists must possess various means of alternative and augmentative communication for more effective work in this direction. At the same time, it is necessary to consider the need for cooperation with speech therapists and other specialists to obtain more detailed information about individual speaking needs of a child and his previous experience in communicative activities.
2. Specialists should engage in the learning process of various alternative communication methods for their own awareness, as well as involve parents and educators in educational institutions. It is necessary to constantly update knowledge about different alternative communication methods and their techniques.
3. Collaboration with parents and professionals is necessary to create individual development plans for each child, taking into account his needs and abilities in alternative communication.
4. One should consider the specific features of the space and create favorable conditions for the use of alternative communication (e.g., quiet communication zones). What is needed is the search and ensuring the availability of special tools and technical means for communication.
5. It is expedient to provide support to parents through recommendations and training on the use of alternative communication at home. Moreover, one should create opportunities for experience exchange among parents, where they can discuss and share successful methods and techniques.

6. It seems rational to establish a monitoring and evaluation system to assess the effectiveness of alternative communication use, aiming to evaluate progress and make necessary adjustments to individual programs in collaboration with other professionals.
7. Collaboration should be organized with other professionals (speech therapists, psychologists, medical workers) for a comprehensive approach to children's development.
8. Peers should be involved in supporting children with special needs. It is necessary to create support and training programs for peers that help them better understand and interact with children using alternative communication. It is highly expedient to organize group activities and games aimed at supporting communication and understanding among peers.
9. The development of independent use of alternative communication skills by children with special needs should be promoted, and children should be involved in planning their own communication methods and determining what is effective for them.
10. It is needed to engage non-governmental organizations and community initiatives to support children with special needs, organize events and campaigns to raise public awareness about the importance of alternative and augmentative communication.
11. One should carry out professional self-improvement (participate in conferences, seminars, webinars, and training programs for continuous improvement of knowledge and skills in the field of alternative communication), practice exchange of experiences and best practices with other professionals.
12. It is necessary to utilize creative approaches, including the use of various arts such as music, graphics, to promote alternative communication, etc., stimulate the use of multimedia tools and gaming technologies to enhance communication. For example, if a child with special needs does not speak orally or has significant speech impairments, he can express gratitude or compliments in writing. This can include writing a compliment together with an assistant on a board or a piece of paper. A specialist could create "life hacks" from personal practical experience, involve and use other modern information resources in working with children with special needs (modern mobile applications, latest developments, support websites, etc.).

Thus, the outlined recommendations will help educational professionals create an effective and supportive environment for children with special needs, enabling them to develop, interact successfully, and communicate effectively. Alternative means of communication (AAC) can be utilized in various aspects of the lives of children with special needs, encompassing social, spiritual, political, and economic spheres. The use of alternative communication in educational institutions will allow children and students with various impairments to actively and fully participate in the learning process and engage with their surroundings.

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Primary Paper Section: A

Secondary Paper Section: AM

VARIABILITY OF THE UNDERSTANDING OF THE PHENOMENON OF "HAPPINESS" IN SCIENTIFIC WORKS AND STUDENT EXPERIENCE

[a]NATALIA VYSHNIVSKA, [b]KATERINA ZHURBA, [c]LIUDMYLA MELENETS, [d]OLHA TRETIAK, [e]HALYNA SMOLNYKOVA, [f]YULIIA FEDOROVA, [g]SVITLANA TSYBULSKA

[a,c-e,g]*Borys Grinchenko Kyiv Metropolitan University, 18/2, Bulvarno-Kudriavska Str., 04053, Kyiv, Ukraine*
[b]*Institute of Education Problems of the National Academy of Pedagogical Sciences of Ukraine, room 807, 9, M. Berlynskogo Str., 04060, Kyiv, Ukraine*
[f]*Municipal Institution "Kirovograd Regional IN-Service Teacher Training Institute named after Vasyl Sukhomlynsky", 39/63, Velyka Perspectivna Str., 25006, Kropyvnytskyi, Ukraine*
email: [a]n.vyshnivska@kubg.edu.ua, [b]katjachiginceva@meta.ua, [c]l.melenets@kubg.edu.ua, [d]o.tretiak@kubg.edu.ua, [e]h.smolnykova@kubg.edu.ua, [f]koippo414@gmail.com, [g]s.tsybulska@kubg.edu.ua

Abstract: The article presents the theoretical and experimental results of research into the phenomenon of "happiness". As a result of the analysis of scientific sources, five approaches were distinguished in revealing its essence (happiness as a subjective state at the current moment (I approach); happiness as a subjective attitude to life (II approach); happiness as a measure of social progress (III approach); happiness as a result of achieving the desired (IV approach); happiness as a way of achieving the desired result (V approach)). The apparatus for measuring the phenomenon of happiness as a subjective state at the current moment has been established. We found out the direct and indirect effects of the influence of education on the feeling of happiness. Students of classes 1-11 of Kyiv and Kirovohrad regions were involved in the experimental part of the study. According to the results of experiment, it was revealed that student experience is characterized by variability, that is, the understanding of happiness as a subjective state at the current moment, happiness as a subjective attitude to life, happiness as the result of achieving the desired, and happiness as a way of achieving the desired result.

Keywords: happiness; students of classes 1-11; measurement of happiness; effects of education on the feeling of happiness.

1 Introduction

First of all, the theory of relativity of happiness testifies to the complexity of the "happiness" phenomenon. According to R. Veenhoven [30], this theory is based on three postulates:

- Happiness results from comparison,
- Standards of comparison adjust,
- Standards of comparison are arbitrary constructs.

In the scientific world, interest in happiness has only intensified over the past fifty years. The concepts of "overall happiness" and "prosperity" arose. A huge amount of research has appeared on happiness and its analogues - various types of well-being and life satisfaction. At the same time, happiness is a dynamic formation and a universal term. In sociopsychological studies, happiness often acts as an analogue of subjective well-being or its hedonic component.

Despite the wide range of uses of the definition of happiness, there is currently no generally accepted definition of happiness. In economics, sociology, and psychology, happiness is often used as an analogue or substitute for such concepts as well-being, subjective well-being, and life satisfaction. Evidently, there is an urgent need to reveal the sociocultural content of the phenomenon of happiness, the conditions for its implementation and the significance of its study as a factor in increasing the social resources of the individual and society.

2 Method

To research the variability of the understanding of the phenomenon of "happiness" in scientific works and student experience, the following tasks were defined:

- To analyze the definitions of the concept of "happiness" given in scientific works, and single out the approaches that reflect the scientific understanding of the essence of this phenomenon;

- To investigate the formation of the apparatus for measuring the phenomenon of "happiness" and to establish the correspondence between the variability of the understanding of this phenomenon and the development of the measuring basis;
- To investigate how scientists consider the phenomenon of "happiness" in comparison with other phenomena and organize information;
- To investigate the content of scientific works to compile scientific characteristics of happy people;
- To establish the direct and indirect effects of the influence of education on the feeling of happiness;
- To establish experimentally the variability of the understanding of the phenomenon of "happiness" in the experience of students of classes 1-11.

Various methods were used in the research, namely: theoretical (analysis of scientific data, arrangement and systematization of selected information, summarization of results in tables and lists of data) and empirical (surveys, questionnaires). 2,526 students of classes 1-11 of Kyiv and Kropyvnytskyi regions were involved in the experimental part of the research.

3 Results and Discussion

Variability of definitions of the concept of "happiness"

The analysis of scientific sources revealed, on the one hand, the multifaceted interest of scientists in the study of the phenomenon of "happiness", and, on the other hand, the need to summarize the work of scientists on the variability of definitions.

According to the research results of Luo Lu, Jian Bin Shih [17], in the Western conception of understanding happiness, the emphasis is made on intra-personal or internal evaluation and satisfaction. Instead, the Chinese understanding of happiness focuses on interpersonal or external evaluation and satisfaction (such as being at ease with life).

In the work of E. Deci, R. Ryan [5], it is about the arrangement of the definition of the concept of "happiness" in relation to the leading ideas of two traditions, namely: hedonistic (happiness is the presence of positive affect and the absence of negative affect) and eudaemonic (happiness is a full and deep satisfaction with life).

As a result of the analysis of scientific and dictionary sources, we single out five approaches in formulating the definition of the phenomenon of "happiness".

The first approach. Happiness is defined as a subjective state at the current moment. This approach is followed in the following definitions: "what I experience here and now" (D. Kahneman, E. Diener, N. Schwarz [14]); the feeling of deep satisfaction and boundless joy that someone feels (dictionary source [27]); feeling or state of the highest, complete satisfaction (dictionary source [15]).

The second approach. Happiness is defined as a subjective attitude to life. As an example, the following definition can be used: "happiness is the subjective enjoyment of life" (R. Veenhoven [30]); the state of complete satisfaction with life (dictionary source [32]).

The third approach. Happiness is defined as a measure of social progress. This approach is evident in the following definitions: happiness is the goal of state policy and a reliable measure for evaluating progress in society (R. Veenhoven [30]); happiness is a measure for establishing a holistic approach to development (United Nations [22]).

The fourth approach. Happiness is defined as the result of achieving the desired. An example can be the following definition: happiness is the realization of a dream or the

achievement of a goal (J. Brailovskaia, M. Lin, S. Scholten [2]); achievement (dictionary source) [27].

The fifth approach. Happiness is defined as a way to achieve a desired result. This approach is obvious in the following definitions: "happiness" is a favorable coincidence of circumstances, success (dictionary source [15]); success, luck, fate (dictionary source [32]).

The formation of the apparatus for measuring the phenomenon of "happiness"

The formation of the apparatus for measuring the phenomenon of "happiness" occurs constantly:

1985 – publication of a scale to measure global life satisfaction, called the Satisfaction With Life Scale (SWLS) (Diener E., Emmons R. A., Larsen R. J., Griffin S. [6]).

1988 – publication of the Positive and Negative Affect Schedule (PANAS). Chart structure: two mood scales containing 10 items each. For answers to each item, a five-point Likert scale is used (1 - very little or no influence at all, 5 - the highest manifestation of influence) (D. Watson, L. Clark, A. Tellegen [34]).

1994 - publication of the expanded form of the schedule of positive and negative effects (PANAS-X). The previous version (PANAS) was supplemented with additional affect scales (D. Watson, L.A. Clark (University of Iowa) [33]).

1999 – 1) publication of the subjective happiness scale. The scale is constructed using absolute ratings, which are descriptions of happy and unhappy people. The respondent needs to identify himself with one of the given descriptions (S. Lyubomirsky, H.S. Lepper [19]); 2) publication of a day reconstruction method (DRM) to obtain results that explain what a person feels. DRM or Day Reconstruction Method is a fairly successful method of reconstructing experiences throughout the day. It gives results similar to those of "What I experience and is easier to do" (D. Kahneman, E. Diener, N. Schwarz [14]).

2002 - publication of the Oxford Happiness Questionnaire to obtain a snapshot of the respondent's current level of happiness. The happiness questionnaire contains a number of statements about happiness. The respondent correlates each statement with his condition and chooses a certain mark of the scale. The marks of the scale are as follows: 1 – do not agree at all; 2 – moderately disagree; 3 - slightly disagree; 4 – slightly agree; 5 – moderately agree; 6 – fully agree (P. Hills, M. Argyle [13]).

2012 – publication of the first Report on World Happiness. Cantrell's ladder method was used to prepare reporting materials and determine the rating of national happiness. Respondents evaluated their current life [12]. To do this, they imagined a staircase with the best opportunity for them equal to 10 and the worst, which corresponds to zero, and chose the staircase on which they imagined themselves.

The phenomenon of "happiness" is first explored as part of overall life satisfaction and as an indicator of positive and negative influences. Since the end of the 20th century, it has been studied as an independent phenomenon. This was facilitated by the adoption by the UN General Assembly of Resolution 65/309 "Happiness: Towards a Holistic Definition of Development" (2011). The phenomenon of happiness is beginning to be studied at the level of individual states, and the obtained research data are used to compile a rating of national happiness.

The research of the phenomenon of "happiness", which was carried out in the context of the events of the last three years (the COVID-19 pandemic, the war in Ukraine, world inflation and a number of local and global climatic emergencies), gained special value, since the research was carried out using life assessments and emotions that accompanied development in crisis situations. The results of the study helped establish how much better life was where trust, goodwill, and supportive social ties continued to prevail [12].

An interesting report on happiness was published in 2023 [12]. For the sixth year in a row, Finland ranked first, followed by Denmark, Iceland, Israel, and the Netherlands. In the top 10 rankings, Israel moved up 5 spots, while Switzerland dropped 4 spots. Lithuania was the only new country in the top twenty. Despite the scale of suffering and destruction in Ukraine, life estimates in September 2022 remained higher than after the 2014 annexation, helped by a much stronger sense of common purpose, benevolence, and trust in the Ukrainian leadership [12].

The phenomenon of "happiness" in comparison with other phenomena

The analysis of scientific sources revealed that in the results of research, scientists compare the phenomenon of "happiness" with other phenomena, in particular:

1. Happiness compared with meaning, worry, stress, and anxiety.

According to the research results of R. Baumeister, K. Vohs, J. Aaker, E. Garbinsky [1], happiness is mostly present-oriented, whereas meaningfulness involves integrating past, present, and future. Higher levels of worry, stress, and anxiety were linked to higher meaningfulness but lower happiness. Concerns about personal identity and self-expression contributed to meaningfulness but not happiness.

2. Consideration of happiness in comparison with needs.

According to the research results of R. Veenhoven [30], happiness draws on gratification of universal needs, rather than on meeting culturally relative wants. The satisfaction of needs depends both on the viability of society and on the viability of individuals [21]. Need gratification depends both on the livability of society and the life-ability of individuals [21] The scientist analyzes happiness in the context of satisfying basic biopsychological needs.

The overall evaluation of life depends also on how one feels affectively and how hedonic level of affect draws on its turn on the gratification of basic bio-psychological needs. Contrary to acquired 'standards' of comparison, these innate 'needs' do not adjust to any and all conditions: they mark in fact the limits of human adaptability. To the extent that it depends on need-gratification, happiness is not relative [30].

R. Baumeister, K. Vohs, J. Aaker, E. Garbinsky [1] based on the results of the study formulated the conclusion that the satisfaction of one's own needs and desires increased happiness.

According to the results of the research by T. Miyer, L. Holodiuk, S. Omelchuk, V. Savosh, H. Bondarenko, L. Romanenko, K. Romanenko [21], happiness is associated with the priority of needs in different age, in particular, with the need to learn something new (from 4 to 8 years old, from 19 to 35 years old, and after 60 years old) and the need for communication (from 8 to 13 years old, from 13 to 19 years old and from 35 to 60 years old).

3. Consideration of happiness in comparison with health.

R. Veenhoven [31] notes that happiness signals that we are functioning well. Good mental and physical health go hand in hand with happiness.

Happy people live longer and healthier lives, have more rewarding and stable relationships, are more productive, more resilient to negative life events, donate more to charity, and are more likely to help others (Diener et al. [7-9]).

4. Consideration of happiness in comparison with activity.

According to R. Veenhoven [30], happiness goes well with good deeds. Happy people have better relationships with other people, they do more volunteer work, they are more interested in other people and their problems.

5. Consideration of happiness in comparison with success.

According to S. Lyubomirsky, L. King, E. Diener [18], the connection between happiness and success exists not only because success makes people happy, but also because positive influence generates success. According to the findings of the scientists, happiness is associated with and precedes numerous successful outcomes, as well as behaviors consistent with success.

6. Consideration of happiness in comparison with social interaction.

Very happy people were sociable and had stronger romantic and other social relationships than less happy groups. They were more extroverted, nicer and less neurotic. Good social relations were necessary for happiness. Members of the happiest group experienced positive but not ecstatic feelings most of the time, and they sometimes reported low moods. This suggests that very happy people have a functioning emotional system that can adequately respond to life events (E. Diener, M. Seligman [8]).

According to the results of the study, a positive correlation of happiness is observed:

▪ With life, health, positive emotions (L. Lu, J. B. Shih [17]);
▪ With social capital, which includes informal social interaction, general social interaction, institutional trust. A. Rodríguez-Pose, V. von Berlepsch [23]. A. Rodríguez-Pose, V. von Berlepsch [23] established that there is a significant difference in how social capital interacts with happiness in different regions of Europe, with the connection being at is weakest in the Nordic countries.
▪ With the surrounding natural environment, in particular the characteristics of residential areas, which include access to open, natural spaces that facilitate social interaction (Somarriba Arechavala, N., Zarzosa Espina, P., López Pastor, A.T. [25]).
▪ With the social environment, in particular with social interaction (L. Lu, J. B. Shih [17]); with the physical environment of the neighborhood (Somarriba Arechavala, N., Zarzosa Espina, P. & López Pastor, A.T. [25]; with good relations in the neighborhood (H. Taniguchi, D.A. Potter [29]); with neighborhood community (D. Mcmillan [20]; with trust in one's family and living near a community that, according to people, can be trusted (K. Leyden, A. Goldberg, P. Michelbach [16]); with social networks in which people support each other (M. Gür, D. Murat, F. Ş. Sezer [11]).
▪ With the place of residence - satisfaction with the place of residence, in particular, with the residential area and residential complex, has a positive effect on happiness (M. Gür, D. Murat, F. Ş. Sezer [11]).
▪ With work, namely: people with stable work are happier compared to people with unstable work or unemployed (K. Leyden, A. Goldberg, P. Michelbach [16]).
▪ With psychological freedom. According to G. Brulé, R. Veenhoven [3], psychological freedom is most strongly related to happiness in rich nations. The Finns are happier than the French because they dare more to be free.

Scientific characteristics of happy people

Different scientific publications give different characteristics of happy people, namely:

▪ Live and work with pleasure, do what they love, and happily devote time to family and children; self-confident, because they have a reliable support under their confidence; are ready to overcome obstacles that arise on the path of life; they enjoy spending a lot of time with family and friends, value their relationships with loved ones; easily give thanks for what they have; they are the first to offer their help to colleagues and strangers; they are optimistic about the future; enjoy life and today; are constantly engaged in sports; they consistently achieve their goals (O. Surzhenko) [28].

▪ They have a positive temperament, are extroverted, tend to see things on the bright side, have better social relationships, can better cope with bad events, have the necessary resources for personal progress and achieving their goals (E. Diner) [7].
▪ Happy people achieve success in many areas of life, including marriage, friendships, income, work productivity, and health (V. Sophie C. Sara T Jellen [26].

Direct and indirect effects of education on happiness

In the research of J. Cuñado, F. P. Gracia [4], the presence of two effects of education on happiness was established: 1) a direct effect from the acquisition of knowledge (the appearance of the effects of "self-confidence" and "high self-esteem") and indirect (the effect of education on happiness through income and employment status (people with a higher level of education have a higher level of income and a higher probability of being employed)

The indirect influence of education on happiness through the satisfaction of cognitive needs, providing the basis for career growth (achievement at work) is traced in the results of the research by Luo Lu, Jian Bin Shih [17]. Scientists have established that the main sources of happiness are: a) gratification of need for respect; b) harmony of interpersonal relationships; c) satisfaction of material needs; d) achievement at work; e) being at ease with life; f) taking pleasure at others' expense; g) sense of self-control and self-actualization; h) pleasure and positive affect; i) health.

A research by M. Salinas-Jiménez, J. Artés, J. Salinas-Jiménez [24] established the direct and indirect effects of education on women's happiness and the indirect effects of education on men's happiness through professional status, job improvement, and opportunities for employment.

N. Somarriba Arechavala, P. Zarzosa Espina, A.T. López Pastor [25] singled out the indirect effect of education on happiness, which relates to better adaptation to changes and increasing the level of aspirations.

O. Surzhenko [28] characterizes the child's experience of happiness in the family in the context of the direct influence of family upbringing. According to the generalizations of the scientist, the following factors contribute to the child's experience of happiness in the family: parents' understanding of the influence of the surrounding world on the child; education without the use of psychological and physical violence; waiver of punishments; a favorable psychological climate in the family and the right approach to conflict resolution; sequence of upbringing, which is achieved by setting boundaries; democratic education; the development of a child's positive thinking, a sense of optimism, the formation of gratitude; avoiding social comparison and envy; development of social contacts; promoting the acquisition of moral values by the child; development of endurance based on the analysis of what is happening and managing one's emotions; formation of the ability to forgive and live here and now; involvement of the child in family traditions and rituals.

The experimental part of the study was aimed at studying the students' understanding of the phenomenon of "happiness" and identifying the approaches in formulating the definitions of the phenomenon of "happiness" that are preferred by this category of respondents. These are the following approaches: happiness as a subjective state at the current moment; happiness as a subjective attitude to life; happiness as a measure of social progress; happiness as a result of achieving the desired; happiness as a way to achieve the desired result.

During 2022-2023, 2,526 students of classes 1-11 from the city of Kyiv, Kyiv and Kropyvnytskyi regions took part in the pedagogical experiment.

Table 1 shows the keywords in the reasoning of students of grades 1-11 about what the word "happiness" means to them personally.

Table 1: Keywords in the reasoning of students of classes 1-11 about happiness

Keywords of students' reasoning	Classes										
	1	2	3	4	5	6	7	8	9	10	11
peace	■	■	■	■	■	■	■	■	■	■	■
good	■	■									
family	■	■	■								
positive emotions									■	■	■
dream come true	■	■	■	■	■	■	■	■	■	■	■
good mood	■	■	■								
helping people				■							
success					■	■					
luck								■	■	■	■
result in your favorite business						■	■	■	■		
participation in interesting work							■	■	■	■	
nice communication				■	■	■					
achieving the goal											■

In Table 2, we have entered the keywords of the opinions of students in classes 1-11 about what they feel when they are happy.

Table 2: Keywords of reasoning of students of classes 1-11 about what they feel when they are happy

Keywords of students' reasoning	Classes										
	1	2	3	4	5	6	7	8	9	10	11
joy	■	■	■	■	■	■	■	■	■	■	■
liveliness	■	■									
warm	■	■									
satisfaction from achievements			■	■	■	■	■	■	■	■	■
tranquility			■								
success					■	■	■	■	■	■	■
luck					■	■	■	■	■	■	■
an opportunity that can be used											■

Analysis of the data in Tables 1 and 2 makes it possible to formulate the following conclusions:

1. Happiness as a subjective state at the current moment is characteristic of the reasoning of students of classes 1-11 and is perceived by them as joy.
2. Happiness as a subjective attitude to life is observed in relation to students of classes 3-11. This is the satisfaction of achievements (classes 3-11).
3. Happiness as a measure of social progress is not characteristic of the reasoning of students in classes 1-11. However, our attention was drawn to the inner desire of students of classes 1-11 to live in peace.
4. Happiness as a result of achieving the desired is characteristic of the reasoning of students of grades 1-11. It is a dream come true (classes 1-11); goal achievement (11th class).
5. Happiness as a way to achieve the desired result. This is success, luck (classes 5-11), an opportunity that can be used (11th class).

4 Conclusions

1. Analysis of the variability of the definitions of the concept of "happiness" contributed to the identification of five approaches in revealing its essence: happiness as a subjective state at the current moment; happiness as a subjective attitude to life; happiness as a measure of social progress; happiness as a result of achieving the desired; happiness as a way to achieve the desired result.

2. The analysis of the results of the research of the apparatus for measuring the phenomenon of happiness made it possible to establish the correspondence between the approaches to revealing the essence of the concept of "happiness" and the measuring apparatus:

- Happiness as a subjective state at the current moment - the Positive and Negative Affect Schedule (PANAS) (D. Watson, L. Clark, A. Tellegen [34]; the schedule of positive and negative effects (PANAS-X) (D. Watson, A Lee Clark [33]); the subjective happiness scale (S. Lyubomirsky, H.S. Lepper [19]); the Oxford Happiness Questionnaire (P. Hills, M. Argyle [13]).
- Happiness as a subjective attitude to life - the Satisfaction With Life Scale (SWLS) (Diener E., Emmons R. A., Larsen R. J., Griffin S. [10]);
- Happiness as a measure of social progress (Report on World Happiness).

3. Happiness in comparison

- With significance, concern, stress, and anxiety (R. Baumeister, K. Vohs, J. Aaker, E. Garbinsky [1]);
- With needs (R. Veenhoven [30]; R. Baumeister, K. Vohs, J. Aaker, E. Garbinsky [1]; T. Miyer, L. Holodiuk, S. Omelchuk, V. Savosh, H. Bondarenko, L. Romanenko, K. Romanenko [21]);
- With health (R. Veenhoven [31]; Diener et al. [7-10]);
- With activity (R. Veenhoven [30]);
- With success (S. Lyubomirsky, L. King, E. Diener [18]);
- With social interaction (E. Diener, M. Seligman [8]).

According to the results of the study, a positive correlation of happiness was established:

- With quality of life, health, positive emotions (L. Lu, J. B. Shih [17]).
- With social capital, including informal social interaction, general social interaction, and institutional trust (A. Rodríguez-Pose, V. von Berlepsch [23]).
- With the surrounding natural environment that promotes social interaction (Somarriba Arechavala, N., Zarzosa Espina, P., López Pastor, A.T. [25]).
- With the social environment, in particular social interaction (L. Lu, J. B. Shih [17]); with the physical environment of the neighborhood (Somarriba Arechavala, N., Zarzosa Espina, P. & López Pastor, A.T. [25]; with good relations in the residential area (H. Taniguchi, D.A. Potter [29]); with the neighborhood community (D. Mcmillan [20]; with trust in one's family and living near a community that people believe can be trusted (K. Leyden, A. Goldberg, P. Michelbach [16]); with a social network in which people support each other (M. Gür, D. Murat, F. Ş. Sezer [11].
- With work (K. Leyden, A. Goldberg, P. Michelbach [16].
- With psychological freedom (G. Brulé, R. Veenhoven [3]).

Data on the characteristics of happy people are summarized, as well as on the influence of education on the feeling of happiness, characterized in direct and indirect effects.

During the experimental work, it was established:

- For students of classes 1-11, happiness as a subjective state at the current moment is correlated with joy; happiness as a result of achieving the desired is explained as the implementation of a dream; happiness as a measure of social progress is manifested in a conscious desire to live in peace.
- For students of classes 3-11, happiness as a subjective attitude to life is associated with receiving satisfaction from one's achievements.
- For students of the 11th class, happiness as a result of achieving the desired is correlated with the achievement of the goal.
- For students of classes 5-11, happiness as a way of achieving the desired result is associated with success and luck.

▪ For students of the 11th class, happiness as a way of achieving the desired result is correlated with an opportunity that can be used.

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Primary Paper Section: A

Secondary Paper Section: AM, AN

INVOLVEMENT OF FUTURE TEACHERS IN THE LEARNING PROCESS AS A DETERMINANT OF INFLUENCE ON THE ORIENTATION OF THEIR PROFESSIONAL THINKING IN PEDAGOGICAL ACTIVITIES

[a]TETIANA MIYER, [b]NATALIIA MACHYNSKA, [c]YULIIA KOTELIANETS, [d]ALINA MARTIN, [e]OLEKSANDRA SHKURENKO, [f]NATALIA VYSHNIVSKA, [g]ROKSOLANA SHPITSA

[a,e,f,g]*Borys Grinchenko Kyiv Metropolitan University, 18/2, Bulvarno-Kudriavska Str., 04053, Kyiv, Ukraine*
[b]*Ivan Franko National University of Lviv, 1, Universytetska Str., Lviv, Ukraine, 79000, Lviv, Ukraine*
[c, d]*Volodymyr Vynnychenko Central Ukrainian State University, Shevchenko Str., 1, 25006, Ukraine, Kropyvnytskyi*
email: [a]t.miyer@kubg.edu.ua, [b]natalya_im@ukr.net, [c]y.s.kotelianets@cuspu.edu.ua, [d]tarapakamartin@gmail.com, [e]o.shkurenko@kubg.edu.ua, [f]n.vyshnivska@kubg.edu.ua, [e]r.shpitsa@kubg.edu.ua

Abstract: The article presents the theoretical and experimental results of research on the involvement of future teachers in educational work and the involvement of teachers in professional work, as well as research on the impact of involvement on the direction of professional thinking in pedagogical activity. As a result of the analysis of scientific sources, the essence of involvement was revealed as a complex entity, the components of which are behavioral, emotional, and cognitive involvement. The essence of involvement in work is considered in relation to involvement in educational work (involvement) and involvement in professional work (engagement). Negative attitude towards work, unfavorable functioning at the workplace, exhaustion is characterized as emotional and cognitive burnout. The experimental part of the work was aimed at researching the involvement of future teachers in educational work and establishing the factors influencing direction of professional thinking of future teachers in three areas: 1) behavioral involvement; 2) emotional involvement; 3) cognitive involvement. With regard to teachers who are already working, two groups of factors are distinguished: 1) factors of positive influence on professional thinking as a higher cognitive process of searching, identifying and creatively solving problems in the process of pedagogical activity; 2) factors of negative impact on professional thinking as a higher cognitive process of finding, identifying, and creatively solving problems in the process of pedagogical activity.

Keywords: involvement; involvement in educational work; engagement in professional work; professional thinking; graduate students; teachers; martial law.

1 Introduction

Emphasis on the development of professional thinking is not made by chance, but due to the fact that thinking as a higher cognitive mental process ensures mastery of new knowledge based on creative reflection and transformation of reality, which encompasses the field of professional activity. Understanding the essence of professional thinking is determined, on the one hand, by the peculiarities of professional activity, and, on the other hand, by constant development, which occurs both during the period of learning professional activity and during the period of its active performance.

According to the generalizations of T. Hura [17], the interpretation of the concept of "professional thinking" is characterized by variability. Professional thinking is competent, specifically professional thinking aimed at solving tasks of professional activity; a hierarchical chain of thought processes that correspond to the purpose of professional activity; a higher cognitive process of finding, identifying, and creatively solving problems in the process of professional activity.

The practical nature of professional thinking is determined by two levels of functioning [17]:

1. Situational level – related to the specialist's identification of the causes of the contradiction and ways to eliminate and overcome it. The changes that occur in the subject in the process of solving the problem situation are mainly related to the reconstruction of the methods of professional activity. This level is determined by the situational motivation of the individual and by the influence of certain conditions of professional activity.

2. The supra-situational level – is determined by the specialist's awareness of the need to change and improve certain features of his own personality, which is manifested in the search for means of purposeful formation of own professionally significant and personal qualities.

The success of a specialist's professional thinking depends on understanding:

- Of external factors that determine the content of professional activity and direct ways of solving various professional problems;
- Of personal, internal factors that determine individual psychological properties and peculiarities of the functioning of the intellectual sphere;
- Of general and special patterns of thinking that correspond to the main determinants that are embedded in the content and structure of professional activity.

2 Method

The period of study at an institution of higher pedagogical education contributes to the development of professional thinking of future teachers, in particular, determines its orientation. Accordingly, the task of our research was aimed at summarizing data on:

- The component structure of the "engagement" phenomenon;
- Peculiarities of involvement in the work of educational and professional content;
- The impact of burnout on work engagement and on the focus of professional thinking.

The experimental part of the work was aimed at researching the involvement of future teachers in educational work and establishing factors influencing the direction of professional thinking of future teachers in three vectors:

1) behavioral involvement;
2) emotional involvement;
3) cognitive involvement.

With regard to teachers who are already working, the experimental part of the study was aimed at identifying the components of two groups of factors, namely:

1. Factors of positive influence on professional thinking as a higher cognitive process of searching, identifying, and creatively solving problems in the process of pedagogical activity;
2. Factors that have a negative impact on professional thinking as a higher cognitive process of searching, identifying, and creatively solving problems in the process of pedagogical activity.

3 Results and Discussion

The component structure of the "engagement" phenomenon

The involvement of future teachers in the learning process in a higher education institution directly determines the effectiveness of educational activity and indirectly - the effectiveness of pedagogical activity through the system of acquired knowledge and skills that form the basis for thinking aimed at solving the tasks of professional activity.

In scientific works, "engagement" is analyzed as a complex phenomenon, which includes three components:

1. Behavioral involvement – refers to participation in work, includes involvement in various types of activities (academic, social, etc.), plays a key role in the process of achieving positive

academic results, is considered as a preventive measure for dropping out while studying in educational institutions.

Manifestations of behavioral involvement: performance of work; compliance with the rules and norms of education, communication, performance of activities; independent work, participation in discussion, asking questions; cooperation with others; participation in various activities (E. Buhs, G. Ladd [11]).

2. Emotional involvement – includes positive and negative reactions to participants the learning process (teachers, lecturers, pupils, students) and to a specific educational institution as a whole (school, college, institute, university); determines the nature of relations with the participants of the learning process and with a specific institution; affects readiness to perform work.

Manifestations of emotional involvement: affective reaction to the institution (sympathy, evaluation of the work of the educational institution (Y. Lee et al. [18]); self-identification ('price for me', belonging to a certain community) (Y. Lee et al. [18]); affective reactions to the learning process (interest, boredom, happiness, sadness, anxiety) (J. Connell, J. Wellborn [12]).

3. Cognitive involvement includes motivation, mental effort, and the use of various strategies, based on the idea of investment (understanding the value of work for the formation of mastery, the desire to get a good grade, the desire to look smart, the desire to be productive) (C. Wolters, S. Yu, R. Pintrich [33]), implemented on the basis of thoughtfulness; it implies a willingness to make efforts necessary to understand complex ideas and master new knowledge and skills.

Manifestations are as follows: simple memorization; deep understanding and acquisition of experience based on the use of self-regulated learning strategies; fulfillment beyond requirements; perseverance in overcoming difficulties (J. Connell, J. Wellborn [12]); the use of metacognitive strategies for planning, monitoring, and evaluating one's knowledge while performing tasks (R. Pintrich, E. De Groot [24]); strategies for managing efforts (regulating attention, showing persistence, establishing a connection between new information and existing knowledge, actively monitoring understanding (repeating complex material); strategies for seeking help (formulating a request for clarification, using analogies) or avoiding efforts (skipping difficult parts of the material) (R. Miller, B. Greene, G. Montalvo, B. Ravindran, J. Nichols [22]).

According to Bakker and van Woerkom [7], as well as Wang, Ren and Liu [32], the term "engagement" has significant potential as a multidimensional construct that combines three components of engagement (behavioral, emotional, cognitive), which are dynamically interconnected within the individual (pupil or student).

Involvement can be characterized by:

- Directions (social, academic);
- Intensity (moderate, productive, intense);
- Duration (short-term (depending on the situation) and long-term or stable);
- Type of efforts (behavioral efforts, mental efforts, efforts to fulfill behavioral expectations);
- A source of emotions (community, environment, content, process, result).

Peculiarities of involvement in the work of educational and professional content

A. Bakker, W. Schaufeli, M. Leiter, and T. Taris [6] explain work engagement as a state of mind characterized by energy, dedication, and absorption, which is also supported by the works of other authors (W. Schaufeli, B. Bakker [29]). Engagement at work requires not only a high level of energy, but also mental stability during work, a willingness to put effort into one's work and to persevere in the face of difficulties. Involvement in work

is characterized by a high level of energy and a high identification with one's work.

A. Bakker, W. Schaufeli, M. Leiter and T. Taris [6] characterize work involvement as: positive satisfaction and affective-motivational state of well-being related to work; a unique concept that is best predicted by job resources (e.g., autonomy, supervisory coaching, performance feedback) and personal resources (e.g., optimism, self-efficacy, self-esteem).

K. Salmela-Aro, S. Read [26] identified four profiles of student involvement in learning and emotional burnout (i.e., fatigue, cynicism, inadequacy) in higher education:

- "Engaged" (44%) – involved students had the most positive involvement, which was accompanied by the least symptoms of burnout compared to other groups;
- "Engaged-exhausted" (30%) – exhausted students felt emotional exhaustion at the same time as academic activity;
- Inefficacious (19%) – the inefficacious group had heightened experience of inadequacy as a student;
- "Burned-out" (7%) – burned out students demonstrated very high cynicism and inadequacy and very low academic activity compared to other groups.

Inefficacious and burned-out students had higher demands and fewer resources than engaged and engaged-exhausted students. Also, ineffective and burned-out students had more depressive symptoms compared to engaged students.

Engaged students tended to be observed in the early stages of higher education, while the burned-out students and ineffective were observed in the later stages of their studies [26].

The results of the study by Salmela-Aro et al. [27] showed that a high level of involvement in academic work at the university predicted a high level of involvement in professional work and a low level of burnout after 10, 14, and 17 years. Conversely, high levels of task avoidance in university predict low levels of work engagement and high levels of early career burnout.

K. Alexander, D. Entwisle, C. Horsey [1] pointed out that the effectiveness of engagement is influenced by the influence of the family context (the presence of stressful changes in the family), personal resources of students (attitudes and behavior) and acquired experience during the period of schooling.

Involvement in educational work has a continuation in involvement in professional work. A. Bakker [2] examines daily fluctuations in work engagement. The scientist explains the fluctuations by the dynamics of everyday work and changes in personal resources. On days when employees have access to many resources, they may be well engaged in their professional work, coping with their daily work factors (e.g., work pressure, negative events), and are likely to interpret these factors as problems. On days when employees have a sufficient level of control over their work, they actively seek to optimize their work environment to stay engaged. This proactive behavior is called job creation and involves immediate and daily engagement with work. Daily engagement is inversely related to daily recovery. On days when employees recover well, they feel more engaged, and activity throughout the day predicts further growth.

According to I. Beltrán-Martín et al. [9], in highly productive work systems, involvement in professional work is ensured through psychological conditions: significance, psychological safety, accessibility.

W. Schaufeli, W. Van Rhenen [28] found that employees involved in work experience positive emotions compared to those who are not involved. They also feel more inspired, energetic, cheerful and full of enthusiasm.

Rodríguez-Muñoz et al. [25] found that home-based employees were happier on days when they felt highly engaged at work.

According to the results of research by B. Fredrickson [15], busy workers show greater openness to new experiences, actively explore the environment, become inclined to creative work.

The impact of burnout on work engagement and the orientation of professional thinking

C. Maslach, W. Schaufeli, M. Leiter [20] explain burnout as a state of mind associated with work engagement. According to A. Bakker, E. Demerouti, A. Sanz-Vergel [4], burnout is a syndrome consisting mainly of chronic exhaustion and a negative attitude to work, which implies unfavorable functioning at the workplace.

Burnout is characterized by low energy and low self-identification with the work to be done. Two dimensions are implied here:

1. Emotional burnout – observed in the presence of exhaustion, which shows a strong correlation with depression (including anhedonia and depressed mood) [10].
2. Cognitive burnout – characterized by cynicism and loss of professional efficiency (C. Maslach, W. Schaufeli, M. Leiter [20]).

A. Bakker, E. Demerouti, A. Sanz-Vergel [5] established the following relationships between burnout and work engagement: burnout is more closely related to health consequences, and work engagement is more closely related to motivational results.

According to S. Sonnentag [30], engagement can fluctuate, similar to fluctuations in labor productivity during the day. The nature of the task at hand can be an important factor in determining whether or not a person feels engaged at work.

N. Dimotakis and R. Ilies [14] draw attention to the transition to instant burnout depending on the specifics of involvement in work, in particular, on the content of the assigned task, the contingent of people with whom the task needs to be performed.

The work of M. Bask, K. Salmela-Aro [8] deals with the development of school burnout. Scientists studied three components of this process: 1) cynical attitude towards school; 2) feeling of inadequacy in behavior; 3) fatigue. According to the results of the study, it was recorded that a student with a high level of cynicism or a sense of inadequacy is most likely to drop out, while a student who scores low on these two components is most likely to continue studying. An increase in the indicators of all three components over time in relation to students of the academic direction was also established.

A. Bakker and P. Costa [3] found that employees with a high level of burnout need help in structurally changing working conditions and improving their health.

In the research of E. Garrosa, L. Blanco-Donoso, J. Moreno-Jiménez [16], a conclusion was made about daily emotional exhaustion. According to the results of a study by scientists, the loss of energy by employees is influenced by role stress and impoliteness at work. Daily optimism and recovery (relaxation and psychological detachment from work during non-working hours) contribute to increasing the energy of employees, reducing emotional exhaustion, and mitigating the negative impact of role stress.

The effectiveness of involvement in work is influenced by the following personal factors: emotional stability, conscientiousness, extraversion (A. Mäkikangas, T. Feldt, U. Kinnunen, S. Mauno [19]); self-efficacy, optimism, self-esteem [34].

P. Costa and R. McCrae [13] pay attention to the tendency of extroverts to positively reassess problems, which will help them perceive work requirements as challenges.

The experimental part of the research was conducted under the conditions of the introduction of martial law on the territory of Ukraine. The research covered 126 primary school teachers and 726 master's students who studied in the "Elementary Education" specialty at Borys Grinchenko Kyiv University, Ivan Franko National University of Lviv, and Volodymyr Vynnychenko Central Ukrainian State Pedagogical University on full-time and part-time basis.

In order to research the involvement of future teachers in educational work and to determine the influencing factors on the direction of professional thinking of future teachers in three areas ((1) behavioral involvement; (2) emotional involvement; (3) cognitive involvement), a student questionnaire was applied. After processing questionnaires, influencing factors related to behavioral, emotional, and cognitive involvement were identified. Next, we present the generalized data.

Behavioral involvement is influenced by the following:

▪ Content of the academic discipline – the academic discipline has a structured content that is convenient and easy to work with;
▪ Organization of the educational process – flexible organization of distance learning in the realities of war; clear organization of the educational process, all tasks are scheduled, deadlines are defined, which help to orientate in time; learning does not occupy the entire life space, but complements work and rest; there is enough time to familiarize self with the material and complete tasks;
▪ The content of educational information is new, interesting, modern, relevant for me as a teacher, accessible for perception, sufficient in volume, diverse and allows for a wider acquaintance with the topic; constant access is provided to be able to return to the information if necessary and repeat it; useful and will be useful in the future; the information can be used in the future for own professional growth; I receive invaluable, useful information for my future profession and personal development;
▪ Features of teaching – clear and structured teaching is organized using innovative methods, the latest technologies, modern teaching tools (presentations, mind maps, video lectures), various educational platforms; emphasis is placed on theoretical material and on the formation of practical skills; taking time to answer students' questions; presentation is clear and understandable; the material is presented in an accessible form, supported by examples from life, my needs and wishes are taken into account; the teacher helps to understand a complex topic and answers students' questions; there is an opportunity to explore new ideas and interact with interlocutors; students in the group are interested in what is taught and can discuss the topic during and after classes; practical examples are presented that help to understand the theory and apply it in practice; the material is taught in an accessible and interesting way, using various methods and examples; there is an opportunity to question what is unclear; the lecturer explains the theoretical or practical material by demonstrating it and explaining it in simpler words than in the task; teaching is interactive and interesting, changing types of activities; correctly organized learning and there is a connection with life, a clear structure of the presentation with specific tasks to be performed; organizing discussions from which I get the most knowledge; teaching combines the theoretical part with the practical part, based on real events; not a very fast pace of teaching; the lecturer presents the material in an interesting way; visualization of the main educational material, use of tables, highlighting in different colors; the lecturer helps me understand the material, creates a positive atmosphere for studying, helps me feel comfortable and motivated to study; ensuring the student's understanding of the purpose of study, methods of applying knowledge and skills in professional activities; teaching is conducted in comfortable conditions; the possibility of studying at a convenient time (asynchronously, not during work);

- The content of the tasks and the specifics of their implementation – the tasks are of a practical or applied nature, which allows to better remember information and consolidate skills; tasks have a clear explanation for execution; the content of the tasks to be performed is clear; tasks do not take much time; I understand what I have to do; interesting task content; I complete all tasks on time and with high quality and get the highest marks; I understand what task I have to do and in what time; the lecturer's support can help me understand the material, give me additional motivation and the feeling that I am not alone in my learning process; the task does not take much time; I receive assignments that allow me to develop and explore new issues;

- The result of training – everything is successful and everything is clear; I see the result of this training; understood the material I am studying and can use this knowledge in professional activities; well-deserved evaluations for works on which she spent a lot of time and effort; I understand that I need this knowledge; skills and knowledge helped me develop myself, raise my professional level, solve employment issues, solve professional problems; when I see the result of my studies, i.e., by completing tasks (in the form of tests or answering questions, for example) and receiving points for them.

Emotional involvement is affected by:

- Affective reactions to training in war conditions – a day with worries and sad news; there is no internet or electricity during training;

- Affective reactions to the learning process – a sense of satisfaction, time spent with benefit (at the end of the pair, I understand that I did not waste my time and gained thorough knowledge that I can use in my work);

- Affective reactions to the lecturer's personality – I like how the lecturer teaches; has a pleasant voice; my mood is influenced by the lecturer's mood; when the person who teaches causes pleasant emotions in me; I do not feel any obstacles when communicating with the lecturer; a pleasant and calm emotional state in the dialogue; feeling of support, mutual understanding and comfortable communication; communication with the lecturer brings pleasure; education is built on the principle of "mutual understanding", the lecturer understands the conditions of students' education during the war; I receive support from the lecturer;

- Affective reactions to the students of the group – I find common cognitive interests with my group mates; I feel ease in communicating both with classmates and lecturers;

- Affective reactions to the learning environment – a comfortable environment in which I am: well-ventilated, bright, soft chair, large screen for better perception; the lecturer creates a comfortable atmosphere in the class; a physical state of comfort and respect, when the team (group) in which I study is pleasant.

Cognitive involvement is affected by:

- Level of mental load – mental load corresponds to my capabilities; no overload; the learning process takes place without excessive load; no task overload; there is no need to combine studies with work, and I can fully focus on studies;

- Conditions for concentration – silence all around so as not to be distracted; nothing interferes with concentration and promotes successful learning of the material;

- Investing in myself – learning helps me develop my talents and abilities, supplement my knowledge and allow becoming more competent and successful; I know it will be useful for me; understanding the practical need for knowledge; explore the world and expand my knowledge; I study really important and interesting material; I am engaged in what is interesting and important to me, I understand and feel that the acquired knowledge or skills will be useful to me in my work; information really carries

a cognitive context for me; learn from a professional in his field, well-versed in the topics he teaches; communicating with a teacher who inspires and provides support, you always want to challenge yourself; for me personally, this is work and encouraging myself for success, fighting laziness, proper self-organization of my work; I understand that I need this training, it is useful and will have a productive result; the educational material matches my interests; when I study for myself, and not for the sake of points/grades; when I succeed in everything, I understand everything, I get good grades, I present the prepared material and the teacher highly appreciates it; I am interested in the subject or topic I am studying, then I will be more motivated and involved in learning; the material I study is interesting and stimulating for my development; feel that I am learning something useful and interesting, then I will be more motivated to study the material and achieve better results; learning is in line with my interests.

The analysis of data from primary school teachers' questionnaires contributed to the identification of two groups of factors:

1. Factors of positive influence on professional thinking as a higher cognitive process of searching, identifying, and creatively solving problems in the process of pedagogical activity:

- Educational factors – level of knowledge and skills; my competence; the opportunity to use my strengths; appeal of what was particularly successful during studies at an institution of higher pedagogical education;

- Subject factors – people with whom there was positive contact during the day; harmonious relationships in the family; general creative mood in the team; positive evaluation of my activity; friendly attitude of colleagues; successful learning of students.

- Production factors – possible volume of load; the optimal time for which the work needs to be done; clearly planned work schedule; strong mental load; performance of the day, achievements; change of activities during the day; positive events that happened during the day.

- Personal factors – my mood; health and well-being; physiological needs are met (healthy sleep, food, sufficient rest).

2. Factors of negative impact on professional thinking as a higher cognitive process of finding, identifying, and creatively solving problems in the process of pedagogical activity:

- External factors – events in the war.

- Subjective factors – negative information, news, conversations, emotions of others; stressful situations; problems in family relationships; general anxious mood in the team; behavior of students and colleagues that causes negative thoughts; conflict situations.

- Production factors – excessive workload; insufficient amount of time to perform work; fatigue from work and study; congested work schedule; a busy day, intense mental workload; a significant amount of work to be done; low productivity of the day; the same type of activity during the day; negative events that happened during the day and the situations I get into.

- Natural factors – state of the atmosphere; weather.

- Domestic factors – problems in everyday life, something broke.

4 Conclusion

Professional thinking ensures the fulfillment of the tasks of professional activity, it is most clearly manifested as a cognitive process of searching, identifying and creatively solving problems in the process of professional activity (T. Hura). Professional thinking is intensively formed during the period of study at a higher education institution based on active involvement in the learning process.

Involvement is a complex formation that has a component composition (behavioral involvement, emotional involvement, cognitive involvement), characterized by: directions (social, academic); intensity (moderate, productive, intense); duration (short-term (depending on the situation) and long-term or stable); type of effort (behavioral effort, mental effort, effort to fulfill behavioral expectations); a source of emotions (community, environment, content, process, result).

The phenomenon of "work engagement" refers to the working state of mind (A. Bakker, W. Schaufeli, M. Leiter and T. Taris), characterized by energy, dedication and absorption (W. Schaufeli, A. Bakker). In relation to students, involvement in educational work is characterized by four profiles: engaged, engaged-exhausted, inefficacious, burned-out (K. Salmela-Aro, S. Read).

Involvement in professional work is characterized by daily fluctuations (A. Bakker), affecting the emotional sphere. Negative attitude to work, unfavorable functioning at the workplace, exhaustion is explained as burnout (emotional, cognitive).

As a result of the study, it was established that the involvement of future teachers in educational work is a determinant of the impact on the orientation of their professional thinking. According to the results of the study, it was established that the influence on the direction of professional thinking of future teachers takes place in three directions:

1. Behavioral involvement – factors of influence: the content of the educational discipline; organization of the educational process; content of educational information; peculiarities of teaching; content of tasks and features of their implementation; learning outcome.
2. Emotional involvement – factors of influence: affective reactions to training in war conditions; affective reactions to the learning process; affective reactions to the lecturer's personality; affective reactions to the students of the group; affective reactions to the learning environment.
3. Cognitive involvement – influencing factors: level of mental workload; conditions for concentration; investment in self.

Regarding teachers who are already working, two groups of factors are distinguished:

1. Factors of positive influence on professional thinking as a higher cognitive process of searching, identifying, and creatively solving problems in the process of pedagogical activity. These are educational, subject, production, and personal factors.
2. Factors of negative impact on professional thinking as a higher cognitive process of finding, identifying, and creatively solving problems in the process of pedagogical activity. These are external, subject, production, natural, and household factors.

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Primary Paper Section: A

Secondary Paper Section: AN

SUBJECTIVE WELL-BEING: ESSENCE, PSYCHOLOGICAL AND SOCIAL CONDITIONING, INFLUENCING FACTORS DURING STUDENT LEARNING

[a]HENNADII BONDARENKO, [b]LARYSA HOLODIUK, [c]OLHA BILYAKOVSKA, [d]VALENTYN SAVOSH, [e]SERHII BURTOVYI, [f]ZHANNA FEDIRKO, [g]IRYNA NEBELENCHUK

[a]*Borys Grinchenko Kyiv Metropolitan University, 18/2, Bulvarno-Kudriavska Str., 04053, Kyiv, Ukraine*
[b,e,f,g]*Municipal Institution "Kirovograd Regional IN-Service Teacher Training Institute named after Vasyl Sukhomlynsky", 39/63, Velyka Perspectivna Str., 25006, Kropyvnytskyi, Ukraine*
[c]*Ivan Franko National University of Lviv, 1, Universytetska St., 79000, Lviv, Ukraine*
[d]*Lesya Ukrainka Volyn National University, 13, Volya Ave., 43025, Lutsk, Ukraine*
email: [a]*h.bondarenko@kubg.edu.ua,* [b]*golodiuk_larysa@ukr.net,* [c]*olha.bilyakovska@lnu.edu.ua,*[d]*valsavosh@gmail.com,* [e]*burtovoy@ukr.net,* [f]*jeannefedirko@gmail.com,* [g]*nebirina@ukr.net*

Abstract: The article presents the theoretical and experimental results of the study of subject well-being as one of the components of the research of social progress, the evaluation of state policy and the prediction of results for individuals and societies. The essence of subjective well-being is considered in the context of life satisfaction and the affective dimension (frequent positive and infrequent negative affects, momentary moods of individuals). The psychological conditioning of the subject's well-being is revealed in view of the change or stability of the well-being attitude, the connection between the satisfaction of needs, motivation and the subject's well-being. The social conditioning of the subject's well-being is revealed in the context of the influence of the social environment, stable social relations, and social support on the subject's well-being. Scientific data on factors that can disrupt (improve) subject well-being are summarized. The experimental part of the research was conducted with the involvement of students of grades 1-11. The experimental results of the study relate to the period of the introduction of martial law on the territory of Ukraine in connection with the aggressive actions of Russia. The experimental results of the research include generalizations about the episodic subjective well-being of students according to the character traits of the teacher, the subjective well-being of students according to the teacher's actions in class, groups of factors that negatively affect the subjective well-being of students during education (factors related to external influences on the organization of student learning, factors related to the emotional and physiological states of the teacher; factors related to cognitive processes, emotional and physiological states of students).

Keywords: well-being; subjective well-being; factors influencing the subjective well-being of students; students of classes 1-10; teachers; martial law.

1 Introduction

Well-being is determined by numerous factors, including social support and environmental factors, which are constantly changing. Different changes cause different effects on a person. In the study by A. Moè [21], the well-being of university students was considered during the COVID-19 pandemic, that is, in the context of social distancing and isolation. We investigated the subjective well-being of students in classes 1-11 during the years 2022-2023, that is, during Russia's military operations on the territory of Ukraine.

The topic of subjective well-being is the focus of attention of researchers and practitioners, but there is a lack of assessment tools. Meanwhile, the physical and psychological well-being of children and adolescents is a necessary condition for maintaining their health and achieving high results in education, upbringing and development. Due to the rapid increase in the number and variety of risks contained in the social environment, the child quite often finds himself in a situation that places increased demands on his ability to resist various negative influences and threaten his subjective well-being. The study of the problem of the subjective well-being of adolescents in educational environments with different levels of psychological safety and the identification of patterns associated with the development and formation of the subjective well-being of schoolchildren will help determine the content of psychological assistance and psychological and pedagogical activities aimed at maintaining and increasing the level of subjective well-being. The importance of resolving this issue; is proven by the fact that subjective well-being is considered as a criterion of a person's

mental and psychological health and a necessary condition for the comprehensive and harmonious development of a person.

2 Method

The following tasks were defined for multi-aspect analysis:

- To reveal the essence of well-being and subjective well-being as complex formations;
- To characterize the psychological and social conditioning of the subject's well-being;
- To summarize scientific data on factors that can disrupt the subject's well-being and improve it;
- To characterize the contribution of education to subject well-being;
- To summarize scientific data on factors that can disrupt the subject's well-being in education;
- To summarize the experimental results of the study, which was conducted under the conditions of the introduction of martial law on the territory of Ukraine and concerns: episodic subjective well-being of students in accordance with the character traits of the teacher; the subjective well-being of students in accordance with the actions of the teacher in class; groups of factors that negatively affect the subjective well-being of students during education (factors related to external influences on the organization of student learning; factors related to the emotional and physiological states of the teacher; factors related to cognitive processes, emotional and physiological states of students).

Various methods were used in the research, namely: theoretical (analysis of scientific data, systematization of selected information, summarization of results in tables and lists of data) and empirical (survey, questionnaire). Students of classes 1-11 from Kyiv, Kirovograd, and Volyn regions, as well as the cities of Kyiv, Kropyvnytskyi, and Lutsk, were involved in the experimental part of the research.

3 Results and Discussion

Well-being and subjective well-being: essence and components

C. Keyes [16] considers the phenomenon of "well-being" as a complex entity and distinguishes three components:

- Emotional is an affective component of well-being, includes life satisfaction, the presence of positive emotions and the absence of negative emotions (E. Diener, E. Suh, R. Lucas, H. Smith [10]; C. Keyes [18]); daily (intrapersonal) fluctuations in emotional well-being are important for emotional well-being (Reis, H. T., Sheldon, K. M., Gable, S. L., Roscoe, J., & Ryan, R. M. (2000) [24]);
- Psychological – manifests itself at the interpersonal and intrapersonal levels of positive functioning; relates to connection with others, a sense of purpose and meaning of life, a sense of personal growth and development (C. Keyes [18]);
- Social – refers to optimal functioning at the community level, includes social well-being, reflects social integration, social contribution, social coherence, social actualization and social recognition (C. Keyes [16; 18]).

Along with the term "well-being", there is the term "subjective well-being". According to the generalizations of E. Diener, R. Lucas C. Scollon [9] and K. Ngamaba (2017) [22], subjective well-being is used to study social progress, evaluate public policies and predict outcomes for individuals and societies.

According to E. Diener [6], subjective well-being includes life satisfaction and an affective dimension. Accordingly, high subjective well-being reflects a feeling of high satisfaction with life as a whole, while the affective dimension refers to positive emotions and thoughts about life in terms of frequent positive

and infrequent negative affects (E. Diener [6]; E. Diener, M. Chan [7]).

C. Kim-Prieto, E. Diener, M. Tamir [19] associate subjective well-being not only with people's evaluation of their lives, but also with momentary moods of individuals and global judgments of life satisfaction. Scientists describe the consistent temporal structure of subject well-being as follows: experiencing well-being from events and circumstances that cause evaluative reactions; transition from emotional reactions to these events to memories of these reactions; the transition to global considerations of well-being based on previous stages.

A high level of subjective well-being, manifested in life satisfaction, lack of negative emotions, optimism and positive emotions, contributes to the improvement of health and increases the life expectancy of healthy people (E. Diener, M. Chan [7]).

The relationship between subjective well-being and satisfaction of needs

E. Diener, R. Lucas, and C. Scollon [9] point out that people differ in their adaptation to events, which can cause a change in the well-being threshold under certain conditions. Thus, in response to a certain external event, some people may change their well-being attitudes, while other people will keep their well-being attitudes unchanged.

According to the results of the study by L. Tay and E. Diener [30], a relationship between the satisfaction of needs and subjective well-being, which includes life evaluation, positive and negative feelings, was established. Connections have been established:

- Between satisfaction of needs and subjective well-being;
- Between assessment of life and satisfaction of basic needs;
- Between positive feelings and needs for communication and respect;
- Between negative feelings and basic needs, needs for respect and autonomy.

According to E. Deci, R. Ryan [4], needs determine the necessary conditions for well-being, as well as for psychological growth and integrity. Different regulatory processes underlying goal attainment are differentially related to well-being. "Social contexts and individual differences that support satisfaction of the basic needs facilitate natural growth processes including intrinsically motivated behavior and integration of extrinsic motivations, whereas those that forestall autonomy, competence, or relatedness are associated with poorer motivation, performance, and well-being" [4].

According to the results of the study by M. Tang, D. Wang, A. Guerrien [29], satisfaction of basic psychological needs and motivation (autonomous types) are positively related to positive indicators of well-being (meaning of life, life satisfaction, positive affect, self-esteem, etc.) and negatively associated with negative indicators of well-being (depression, apathy, etc.).

The satisfaction of social needs implied subjective well-being, especially for the purpose of evaluating life, in addition to the satisfaction of people's needs, which indicates the desirability of living in a prosperous society (L. Tay, E. Diener [30]).

According to the results of L. Tey and E. Diner [30], the satisfaction of needs is a necessary condition for the subject's well-being, but not sufficient for ascertaining a high level of life satisfaction. In this context, it is appropriate to cite the following quotes:

- "Life satisfaction is connected to a large degree to social yardsticks – achieving goals, meeting expectations" (D. Kahneman, A. Krueger, D. Schkade, N. Schwarz, A. Stone [15]).
- "It is based on comparisons with other people and most related to the satisfaction of basic needs, the satisfaction of social needs and the need for respect, the need for autonomy (L. Tay, E. Diener [30]).

According to V. Sophie, C. Sara, T. Jellen [27], life satisfaction correlates most with basic needs, peace of mind, and meaningfulness. The positive affect of life satisfaction is most strongly associated with high levels of competence, peace of mind, and meaningfulness, while the negative affect is most strongly associated with sleep deprivation, low levels of competence, and poor peace of mind.

The influence of the social environment on subjective well-being

According to L. Uziel, T. Schmidt-Barad [31], people rely on a safe, reliable social environment. In the case of social isolation or loneliness, they increase alertness to threat and heighten feelings of vulnerability, and increase the desire to reconnect. Implicit hypervigilance about social threat alters psychological processes that affect physiological functioning, impair sleep quality, and increase morbidity and mortality.

Chronic perceived isolation (i.e., loneliness) is characterized by disorders of attention, cognition, affect, and behavior that affect morbidity and mortality due to their impact on genetic, nervous, and hormonal mechanisms (L. Hawkley, J. Cacioppo [13]).

According to N. Hudson, R. Lucas, and M. Donnellan, "experiential and global well-being are often separable constructs that may show different patterns of association with relationship experiences (e.g., well-being may operate differently on within- vs. between-persons levels)" [14].

According to the research results of L. Uziel andT. Schmidt-Barad [31], the social environment affects well-being. In particular, stable social relations contribute to well-being. Being with others of one's choice has the strongest positive relationship with subjective well-being. In contrast, interacting with others not by choice has the strongest negative relationship with subjective well-being. In the case of loneliness, the status of choice (by choice / not by choice) affects the subject's well-being to a lesser extent.

A. Moè [21] believes that increasing well-being as an important global goal can be achieved with the help of social support and environmental factors.

At the same time, subjective well-being can be disturbed due to (Y. Gong, S. Cheung, M. Wang [12]):

- Decrease in well-being and motivation as a result of unsatisfied needs for autonomy, competence, relatedness;
- A low level of proactivity, because such people are less able to effectively mobilize their energy and emotions to cope with difficulties and problems, achieve results, anticipate and prevent problems, use opportunities, do not set a proactive goal.

The main factors that will improve the subjective well-being of people around the world are: state of health, household's financial satisfaction and freedom of choice (K. Ngamaba [22]).

Well-being is promoted by stable social relations. Regarding daily social interactions, L. Uziel and T. Schmidt-Barad [31] investigated their impact on episodic (empirical) subjective well-being. Social relations increase episodic (empirical) subjective well-being if they occur by choice. Communication with others that is not by choice has the strongest negative relationship with episodic (empirical) subjective well-being. According to the ownership theory, people easily form social attachments in most conditions and resist the destruction of ties that already exist (R. Baumeister, M. Leary [2]).

The influence of education on subjective well-being

According to M. Salinas-Jiménez, J. Artés, and J. Salinas-Jiménez [26], education shows a significant impact on life satisfaction regardless of the impact on income. The contribution of education to subjective well-being is stronger in the fewer people who attain a given level of education, thus suggesting that this contribution is partly due to positional concerns.

Subjective well-being can be disturbed due to:

▪ Low level of trust of teachers towards students. According to the research results of D. Van Maele and M. Van Houtte [32], the teacher's trust in the student is largely determined by the teacher's perception of the students' ability to learn, the students' ability to meet expectations and the organizational school context.

▪ Feelings of exhaustion and demotivation caused by a large number of classes in an online learning environment and a small amount of face-to-face exchange of ideas (H. Wang, Y. Ren, W. Liu [33];

▪ Insufficient level of school involvement, lack of flexible interaction that takes into account contextual features and environmental changes (J. Fredricks, P. Blumenfeld, A. Paris [11]);

▪ A low initial level of involvement of students in achieving the goal results in low progress in their achievements. (J. Pfeiffer, M. Pinquart [23]).

The experimental part of the study was conducted during 2022-2023, during Russia's military operations on the territory of Ukraine, incredibly difficult tests for the economy of Ukraine, all spheres of activity of Ukrainians without exception, and the personal life of each of them. In this study, we studied:

1) Episodic subjective well-being of students in accordance with the character traits of the teacher;
2) The subjective well-being of students depending on the actions of the teacher in class (how to organize students' activities in class, how to teach educational material, how to evaluate learning results, how to organize students' homework);
3) Groups of factors that negatively affect the subjective well-being of students during learning (factors related to external influences on the organization of student learning; factors related to the emotional and physiological states of the teacher; factors related to cognitive processes, emotional and physiological states of students.

In order to establish the episodic subjective well-being of students, which is influenced by the character traits of the teacher, the respondents were asked to answer the question: which teacher would they like to learn from: demanding, fair, happy or another answer option? When answering the question, 80% of respondents limited themselves to defining the 2 most important features of a teacher's character. We summarized the questionnaire data in Table 1.

Table 1: The results of the study of the episodic subjective well-being of students according to the character traits of the teacher

Class	Characterization of the character traits of the teacher, which students prefer, as it determines their episodic subjective well-being				
	smart	good	demanding	fair	cheerful
1	I				II
2	II	I			
3	II	I			
4	II	I			
5	II	I	III	IV	
6		II		I	
7	II	I		III	IV
8	II	I		III	
9	II			I	
10	II			I	
11	II		III	I	

The analysis of the data in Table 1 proves that a smart teacher determines the episodic subjective well-being of students who have started school. Starting from the 2nd grade, the episodic subjective well-being of students is associated with a good teacher. Respondents studying in classes 6, 9, and 10 preferred a fair teacher.

Table 2 summarizes the students' reasoning about the teacher's actions that will contribute to their subjective well-being in the lesson. During the introduction of martial law in Ukraine, students of all grades indicated a desire to actively move and communicate in pairs and groups. The teaching of educational material should be interesting, understandable, accessible for perception, with practical examples. Evaluation of learning results should encourage, stimulate. The amount of homework should be reduced.

Table 2: The results of the study of the subjective well-being of students depending on the actions of the teacher in class

Class	How to organize students' activities in class?	How to teach educational material?	How to evaluate learning results?	How to organize students' homework?
1	work together more	very interesting, easy	just talk like a job done; praise more	give tasks to be done together with parents
2	don't sit at a desk all the time	interesting to tell	tell me first and then tell my parents	give tasks to choose from; do only the task you like
3	conduct lessons in the fresh air	interest, and then tell new material	to ask everyone	give interesting homework
4	organize tasks in pairs or small groups	to explain the material so that students understand, to be interesting	use self-assessment and peer assessment	give less homework; to give tasks to find what is not in the textbook and prepare to interestingly tell new information to your classmates
5	to create a friendly atmosphere in the classroom	it is interesting to explain, to explain using the example of life situations	encourage with points; evaluate what was successful; evaluate the level of student participation in education	set students tasks that will allow them to show creativity and their own abilities; give tasks according to interests
6	avoid monotony in the activities of students in class	less reading from textbooks, especially during the lesson itself, discussing, teaching is interesting	do not put low scores; evaluate fairly and objectively	to set tasks that are quickly and interestingly performed in accordance with the goal chosen by the student (repeat (1), understand what was not understood in the lesson (2), learn something new about the topic being studied (3))
7	to take into account that not all students have enough time allocated for the task	first make students want to listen, only then it is interesting to tell	take into account the quality of the work performed; to give an opportunity to improve scores	a creative, developmental task, not just learning something; do not give tasks that students will not be able to complete
8	create opportunities for active participation of students in conducting the	it is good to explain the material, conduct experiments live, and not show videos	take into account not only academic knowledge, but also communicative, social skills, critical	provide pedagogical tips that can be used when performing homework of various levels of difficulty

	lesson		thinking	
9	to show how new knowledge or skills can be applied practically	it is interesting and understandable to explain the material, taking into account the individual needs and abilities of students	not to comment in the presence of other students of the class on the reasons why such a score was given	give more tasks of practical direction
10	to allow students to work at their own pace with tasks for their level	available to explain the material and explain where and how it can be practically applied	not to evaluate each lesson, but to monitor the work of students over a certain period of time in order to understand the general level of knowledge	fewer written assignments; give interesting search tasks; to set creative tasks
11	organize individual work and conduct consultations at the request of	clearly, structured, interesting, simple and understandable, with clarity, avoid	fairly, honestly, evaluate the progress of students	giving very important homework so that other extra classes can be scheduled

	students	monotony, with examples from life		

The analysis of the data in Table 3 shows that in the conditions of the introduction of martial law, the subjective well-being of students during education is negatively affected by the following factors:

1. Factors associated with external influences on the organization of students' education (the subjective well-being of students in classes 1-10 was negatively affected by shelling, air raids, problems in the family. Studying in bomb shelters and studying as an electronic student especially negatively affected the subjective well-being of students in classes 1-4).
2. Factors related to the emotional and physiological states of the teacher (the subjective well-being of students in classes 1-10 was negatively affected by the teacher's depression or nervousness. The subjective well-being of students in classes 1-4 was also negatively affected by the teacher's illness).
3. Factors related to cognitive processes, emotional and physiological states of students (the subjective well-being of students of classes 1-10 was negatively affected by the failure to satisfy their physiological needs (I want to eat, sleep), safety needs (I feel anxious), as well as negative emotional manifestations and a decrease in cognitive activity and cognitive independence.

Table 3: The results of the study of groups of factors that negatively affect the subjective well-being of students during education

Groups of factors and their components	Classes									
	1	2	3	4	5	6	7	8	9	10
Factors associated with external influences on the organization of student learning										
shelling and air alarms										
training in a bomb shelter										
learning as an e-learner										
problems in the family										
change of place of residence and study										
Factors related to the emotional and physiological states of the teacher										
depressed or nervous teacher										
sick teacher										
a teacher with a bad mood										
Factors related to cognitive processes, emotional and physiological states of students										
I'm sick										
I want to eat										
I want to sleep										
I listen to different sounds, I often worry										
I do not understand the educational material										
a difficult topic for me										
cannot complete the task										
I don't understand why to study it										
I get low marks										

I feel bad mood										
I answer, and the teacher or students interrupt										
it's noisy in the classroom										
something is distracting										
lots of homework										
the teacher does not understand you and does not support you										
conflict with the student(s) of the class										

4 Conclusions

Well-being and subjective well-being are considered by scientists as one of the components of the study of social progress, evaluation of state policy and prediction of results for individuals and societies. By their nature, well-being and subjective well-being are complex entities. In particular, emotional, psychological, and social components have been identified in the phenomenon of "well-being" (E. Diener, S. Keyes, H. Reis, K. Sheldon, S. Gable, J. Roscoe, R. Ryan). The phenomenon of "subjective well-being" includes life satisfaction and an affective dimension (frequent positive and infrequent negative affects, momentary moods of individuals) (E. Diener, R. Lucas C. Scollon, K. Ngamaba, C. Kim-Prieto, M. Tamir).

The psychological conditioning of the subject's well-being is determined by the processes of changing the attitude of well-being or maintaining stable attitudes (E. Diener, R. Lucas, C. Scollon), the connection between the satisfaction of needs, motivation and subjective well-being (D. Kahneman, L. Tay, E. Deci, R. Ryan, M. Tang, D. Wang, A. Guerrien, V. Sophie, C. Sara, T. Jellen).

The social conditioning of the subject's well-being refers to the social environment, stable social relations, and social support.

Subjective well-being can be disturbed by the dissatisfaction of the needs for competence, autonomy, and relatedness (E. Deci, R. Ryan), a low level of proactivity (Y. Gong, S. Cheung, M. Wang, J. Huang). Subjective well-being can also improve. It depends on the state of health, household's financial satisfaction and freedom of choice (K. Ngamaba). It can also be about episodic (empirical) subjective well-being (L. Uziel, T. Schmidt-Barad).

Subjective well-being in education can be affected by the following factors: low level of teachers' trust in students (D. Van Maele, M. Van Houtte), feelings of exhaustion and demotivation (H. Wang, Y. Ren, W. Liu), insufficient level of school involvement, lack of flexible interaction (J. Fredricks, P. Blumenfeld, A. Paris), low initial level of student involvement in achieving the goal (J. Pfeiffer, M. Pinquart).

According to the results of our research, three groups of factors have been identified that negatively affect the subjective well-being of students of classes 1-11 in the conditions of the introduction of martial law on the territory of Ukraine:

1. Factors related to external influences on the organization of students' education (shelling, air raids, problems in the family (regarding students of classes 1-10); training in bomb shelters, training as an electronic student (regarding students 1-4 classes)).
2. Factors related to the emotional and physiological states of the teacher (states of depression or nervousness of the teacher (regarding students of classes 1-10); illness of the teacher (regarding students of classes 1-4)).
3. Factors related to cognitive processes, emotional and physiological states of students (dissatisfaction of physiological needs (I want to eat, sleep), safety needs (I feel anxiety), negative emotional manifestations, a decrease

in cognitive activity and cognitive independence (regarding students of 1-11 classes)).

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Primary Paper Section: A

Secondary Paper Section: AN

FACTORS INFLUENCING THE PROCESS OF ORGANIZING DISTANCE LEARNING OF STUDENTS IN THE CONDITIONS OF MILITARY OPERATIONS ON THE TERRITORY OF UKRAINE

[a]NINA RUDENKO, [b]NATALIIA SIRANCHUK, [c]SERHII STETSYK, [d]SVITLANA DUBOVYK, [e]IRYNA SUKHOPARA, [f]LYUDMILA ROMANENKO, [g]ROKSOLANA SHPITSA

[a,b,d-g]*Borys Grinchenko Kyiv Metropolitan University, 18/2, Bulvarno-Kudriavska Str., 04053, Kyiv, Ukraine*
[c]*Mykhailo Drahomanov Ukrainian State University*, 9, Pyrohova Str., 01601, Kyiv, Ukraine
email: [a]*n.rudenko@kubg.edu.ua,* [b]*n.siranchuk@kubg.edu.ua,*
[c]*sergeistet@gmail.com,* [d]*s.dubovyk@kubg.edu.ua,*
[e]*i.sukhopara@kubg.edu.ua,* [f]*l.romanenko@kubg.edu.ua,*
[g]*r.shpitsa@kubg.edu.ua*

Abstract: The article presents the theoretical and experimental results of the study of the process of organizing distance learning in the conditions of a full-scale invasion of Russia into the territory of Ukraine. As a result of the analysis of scientific sources, eight groups of factors influencing the process of organizing distance learning in the conditions of military operations were determined. These are: 1) political, social, and economic factors; 2) psycho-physiological factors; 3) dominant factors; 4) technologcal direction factors; 5) didactic orientation factors; 6) limiting factors; 7) subjective factors of negative impact on the personality and the results of distance learning (self-limitation; focus on learning results; avoidance of tasks; pessimistic behavior; low general level of self-esteem; low level of involvement in educational work); 8) subjective factors of positive influence on the personality and results of distance learning (orientation to tasks and mastery; optimistic behavior; expectation of success; high general level of self-esteem; high level of involvement in educational work). A list of leading ideas of theories, approaches, strategies, concepts that can be used during the organization of distance learning in the conditions of military opertions has also been compiled. The list includes: the theory "broaden-and-build" (B. L. Fredrickson); the theory of self-determination (E. Deci, R. Ryan, A.B. Bakker and others); the self-determined learning model (M. L. Wehmeyer, S. B. Palmer, and others); the self-determination strategies (A. B. Bakker and M. van Woerkom); the concept of "taking charge" (E. W. Morrison, S. S. Phelps); the theory of proactivity (T. S. Bateman, J. M. Crant, and others); the theory of using character strengths (N. Park, C. Peterson, and others); the strategy "Game design of learning" (A. Bakker, A. Sanz Vergel, J. Kuntze, and others). The leading ideas of these scientific developments formed the basis for the development of the table "My actions during distance learning in accordance with the leading ideas of theories, approaches, strategies, concepts". The experimental results of the study include a generalization about the organization of distance learning of students in the conditions of military operations on the territory of Ukraine using the leading ideas of theories, approaches, strategies, concepts that were previously adapted accordingly.

Keywords: distance learning; factors influencing organization of distance learning; theories; approaches; strategies; concepts; students; teachers; military actions.

1 Introduction

The organization of distance learning has a number of specific features. According to the generalizations of scientists [25], this is, first of all, the interaction of participants in the educational process in the roles of "electronic student" and "electronic teacher". This type of interaction is characterized by a combination of temporal, spatial, and organizational advantages of distance learning, as well as by a number of disadvantages (instances of mental overload among electronic students; unpreparedness for a self-disciplined way of learning; lack of motivation to use tools; perception of the educational system of e-learning as complex; lack of methodical support to enhance students' independent work; sleepiness as a result of the lack of face-to-face communication; insufficient attention to students who demonstrate low progress during e-learning).

Distance learning takes place in the absence of face-to-face communication, but with the use of various information and communication technologies, as well as computer, network, digital and mass media digital technologies that provide the expansion of technological characteristics of information, communication, digital technologies in the case of their use as self-sufficient means [24].

In turn, we would like to add that namely thanks to the organization of distance learning the training process continued in the conditions of the deployment of military operations on the territory of Ukraine.

2 Materials and Methods

In the investigation of distance learning, we focused on a group of factors that influenced the organization of distance learning in the conditions of the full-scale invasion of Russia on the territory of Ukraine.

The theoretical part of the study was aimed at performing the following tasks:

1. To analyze scientific sources and identify groups of factors influencing the process of distance learning organization in the conditions of military operations on the territory of Ukraine.
2. To analyze scientific sources and systematize information about the leading ideas of theories, approaches, strategies, concepts that can be used during the organization of distance learning in the conditions of military operations.
3. Experimentally verify the positive influence of the leading ideas of theories, approaches, strategies, concepts on the organization of distance learning, which was organized in the conditions of military operations on the territory of Ukraine in connection with the full-scale invasion of Russia.

Various methods were used in the research: theoretical (analysis, arrangement, systematization, generalization) and empirical (observation, questionnaires, interviews). Teachers and students of Borys Grinchenko Kyiv Metropolitan University (Ukraine) and Mykhailo Drahomanov Ukrainian State University (Ukraine) were involved in the experimental part of the study.

3 Results and Discussion

Factors affecting the process of distance learning organization in the conditions of military operations on the territory of Ukraine

The analysis of scientific papers served to identify eight groups of factors influencing the organization of distance learning in the conditions of military operations on the territory of Ukraine. These are:

1. Political, social, and economic factors:

a) The need to preserve the educational process, the maximum optimization of training in order to ensure the quality of education, despite the difficult conditions [34].

b) Economic efficiency in conditions of destabilization of socio-economic reality, ensuring constant intellectual development [26].

c) The need to find a systemic response to social challenges that have arisen before the education system in Ukraine as a result of the unprovoked military aggression of the Russian Federation against Ukraine [19].

2. Psycho-physiological factors:

a) Training in the conditions of constant shelling of the civilian and critical infrastructure of Ukraine, as well as the direct impact of the war on the daily life of the families of participants in the educational process [19].

b) Training combined with providing assistance to those who have fallen into difficult life circumstances as a result of military actions, maintaining the status of a productive subject of training, activity, personality and individuality for positive interaction with the world, others, and oneself [13].

c) Training in conditions of increased risk of physical and psychological injury [34].

d) Teaching in the conditions of a high level of professional burnout of teachers caused by the proximity of hostilities, excessive workload and poorly organized working conditions, uncertainty in the future and the inability to plan own future [15].

e) An increase in the level of mental load during distance learning compared to face-to-face learning [26], increasing the mental workload of students [21].

3. Dominant factors:

a) The need to carry out educational work with the participants of the educational process regarding behavior in emergency situations, providing first aid, reducing the degree of anxiety and tension, etc., creating a favorable psychological atmosphere [34]

b) Organization of the educational process and the educational environment of the educational institution based on respect for the previous traumatic experience of the participants in the learning process [19]

c) Directing pedagogical actions not only to the development of academic knowledge, but also to the formation of the ability to maintain psychological stability, self-control in conditions of uncertainty [34]

4. Technological direction factors:

a) The possibility of distance learning platforms to register data on the results of student participation in various types of online activities

b) The ability to plan and implement synchronous and asynchronous processes with an educational purpose

c) The possibility of transparent and quick assessment

d) The possibility of introducing innovative teaching methods

e) The possibility of organizing online learning at one's own pace, in a self-determined order of studying the educational material; with the possibility of several one-time processing of educational material, without time and space limitations; more effective use of time resources, which is manifested in a quick change of virtual teaching or learning activities to participation in various educational or social events, visits to various institutions, organizations, etc. [26].

5. Didactic orientation factors:

a) Supporting all participants in the educational process by recognizing the presence of trauma and implementing the principles of a trauma-informed environment in the practice of the educational process, enhancing the strengths of each participant in the learning process, minimizing the impact of trauma through social involvement, creating a comfortable and safe environment [19].

b) Introduction of individualization of training to increase the effectiveness of training in war conditions [34].

c) Prevention of a drop in academic performance, a weakening of interest in the learning process, a general decrease in work capacity based on dominance of integration in the learning process, i.e., grouping students into groups comfortable for interaction or forming groups of their own choice, introducing management of the learning process through the content of different level tasks, variability methods of their implementation and methodical support [18].

6. Limiting factors:

a) Necessity of preliminary training of lecturers and future teachers for distance learning

b) Constant updating of knowledge and skills of lecturers and students in view of the introduction of technological innovations

c) Absence of high and sufficient levels of formation of personal qualities in students to carry out studies without external control

d) Lack of direct interaction between the participants of the learning process

e) Formation of practical skills of working with children in future teachers is difficult.

7. Subjective factors of negative impact on the personality and the results of distance learning:

a) Self-limitation. The student focuses his attention on the probable failure. A student's use of self-restraint leads to a high level of task avoidance, a low level of (mental and physical) effort, an increased probability of failure in academic tasks, and ultimately - to low success [28]

b) Focus on learning results. Orientation to the learning result causes in students a decrease of satisfaction from completing the task, gives rise to a desire to give preference to easier tasks, to give up efforts before failure, and to explain failures as a lack of abilities [1; 11]

c) Avoidance of tasks. Students who are typically high in task avoidance often cite a lack of effort after failure. Task avoidance leads to low performance and dissatisfaction and predicts further task avoidance [28]

d) Pessimistic behavior. In their actions, pessimistic students avoid tasks more [7]

e) Low general level of self-esteem. A low general level of self-esteem predicts only partially successful student learning, serves as the basis for probable unemployment, feelings of exhaustion, cynicism and reduced achievement at work, and also serves as the basis for a low level of both involvement in work and satisfaction with it [31; 32]

f) Low level of involvement in educational work. Students resort to inadequate ways to overcome difficulties that arise in the academic environment, which, in turn, creates disengagement from learning [16].

8. Subjective factors of positive influence on the personality and results of distance learning:

a) Orientation to tasks and mastery. The student's actions are aimed at mastering ways to solve situations, which, in turn, is associated with high success [12]

b) Optimistic behavior. Optimism increases the likelihood of a student's academic success. Students with these behaviors were more engaged and reported less burnout early in their professional careers [7]

c) Expectation of success. Individual expectations of success contribute to academic achievement and satisfaction. Students who reported expectations of success often cited their abilities as the reason for their success [28]. According to the results of the research of T. Berndt and K. Miller, the motivation for success depends on the expectations of success and the value given to success [6]

d) High general level of self-esteem. High general self-esteem predicted a student's academic success, having a permanent job after 10 years, high wages, high levels of work engagement and job satisfaction, and low levels of burnout [31]

e) High level of involvement in educational work. Within the involvement in educational or professional work, the individual shows greater openness to new experiences, actively explores the environment, becomes inclined to creative work [14].

Leading ideas of theories, approaches, strategies, concepts that can be used during the organization of distance learning in the conditions of military operations

The theory "broaden-and-build" (B. L. Fredrickson) [14]. The leading ideas of the theory: the process of personal training is based on the experience of positive emotions, the expansion of the effective (momentary) repertoire of thoughts and actions, the creation of sustainable personal resources, in particular physical, intellectual, social, and psychological.

The theory of self-determination (E. Deci, R. Ryan, A.B. Bakker and others). The theory of self-determination assumes that certain developed psychological needs must be satisfied if the individual wants to develop his potential to the fullest extent [10; 30].

The theory of self-determination postulates three universal needs [8]:

- The need for autonomy (the individual's need to experience his behavior as freely chosen and arbitrary, and not imposed by external forces);
- The need for competence (the need for an individual to feel capable of certain actions and to be effective in these actions);
- -The need for relatedness (the individual's need for belonging, closeness, and connections with others).

Bakker and Van Woerkom claim: "We use self-determination theory to argue that all human beings have basic needs for autonomy, competence and relatedness" [3].

The self-determined learning model [36]. The introduction of the model serves: to create conditions for the self-determination of the individual and to give him the opportunity to become a self-regulated solver of the problem that the lecturer proposed to solve for educational purposes. The introduction of self-determination orients the individual to an active position and teaches to become causal agent in educational and professional activities.

Self-determination strategies (A. B. Bakker, M. van Woerkom) [3]. The introduction of self-determination strategies is aimed at teaching individuals to actively manage their goals, taking into account constantly changing conditions, to practice self-leadership; to learn to see the benefits of internal motivation, to implement self-leadership while learning to solve professional situations.

The concept of "taking charge" (E. W. Morrison, S. S. Phelps). The leading ideas of the concept [27] are as follows: the individual's constructive efforts to make functional changes in how learning work is done, that is, the individual is willing to challenge the status quo in order to effect constructive change. An individual is more likely to take responsibility to the extent that he has an internal sense of responsibility for changing the content of the educational (professional) task, believes in his own ability to work effectively, and perceives the lecturer (supervisor) as a leader.

The theory of proactivity (T. S. Bateman, J. M. Crant, and others). The leading ideas of the theory are based on proactive behavior. Proactiveness determines the basis of proactive behavior [9]. A proactive personality performs actions that change his environment [4]. Such personality discovers opportunities, takes the initiative, acts persistently until significant changes occur. A personality that is not proactive, does not know how to identify opportunities for change, shows passivity and reactivity, prefers to adapt to circumstances rather than change them.

A proactive personality implements an active search for information and opportunities for improvement. Such personality does not wait passively for information and opportunities to come [9]. A proactive personality actively creates changes in the environment, while a less proactive

personality has a more reactive approach to their academic or professional work [4].

The theory of using character strengths (N. Park, C. Peterson, and others). According to Park and Peterson [29], character strengths are the ability to act, think, and feel in ways that benefit oneself and others. "Good character is not a singular thing but rather plural - a family of positive traits shown in one's thoughts, feelings, and behaviors" [29]. According to D. Baumrind, "It takes virtuous character to will the good, and competence to do good well" [5, p.13].

Park and Peterson define character strengths as more specific psychological processes or mechanisms that define the virtues. As part of the Values in Action (VIA) project, these scientists developed the VIA classification which measures 24 widely recognized and valued strengths (in particular, wisdom and knowledge, courage, humanity, justice, moderation, and transcendence) [29].

According to S. Lavy [20], knowledge about one's strengths should be complemented by a high degree of their use, since the discussion of character strengths, their development and use is of great importance for increasing the ability of an individual to realize his potential, to achieve success in professional activities. The development of character strengths is facilitated by the organization of the learning process, features of interaction with other participants in the educational process, and evaluation of the results of educational activities.

R. Govindji and P. Linley [17] draw attention to the fact that each individual not only has an internal motivation to use own strengths, but also needs this process.

When a person does this, he gets positive results. Park and Peterson found that the use of character strengths (including perseverance, love, gratitude, hope, and perspective) affects the academic achievement of high school students and college students [29].

The organization of training using character strengths is based on the following statements. Every personality has strengths. Strengths need to be recognized, celebrated, strengthened, and used. The process of using personal strengths should be gradual. First, it is necessary to identify those strengths that are most noticeable to this individual, which the individual already possesses. Then one must be taught to select the target strengths that he wants to focus on (i.e., identify underdeveloped strengths), set specific and measurable goals, and develop a specific plan of action to achieve those goals. Next, learning to use own strengths in new ways follows, as well as finding new ways to use own strengths.

The strategy "Game design of learning" (A. Bakker, A. Sanz Vergel, J. Kuntze, and others). The leading idea: to make the educational tasks proposed to be completed in the learning process more exciting and more difficult, to increase internal motivation to achieve the goal, to promote a positive attitude towards the process of completing the task, and to improve academic performance. This behavioral strategy includes two aspects: play (increasing pleasure in the process of performing a task) and competition (anticipating actions for competition). That is, the game design of learning involves a change in the way the task is performed. The individual is given the opportunity to establish the best balance between his knowledge and skills and the content of the tasks to be performed. The game design of learning promotes the development of the ability to communicate casually, to establish harmonious relationships with other participants in the learning process, which helps to satisfy need for relatedness.

H. Wang, Y. Ren, and W. Liu [35] see the application of game design in education as giving students autonomy in improving the content of the task, in adding certain features to the process of its execution. It is also advisable for lecturers to establish a balance between the difficulty of the learning task and fun when they form learning tasks. According to the reasoning of

scientists, small changes in tasks will allow students to better immerse themselves in the task, increase their interest in learning, improve involvement in educational work, and direct the achievement of learning goals.

A. Bakker, A. Sanz Vergel, and J. Kuntze provide the following examples of practical use of game-based learning design [3; 33]: 1) the student competes with himself, trying to complete the task faster than before; 2) the student uses humor or wit, trying to make the meeting more interesting; 3) the student performs online tasks and formulates interesting questions for online interaction with his mentors; 4) a student completes an online task, competing with other students to determine who can complete the task faster.

16 lecturers and 350 students of the Faculty of Pedagogical Education of Borys Grinchenko Kyiv Metropolitan University (Ukraine) and 3 lecturers and 50 students of Mykhailo Drahomanov Ukrainian State University (Ukraine) were involved in the experimental part of the research.

Before the start of the experiment, preparatory work was carried out. In Table 1, we have displayed the student's actions in accordance with the leading ideas of theories, approaches, strategies, concepts that can be used during the organization of distance learning in the conditions of military operations. During the educational process, the students were shown the table "My actions during distance learning according to the leading ideas of theories, approaches, strategies, concepts" and were given the task of choosing one or more leading ideas of theories, approaches, strategies, concepts that, according to the students, will contribute to their cognitive activity during the learning process. The leading idea of the theory, approach, strategy, concept or a certain combination of them chosen by the students was practically implemented in the lesson. We correlated the choices made by the students in each lesson with the activity of military operations on that day and with the news that caused the students a feeling of anxiety and tension during that day.

Table 1: My actions during distance learning according to the leading ideas of theories, approaches, strategies, concepts

Name of theory, approach, strategy, concept	Concise description of actions according to the leading ideas of theories, approaches, strategies, concepts
The theory "broaden-and-build" (B. L. Fredrickson [14])	I experience positive emotions, expand the effective (momentary) repertoire of thoughts and actions
The theory of self-determination (E. Deci, R. Ryan [10], A.B. Bakker, and others [3])	I satisfy my three needs: 1) the need for autonomy (experiencing my behavior as freely chosen and arbitrary, not imposed by external forces); 2) the need for competence (a sense of the ability to perform certain actions and to be effective in these actions); 3) the need for relatedness (a sense of belonging, closeness, and connection with others)
The self-determined learning model (M. L. Wehmeyer, S.B. Palmer, and others [36])	I use opportunities to become a self-regulated problem solver during a learning session. I am aware of myself as a causal agent in educational activities
The self-determination strategies (A. B. Bakker, M. van Woerkom [3])	I actively manage my educational goals, practice self-leadership when solving professional situations with educational goals
The concept of "taking charge" (E. W. Morrison, S. S. Phelps [27])	I demonstrate a willingness to challenge the status quo in order to make constructive changes in the way a particular learning task is carried out. I take responsibility for

	changing the content of the educational task, effective performance of the task
The theory of proactivity (T. S. Bateman, J. M. Crant, and others [4])	I identify opportunities for change, take initiative, and work hard until significant changes occur. I do not adapt to circumstances, but change them
The strategy "Game design of learning" (A. Bakker, A. Sanz Vergel, J. Kuntze, and others [2])	I make the content or process of the educational task more interesting for me and (or) more difficult. It motivates me, puts me in a positive mood for completing the task, and improves my academic performance
The theory of using character strengths (N. Park, C. Peterson, and others [29])	1. I know about my strengths (Table 2), I use them during training. 2. I focus my attention on less developed strengths, set specific and measurable goals, develop a specific plan of action to achieve these goals, achieve the set goals

Students were also introduced to the classification of strengths, which was developed as part of the Values in Action (VIA) project for the practical implementation of the theory of using character strengths (Table 2).

Table 2: Classification of character strengths by main virtues The Values in Action (VIA) project (N. Park, C. Peterson [29]))

The name of the virtues	Character strength	Manifestations of character strengths
1. Wisdom and knowledge	creativity	thinking of novel and productive ways to do things
	curiosity	taking an interest in all of ongoing experience
	open-mindedness	thinking things through and examining them from all sides
	love of learning	mastering new skills, topics and bodies of knowledge
	perspective	being able to provide wise counsel to others
2. Courage	honesty	speaking the truth and presenting oneself in a genuine way
	bravery	not shrinking from threat, challenge, difficulty, or pain
	persistence	finishing what one starts
	zest	approaching life with excitement and energy
3. Humanity	kindness	doing favors and good deeds for others
	love	valuing close relations with others
	social intelligence	being aware of the motives and feelings of self and others
4. Justice	fairness	treating all people in the same way, according to notions of fairness and justice
	leadership	organizing group activities and seeing that they happen
	teamwork	working well as member of a group or team
5. Temperance	forgiveness	forgiving those who have done wrong
	modesty	letting own accomplishments speak for themselves

	prudence	being careful about own choices; not saying or doing things that might later be regretted
	self-regulation	regulating what one feels and does
6. Transcendence	appreciation of beauty and excellence	noticing and appreciating beauty, excellence, and/or skilled performance in all domains of life
	gratitude	being aware of and thankful for the good things that happen
	hope	expecting the best and working to achieve it
	humor	liking to laugh and joke; bringing smiles to other people
	religiousness	having coherent beliefs about the higher purpose and meaning of life

The analysis of the experimental data confirmed the following:

Students actively worked with the information in Tables 1 and 2. They explained their actions by the following contexts: "I was offered a choice, it motivated me"; "When I started working with tables, I immediately switched from my thoughts about military operations to studying", "It organized me", "After working with tables, I felt more balanced and organized", "When I work with tables, previous vivid episodes of my self-realization arise in my imagination, and these memories bring me into a working state, which is necessary for training in the difficult conditions of war".

Students preferred several leading ideas of theories, approaches, strategies, and concepts rather than selecting one of them. At the initial stages of working with Tables 1 and 2, students chose the following combination of actions:

1) I experience positive emotions (the theory "broaden-and-build" (B. L. Fredrickson) [14]).
2) I satisfy my three needs: 1) the need for autonomy (experiencing my behavior as freely chosen and arbitrary, not imposed by external forces); 2) the need for competence (a sense of the ability to perform certain actions and to be effective in these actions); 3) the need for relatedness (a sense of belonging, closeness, and connection with others) (the theory of self-determination (E. Deci, R. Ryan [10], A.B. Bakker, and others [3])).
3) I know about my strengths (Table 2), I use them during training (the theory of using character strengths (N. Park, C. Peterson, and others [29]) - the first part of the implementation of the theory).

During the next two weeks of organizing learning using Tables 1 and 2, students began to supplement the list of actions they had chosen with new actions:

▪ 56% of students supplemented the previously formed list of actions, actions that related to the leading ideas of the "Game design of learning" strategy (A. Bakker, A. Sanz Vergel, J. Kuntze, and others [2]) (I make the content or process of the educational task more interesting for me and (or) more difficult. It motivates me, puts me in a positive mood for completing the task, and improves my academic performance).
▪ 38% of students supplemented the previously formed list of actions with actions that related to the leading ideas of self-determination strategies (A. B. Bakker and M. van Woerkom [3]) (I actively manage my educational goals, practice self-leadership when solving professional situations with educational goals).
▪ 27% of students supplemented the previously formed list of actions with actions that related to the leading ideas of the theory of using character strengths (the second part of

the implementation of the theory) (N. Park and C. Peterson) [29]).

▪ 35% of students supplemented the previously formed list of actions with actions that related to the leading ideas of the theory of proactivity (T. S. Bateman, J. M. Crant, and others [4]) (I identify opportunities for change, take initiative, and work hard until significant changes occur). Opportunities for change during distance learning were chosen to implement proactivity. The changes had:
▪ Self-directedness (mainly related to self-organization and maintaining concentration on educational material during distance learning, namely, distraction from events, news, etc.).
▪ Orientation to the process of organizing distance learning (on the initiative of the students, the amount of material that needed to be read was changed, as part of the material was translated into audio format).

4 Conclusion

1. The analysis of scientific sources contributed to the identification of factors influencing the process of organizing distance learning in the conditions of the full-scale invasion of Russia on the territory of Ukraine, as well as the systematization of these factors into eight groups: 1) political, social, and economic factors; 2) psycho-physiological factors; 3) dominant factors; 4) technological direction factors; 5) didactic orientation factors; 6) limiting factors; 7) subjective factors of negative impact on the personality and the results of distance learning (self-limitation; focus on learning results; avoidance of tasks; pessimistic behavior; low general level of self-esteem; low level of involvement in educational work); 8) subjective factors of positive influence on the personality and results of distance learning (orientation to tasks and mastery; optimistic behavior; expectation of success; high general level of self-esteem; high level of involvement in educational work).

2. A list of leading ideas of theories, approaches, strategies, concepts that can be used during the organization of distance learning in the conditions of military operations has been compiled. The list includes the following scientific developments:

▪ The theory "broaden-and-build" (B. L. Fredrickson).
▪ The theory of self-determination (E. Deci, R. Ryan, A.B. Bakker, and others).
▪ The self-determined learning model (M. L. Wehmeyer, S. B. Palmer, and others).
▪ The self-determination strategies (A. B. Bakker, M. van Woerkom).
▪ The concept of "taking charge" (E. W. Morrison, S. S. Phelps).
▪ The theory of proactivity (T. S. Bateman, J. M. Crant, and others).
▪ The theory of using character strengths (N. Park, C. Peterson, and others).
▪ The strategy "Game design of learning" (A. Bakker, A. Sanz Vergel, J. Kuntze, and others).

For each theory, strategy, approach, concept, we determined the actions that a student should perform during the organization of distance learning and organized these actions in the Table "My actions during distance learning according to the leading ideas of theories, approaches, strategies, concepts". The scientific findings of the Values in Action (VIA) project (N. Park, C. Peterson) were also used, in particular, the classification of character strengths by main virtues.

3. According to the results of the experimental part of the study, the use of Tables 1 and 2 during distance learning contributed to students' conscious avoidance of subjective factors that negatively affect their personality and the results of their distance learning. Students began to avoid self-limitation during their studies. They focused on the process of growing their skills. Students did not avoid educational tasks, but consciously made their content or the process of implementation more interesting for them. The level of students' involvement in distance learning in the conditions of military operations on the territory of Ukraine also increased.

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Primary Paper Section: A

Secondary Paper Section: AM

LONG-DISTANCE MARITAL RELATIONSHIPS DURING THE WAR: CHALLENGES AND PROSPECTS FOR PRESERVATION

[a]IRYNA NECHITAILO, [b]OKSANA BORIUSHKINA,
[c]NATALIIA MOISIEIEVA,
[d]NADIIA CHEPELIEVA, [e]SVITLANA PYLYPENKO,
[f]ANASTASIIA LAPCHENKO

[a,d]*Kharkiv National University of Internal Affairs, 27, Lev Landau Ave., 61000, Kharkiv, Ukraine*
[b,c,e,f]*State Biotechnological University, 44, Alchevskih Str., 61002, Kharkiv, Ukraine*
email: [a]nechit_@ukr.net, [b]psuh@ukr.net,
[c]n.i.moiseeval@gmail.com, [d]chepn@ukr.net,
[e]pilipenkosvet1@gmail.com, [f]1apchenko_a@ukr.net

Abstract: The article is devoted to the study of the peculiarities of long-distance family relationships during the war (on the example of Ukrainian families during the full-scale Russian invasion of Ukraine) and the identification of the main challenges and prospects for the development of such relationships. The key provisions of symbolic interactionism are used as the theoretical and methodological basis, in particular, those directly related to family relationships, as well as those that have been applied in the practice of family counseling. The main conclusions are based on the results of an empirical study conducted by the authors using a qualitative methodology: in-depth interviews with women who were forced to leave their husbands and homeland to save their children from war (n=8). It is noted that family identity, family roles, and the quality of relationships (interactions) between spouses are inextricably linked. It is proven that typical problems in the relationship of spouses separated by war are the following: lack of physical intimacy; unwillingness to communicate; problems suppression; problems exaggeration without real evidence of their existence. It is pointed out that spouses whose level of marriage satisfaction was low before Russia's full-scale invasion of Ukraine mostly use the strategy of avoiding conflicts and/or ignoring existing problems faced by the marriage partner and never use the strategy of cooperation. It is concluded that the quantitative and qualitative indicators of interaction between spouses (frequency and duration, positive or negative connotations, etc.) are the main factor that influences how long-distance relationships unfold in the context of numerous stressors created by the war.

Keywords: family; family and marital relations; spouses; husband and wife; symbolic interactionism; identity; role; full-scale Russian invasion of Ukraine; war conditions.

1 Introduction

A family is one of the most important institutions of society which determines social stability, ensures the process of socialization, and provides the ability to reproduce the population in new generations. At the same time, the family is a small social group considered the most stable and cohesive among all other social groups. Throughout their lives, people are members of a large number of different groups: friends or peers, classmates, employees, etc. At certain periods of their lives, they either join or leave these groups. However, the family is one of those social groups that an average person is a member of throughout whole life.

Since this article is devoted to long-distance marital relationships, the main part of it will clarify and clearly distinguish between "family" and "spouses." In the introduction, we consider it necessary to note that, according to the UN infographic, there are 78% of households in the world that are based on marital relationships formed by a married couple. Among these households: 38% are married couples with children (including unmarried adult children who live together with their parents); 27% are married couples with or without children who live together with other relatives; 13% are married couples without children who live separately from other relatives [15].

Different nations at different times have held different views on the family and its well-being, on the role of the family in society, and the place of a person in the family. These views have transformed throughout human existence. However, the above data shows that despite the dramatic social changes and transformations that have taken place and continue to take place, people, in the vast majority, still want to form families and live in one. This desire has not only an emotional component (love, a sense of closeness, etc.), but also a rational, pragmatic one, which consists in meeting the various needs (both vital and social) of its members. From ancient times to the present, it has been the case that those who have a family have the best prospects of receiving support (moral, material, and any other

kind). At the same time, the family is not only a small social group but also a complex social phenomenon. People and their relationships form this phenomenon. Therefore, throughout the entire cycle of its existence, each family faces not only typical, predictable, expected problems, conflicts, and crises (the crisis associated with the initial distribution of family responsibilities and the establishment of common "rules of the game"; the crisis associated with the birth of the first child; the midlife crisis; the crisis of the "empty nest," etc.), but also atypical ones - those that occur under the influence of unexpected events, random situations, etc. [26, p. 136]. As a rule, such unexpected events, which, among other things, are globally widespread and destructive, are wars or natural disasters.

Ukrainian society is currently experiencing a full-scale war, and Ukrainian families are facing atypical, complex, and extremely difficult problems. One of these problems, which should be considered extremely difficult, is the problem of married couples' separation due to wives going abroad to protect their children. To consider this problem and find ways to overcome it is the very subject this article is devoted to.

2 Method

As a theoretical and methodological basis, we used the key provisions of symbolic interactionism, in particular those formulated by E. Burgess, W. Waller, and R. Hill regarding family relationships, as well as those that were later used in the practice of family counseling [40]. In addition, we referred to the scientific works of modern scientists who have studied family interaction, including the following: M. Markova, M. Savina, S. Sliusar, I. Shynkarnko, etc. [6: 19; 27; 29; 33] We also used the concept of the "distant family" introduced into scientific usage by Ukrainian scientists H. Wagner, N. Holovan, Y. Goshovsky, and others [12; 13; 39].

The empirical basis of the article is the results of a study conducted by the authors. Using the method of in-depth interviews, the authors interviewed eight Ukrainian women refugees from the war who were married but were forced to leave their husbands and go abroad (in particular, to Germany and Poland) to preserve the mental and physical health of their children.

3 Results and Discussion

The study of the family involves interdisciplinary analysis. That is why universities in the United States, Canada, Australia, and most European Union countries have interdisciplinary faculties that, in addition to teaching students, are engaged in family studies [9; 14]. American scientists D. Klein (University of Notre Dame, USA) and J. White, who works at the University of British Columbia, conducted an in-depth analysis of various approaches to family studies (using the method of expert survey), based on which they identified eight main ones, that were also divided according to the principles of holism/individualism and statics/dynamics [16, p. 51] (see Table 1).

Table 1: Differentiation of theoretical and methodological approaches to the study of the family as a social phenomenon

Principles of theorizing	Statics	Dynamics
Individualism	▪ The theory of exchange and rational choice ▪ Role theory	▪ Symbolic interactionism ▪ Feminist theory
Holism	▪ Functional approach ▪ Conflictological approach	▪ Systematic approach ▪ Bioecological approach (development of the family life cycle)

The principles of holism and individualism determine at what level - individual (microsocial) or general social (macrosocial) - theorizing will be conducted.

The principles of statics and dynamics determine which family phenomena the researcher focuses on, whether they are relatively stable structural, functional, and value components or processes of development.

Later, the authors identified three criteria for the selection and/or evaluation of theoretical and methodological approaches used by scientists in the study of the family: 1) the level of analysis: individual (dyadic) or supra-individual (group, institutional); 2) the source of existence and functioning of the family: intra-family (endogenous) or external to the family (exogenous); 3) time: in static approaches, social processes and cause-and-effect relationships are relatively independent of time, while in dynamic approaches, time is an important variable [16, p. 57].

According to the above scheme, our study of long-distance marital relationships in wartime is localized at the individual level of analysis (spouses as a dyad); it studies marital relations (or rather their quality) as the main prerequisite for the existence of a family (even despite the impact of (exogenous) war conditions); it takes into account the criterion of time since the duration of distancing is a factor that affects the quality of marital relations.

Obviously, for our study, individualistic approaches have the greatest explanatory potential, and in particular, we focused on symbolic interactionism, which views family relationships as social interaction through the prism of family identities and roles, role expectations, etc. In the main part of this article, we will present a more detailed justification for the use of this particular approach.

As for modern research on family and family relations, all the problems and issues studied in this aspect can be divided into the following groups: 1) axiological and sociocultural - the study of family values and relationships based on them (O. Stoliarchuk, O. Bondarchuk, S. Didenko, M. Korolchuk, O. Yermusevych, L. Orban-Lembryk, L. Pomytkina, K. Sedykh Z. Kisarchuk, L. Korobka, etc.; 2) legal - studying the legal basis for the existence and functioning of the family (M. Baschuk, Y. Solonenko, O. Khromova, M. Polishchuk, S. Pogrebniak, etc.) and the study of the principles of legal regulation of family relations (L. Krasytska, A. Kolodii, M. Koziubra, O. Skakun, etc.); 3) sociological - problems of young families, family socialization and upbringing, issues of family structure and social fictions, etc. (M. Lukashevych, E. Libanova, N. Chernysh, M. Holovatyi, O. Rubliuk, I. Chekhovska, A. Vasyliev, O. Romanenko, O. Protas, O. Vyshnevskyi, I. Trubavina, B. Kovbas, V. Postovyi, V. Kostiv, Z. Kyianytsia, G. Bevz, T. Fedorchenko, etc.); 4) psychological and psychotherapeutic - research on family problems, conflicts, etc. related to the personal and psychological characteristics of family members (S. Vaskivska, P. Hornostai, N. Poviakel, A. Spyvakovska, M. Hryshchuk, I. Chorna, R. Popeliushko, G. Rosynsky, M. Markova, V. Kozyra, O. Buriak, L. Shestopalova, etc.)

Our study of long-distance marital relationships in war is interdisciplinary, but it primarily addresses psychological (specifics of interactions between husband and wife) and sociological (re-distribution/distribution of social roles, non-conformity/conformity with role expectations, etc.) issues.

The study of families in wartime is the subject of research by American sociologists E. W. Burgess and J. H. S. Bossard, who state that war affects the social and family behavior of both men who fight and women who stay at home. According to scientists, these changes hurt marriage (causing an increase in divorce) as well as influence the birth rate [2, p. 21; 4, p. 9]. A group of American researchers, including J. J. Schwab, J. F. Ice, J. J. Stephenson, K. Raymer, K. Houser, L. Graziano, and others, based on their research, conclude that the wars of the twentieth century had a comprehensive (direct and indirect) impact on the family. The main factors of this impact were the following: grief

over losses, separations, etc.; the need for civilians to adapt to military life; the need for the military to adapt to peaceful life; and the growing role of women in the family and society. These scholars emphasize that the main negative consequences of these factors were the increase in the number of divorces. In addition, they draw attention to the negative impact of post-traumatic stress disorder on family well-being and emphasize that war accelerates changes in family life that could have taken decades in peacetime [28, p. 132]. In other words, if any negative processes have begun in the family, even those that are latent and do not spill over into conflicts and quarrels, if spouses have begun to morally distance themselves from each other, if tacit distrust has arisen, etc., then this process of slow family disintegration can last for decades and may not even necessarily lead to divorce. However, when a couple finds themselves in a radically new environment, which is also characterized by a high degree of stress, it activates all family processes (both negative and positive), brings all problems to the surface, and changes in marital relations occur much earlier than would have happened under normal social conditions.

Ukrainian scholars have been studying the impact of the first stage of the current Russia-Ukraine war, which was centered in Donbas, on the overall socio-demographic situation in the country as well as on the Ukrainian family. The staff of the M.V. Ptukha Institute of Demography and Social Studies of the National Academy of Sciences of Ukraine analyzed in detail the state of the Ukrainian family during this period as follows: changes in family functions, problems and risks of its development in modern conditions, socio-demographic characteristics, financial situation and living conditions of families in Ukraine, and the state and prospects of state family policy [7]. The results of this analysis are presented in "The State Report on the Status of Families and Ways of Implementing the State Family Policy by the Results of the 2014-2015 Years". The problems of Ukrainian families that have arisen as a result of military operations in Donbas, the main factors of family destruction, etc. are considered in the National Report "Policy of Integration of Ukrainian Society in the Context of Challenges and Threats of Events in Donbas" [23, p. 78]. In general, the list of these factors fully confirms the conclusions drawn by American scholars, including the fact that the war accelerated the processes of disintegration of families, the situation in which was not good before, and significantly united and strengthened relations in those families that were strong before the war and based on the principles of partnership, equality, mutual support, and trust.

The Ukrainian family in the context of Russia's full-scale invasion has become the object of attention of such domestic Ukrainian scholars as S. Aksyonova, N. Markova, S. Savina, L. Sliusar, I. Shynkarenko, and others [1; 19; 27; 29; 33]. E. Libanova, O. Pozniak, O. Tsymbal, and others study the scale and consequences of forced migration of the Ukrainian population as a result of the armed aggression of the Russian Federation, including for the modern Ukrainian family [17].

On the whole, an analysis of scientific discussions and publications on the problems of the modern family, the Ukrainian family in times of war, etc. shows a high interest in these issues on the part of representatives of the scientific community, in particular sociologists, psychologists, and researchers of demographic processes. At the same time, the analysis of scientific papers and publications shows that there is a certain lack of empirical research on family relationships in times of war and there is no empirical research specifically on long-distance marital relationships.

Considering the above, the purpose of this article is to identify the peculiarities of long-distance family relationships during the war and to outline the main challenges and prospects for the development of such relationships.

Since this topic is insufficiently studied, given the almost complete absence of empirical research on the relevant issues and the lack of developed and tested tools for studying long-distance family relationships, in our study we turned to a

qualitative methodology (in-depth interviews), which allows identifying motivational aspects of behavior, personal expectations and perceptions, individual attitudes, etc. Qualitative research is aimed at studying a wide range of manifestations of an object and does not track its quantitative patterns but rather focuses on revealing cause-and-effect relationships. One of the advantages of the in-depth interview method we have used is that it allows respondents to express themselves freely, which helps to reveal their inner values and feelings.

Theoretical and methodological principles of the study of marital relations

In defining the theoretical and methodological foundations of our study, we believe it is appropriate to begin by clarifying the categorical and conceptual framework. Let us start with the broader concept of family. The most common definition of a family is one that characterizes it as a system of mutual relations between husband and wife, children and parents, as a small social group in which all members are interconnected by parental and/or marital relations, mutual moral responsibility, and a common household. At the same time, attention is focused on the general social significance of the family, which is to meet the social need for spiritual and physical reproduction of the population [32]. An analysis of the special reference literature shows that the general social significance of the family is emphasized in almost every definition of it, regardless of the authors, publications, and their sectoral affiliation. Therefore, one can often find definitions of the family as a "social mechanism of human reproduction" formed by a group of people whose members are united by mutual assistance, moral responsibility, and a common household. This mechanism is based on the relationship between spouses, their children, and parents [30; 31].

For some time, there was an opinion that the main feature of a family was a legally registered (in most cases, of a life duration) marriage of a woman and a man, which was created for the birth and upbringing of children [3, p. 21]. This definition is now considered outdated, as it does not include those couples who, for example, are officially married and do not have children, as well as those who are in a civil marriage and have children together, nor does it include elderly spouses who have adult children living separately, as well as unisexual partners living together.

Given the current reality and the great diversity of families, the English sociologist A. Giddens offers a fairly broad definition, considering the family as "a part of the society of people who support each other economically, socially, and psychologically, and whose relationships are based on such components as affection, care, and love [10, p. 177]".

Thus, the family is based on the joint activities and households of people who are united by the ties of kinship, parentage, and spouses, have a common life, ensure the continuity of generations, provide support for all family members, and socialize children. The "non-family" population includes those who play the role of a parent but are not married or have a legal or de facto marriage without children. The term "family group" is used to refer to all these fragmented forms of family [21, p. 21].

Without denying the limitations of the classical interpretation of the family as a small social group based on marriage, we will be guided by this interpretation in our study since we are studying marital relations, and spouses by definition are a couple of people (usually a man and a woman) who are married.

In addition, in our study, we use an individualistic approach, which involves studying the family as a small social group that has most of the following characteristics [25, p. 60]:

- A voluntary union of two people (usually a woman and a man);

- A common household and everyday life, common property, and material assets;
- The presence of moral unity;
- The presence of intimate and sexual contacts;
- Childbearing and subsequent upbringing and socialization of children.

The subject of our attention is spouses (married couples as a dyad) and interpersonal relationships in this dyad. The married couple is the "core" of the family, and general statistical classifications of family composition are based on the addition of children, parents, and other relatives to this "core".

Given these ideas about family and spouses, as well as the fact that we study marital relationships (as social interactions), we will use symbolic interactionism as the theoretical basis for our study. The main provisions of this approach are formulated in the works of social psychologists G. H. Mead, C. Cooley, and G. Bloomer. A little later, in the article by E. Burgess, "The Family as a Unity of Interacting Personalities," the directions of application of this approach were outlined in the sociology of the family [4]. The scientist emphasized that the commonality of fate and customs influences the patterns of family interaction throughout history. These established patterns, as well as the current concepts of "self" and "others," provide motivation and allow individuals to interpret the reverse reactions of others. W. Thomas and D. Thomas formulated the famous Thomas Theorem: "If people define situations as real, this situation becomes real in its consequences." Thus, if, for example, a wife attributes some bad intentions to her husband (or vice versa), this "reality" will be involved in how the spouses communicate with each other. Attributing bad intentions increases the likelihood that the wife and husband will have a conflict [37, p. 91].

W. Waller, using symbolic interactionism, described the process of destruction of marital solidarity, increasing alienation, and, ultimately, the emergence of a situation that leads to divorce. Based on the scientific achievements of Waller, his follower R. Hill argued that family crises and conflicts are not just a response to certain difficulties or problematic situations, but the so-called "response of definition" – that is, the way the spouses see the possibility of solving the problem (by immersing themselves in a crisis or conflict) [40, p. 111]. An objective definition of a problem situation offered by an impartial observer or a cultural definition supported by a particular social community or group will be less important than a subjective definition "constructed" by the family. Often, families who have the resources to cope with problems such as illness or job loss become stressed because they define such situations as "insurmountable".

According to the postulates of symbolic interactionism, the real community of married life exists not as a result of any legal concept or formal contract, but as a result of the interaction of a wife and husband. For example, the aforementioned E. Burgess defined a family as "an association of interacting individuals," and later this definition acquired a slightly different emphasis: "an association of interacting identities". He viewed family and marital roles as dynamic and believed that if one of the family members suddenly changes the pattern of fulfillment of his role, it can lead to changes in the role patterns of other family members [4].

The application of symbolic interactionism to family studies involves the use and operation of the following concepts (ranked from the micro to the macro level): 1) identities; 2) roles; 3) interactions; and 4) context. These concepts can only be divided analytically; in practice, they are closely interrelated.

Identity is the subjective acceptance of a role by each family member and its individual meaning. For example, a husband's role can be identified as a "sexual partner", "financial provider", etc., while a wife's role - as a "husband's secretary", "manager", "mistress", etc. To find out the individual content of the family role, it is enough to ask, for example, "What does it mean for you personally to be the wife of this particular man?" [18, p. 130].

According to S. Stryker's concept, identities (self-identifications) are arranged in a hierarchical order according to the importance of the respective roles for the person who performs them. For example, for a woman who identifies herself with a wife, the role of a "lover" (sexual partner) may come first, followed by "mother" (disciplinarian), and then "friend" (business partner, advisor, etc.). Stryker argues that the more meaningful a role is to a person, the more often he or she "presents" themselves in that role. For example, people who attribute great significance to their parental roles are more likely to mention that they are parents when they are introduced to other people. Those who attribute great importance to their professional roles are less likely to present themselves as "good", caring parents and more likely to present themselves as "good", reliable "income earners" of the family. A person sometimes chooses and masters an important role for himself or herself contrary to the opinion of others (for example, a woman adopts a child against the wishes of her relatives, and a man officially registers a marriage with a woman who has several children, rejecting the arguments of his friends) [35, p. 200].

According to the followers of symbolic interactionism, the real motive for behavior is the desire to maintain positive self-esteem. In family studies, self-esteem has been considered an important variable for understanding the causes of family violence. A person with low self-esteem may use violence against a marital partner to maintain self-confidence. At the same time, the abused spouse either also has low self-esteem or self-esteem decreases as a result of suffering from abuse [5, p. 43; 26, p. 133].

Roles can be defined as certain patterns of behavior that are shared in society and/or certain social groups and are expected of the holders of certain social statuses. Thus, fulfillment of a role (husband, wife, mother, etc.) is a pattern of behavior accepted in society. Consequently, there are certain role expectations. When there is a lack of resources to fulfill roles to the fullest (relevant to expectations), role tension arises. This is especially true in situations where a person performs many social roles, as well as when expectations for one role contradict or conflict with expectations for another role (for example, when there are simultaneously high professional requirements and requirements to be "a good mother") [24, p. 269].

Self-presentation in everyday life (identity politics and role performance) involves verbal and non-verbal interactions. Society is structured in such a way that, for a mentally healthy person, both his/her identities and his/her respective roles will only matter to interact with other people or groups successfully. Thus, dating and courtship are in some sense a "drama" involving a "game" between two people, each seeking to create the desired impression and, at the same time, to evaluate the partner and the partner's perception of themselves.

One of the significant achievements of the concept of E. Burgess (of the family as a community of interacting personalities) is the identification of five key dimensions of family relationships that must be coordinated for the normal functioning of the family: 1) "remoteness-closeness" of family members; 2) compliance with marital role expectations; 3) openness in discussing family problems; 4) boundaries of family life (open-closed); 5) biosocial aspects of family life (agreement on the meanings of "masculinity" and "femininity," etc.).

To study a family, it is important to study the context of its existence. Any interaction always takes place in a context. For example, a situation in which a husband is unaware of his wife's intentions to file for divorce is contextually different from a situation in which both are aware of it. Family relationships often require negotiation if the context changes [33, p. 11]. For example, a wife goes back to work after a break related to child-rearing, which requires negotiations on a new division of household chores, care for children, elderly parents, etc.

Thus, it is obvious that symbolic interactionism has significant heuristic potential in research in social psychology and

sociology, and it is used as one of the "combined" approaches in the analysis of intrafamily processes and family stress.

In our study of long-distance marital relationships, we used the basic thesis of symbolic interactionism that the family is a complex of specific social interactions, the basis of which is the relationship of a married couple. In addition, the notion of the importance of family (marital) identities and roles, as well as the context in which interaction between family members (in particular, between members of a married couple) takes place, was used as a basis for the development of our research tools (in-depth interview guide).

The processes of intrafamily change are inherent in all families, without exception. Some scholars identify six key events that change the line of relationships within the family and, in particular, between members of a married couple: starting a life together; conflicts with parents; the birth of a child; one of the spouses getting a new position; real estate purchase; forced separation. Thus, the focus of our research was on such an event as forced spousal separation, which is associated with the high danger of wartime conditions.

It is important to keep in mind that the family is perhaps the only social group that is able to adapt to a large number of events in a short time. If family members carefully refrain from discussing problems and pressing issues and are not ready for change, they are likely to find themselves in a difficult situation because they do not plan for change where it is needed. That is why the interview guide included questions that were intended to determine the respondents' subjective assessment of such parameters as: subjective feeling of "distance - closeness" and related experiences; compliance with marital role expectations; and openness in discussing family problems. These parameters, in our opinion, characterize the relationship with a marriage partner as successful or unsuccessful and demonstrate the readiness to adapt to changes associated with forced separation.

In the context of war, the problem of the so-called "distant family" phenomenon arises when its members are at a distance from each other for a long time. Domestic Ukrainian scholars (H. Venger, N. Holova, and J. Hoshovskyi) considered distant families through the problem of "migrant workers" [12; 13; 39]. However, nowadays, family separation has a completely different character, and this phenomenon needs to be comprehended. Wives who have gone abroad are forced to fulfill all family roles that were usually shared with their husbands on their own. The same goes for husbands who stay at home. Such role changes are caused by a radical change in the context of family and marital relations caused by the war and forced long-term distancing. A fundamental change in the context provokes not only a change in roles but also a rethinking of life values. Any crisis exposes all the hidden problems and shows what is really going on between spouses. As for the war, as the aforementioned American scholars have argued in their studies of the wars of the twentieth century, the context created by the conditions of war intensifies and accelerates all processes in the family, both positive and negative. Therefore, in our opinion, the study of long-distance marital relationships can reveal the key problems of Ukrainian families and determine the prospects for their solution (in which cases this solution will be possible and whether it will be possible at all). That is why such a study is relevant and important, because, given the large number of families that are forced to be "torn apart", it is necessary to understand the real complexity of the situation and to provide measures to reduce its negative consequences.

The results of an empirical study of marital relations at a distance in war conditions (on the example of Ukrainian families during the full-scale stage of the Russian-Ukrainian war)

To find out the peculiarities of long-distance marital relationships in the context of war, we conducted a series of in-depth interviews with married women who were forced to leave with their children as a result of Russian military aggression. We interviewed 8 respondents who are currently being refugees in

Germany and Poland. The respondents were selected randomly using the snowball method, i.e., each respondent recommended the next participant from her circle of friends, colleagues, relatives, or acquaintances. The selection of respondents and data collection were completed when we stopped receiving new answers to the questions (i.e., those that would give us fundamentally new insights into the subject of the study – the peculiarities of long-distance family relationships).

The interview guide included two sets of questions: the main and secondary ones. The main block had 8 questions that clarified the following: the length of staying abroad and plans to return home; subjective feeling of distance or/and closeness with the husband (despite the objective distance); family identity of the respondents and their family roles; transformation of family roles due to the separation of the couple; coherence of marital role expectations and, accordingly, the presence or absence of role tension; openness in discussing family problems. During the interviews, if necessary, answers to the main questions were clarified by additional questions to improve their (answers) informational content. The secondary block included a set of questions aimed at clarifying the socio-demographic, professional, and other characteristics of our respondents and their husbands.

Before presenting the results of the analysis of answers to the main block of questions, let us describe some general characteristics of our respondents. All respondents are middle-aged (33-38 years old), married once, have at least 10 years of marriage experience, and have 1-2 underage children (ranged in age from 9 to 13). Since the survey was anonymous, we do not disclose the respondents' names, but for the convenience of presenting the results of the study, we will assign each of them a code: R1, R2,... R8. This coding of our respondents (R) also included their ranking by age, where R1 is the youngest respondent (33 years old) and R8 is the oldest respondent (38 years old). Four respondents have work (R1, R3, R5, and R6). Only one of them (R5) is employed as a highly qualified specialist in a research institution in Germany, has a high (in her own words, "full-fledged European") salary, and a two-year contract with this institution. The other respondents (R1, R3, R6) work in Poland as service staff (in restaurants and hotels). The other four respondents (R2, R4, R7, and R8) are in Germany as refugees supported by the host state and attend German language courses (this is their main occupation besides household chores and childcare). The children of all respondents study at schools in parallel: in foreign schools (full-time) and Ukrainian schools (distance learning).

At the time of the interview (May 2023), all the respondents, without exception, had been abroad for approximately the same period -from 24 to 26 months - that is, from the very or almost the very beginning of Russia's full-scale invasion of Ukraine. Before the invasion, all of the respondents and their families lived in the regions most affected by Russian aggression: Kharkiv city and Kharkiv region, Kherson, and Kyiv regions. All of their husbands are civilians and have not changed their place of residence (they live in their own homes in territories not occupied by the enemy). Four husbands (R1, R2, R4, R8) have stable jobs and "normal" (according to their wives) earnings. All other husbands (R3, R5, R6, R7) do not sit idly by and try to do something but do not have stable work and earnings as a result of the war.

Having reviewed the general socio-demographic and other characteristics of the respondents, we will now analyze their answers to the main set of questions. Taking into account the requirements set by periodicals for the length of scientific papers, we are not able to present the answers of each respondent to each question in this article. Therefore, in the course of presenting the results, we will generalize and present "typical answers," i.e., those that reflect the opinion of either all or several respondents, trying to cover answers with different connotations as well as those that reflect opposing opinions and points of view.

So, first, we asked about the subjective feeling of the duration of separation and its experience. Six of the eight respondents (R1, R2, R4, R5, R7, and R8) said that at first the separation was very difficult (approximately during the first year), but later it became easier because they "got used to" and "came to terms" with the situation. One of the respondents (R5) described the state of separation from her husband in particularly vivid terms: "...It was as if my skin was taken off. I felt naked and defenseless; everything and everywhere hurt, and it still hurts". The woman managed to cope with the separation by switching to other activities: looking for a job and then work itself, learning the language of the host country, volunteering, helping her child with studies, etc. At the same time, there were also respondents (R3 and R6) who noted that at first they were "scared to go to a foreign country", but quickly came to realize that it was much easier without a husband, "three times less housework", and that they did not need to cook, clean, or do laundry as much because the child did not need all of this in such a quantity. One of these respondents (R6) also said that her husband was very particular about the cleanliness of the house and constantly scolded her if she did not have time to clean something because of her high workload. Therefore, when she moved abroad, she was even relieved because she no longer had to "create perfect cleanliness" in the house.

Next, we asked the respondents about their plans to return home. The overwhelming majority of respondents said they would definitely return as soon as it became safe in Ukraine, particularly for their children. The answer of R5 was slightly different: "I would have returned home a long time ago, but I have a contract here and have to work on it. When the war broke out, I thought I would be unemployed, so I started looking for options abroad and very quickly found a project specifically for Ukrainian scientists, filled out the documents, and left for it. The project was designed for a year, so it recently ended. While I was on the project, I received money as a refugee. After the project was completed, the institution where I worked on the project offered me a full-time contract for two years. So I have to work under the contract until 2025... The only comfort is that I earn very well and help my husband and parents who stayed at home". The answer of respondent R3 was radically different from all the others: "It was hard at first. But later, I realized that I feel much more comfortable here in Poland. I am my own boss here, and I am happy with everything. Therefore, most likely, no matter what, I will stay here… If my husband still needs me after the war, he can come here to me".

We continued with asking the respondents whether they had lost their sense of moral closeness with their husbands and, if not, how they maintain this closeness. In this question, the respondents' answers seemed less homogeneous. R1, R4, and R5 continue to feel high moral closeness (due to constant interaction and many hours of communication by phone, mostly using video communication). R5 said that she and her husband began to communicate even more than when they lived together at home: "Before, we could come home from work and do our own things. And now it's like a kind of addiction: every evening we get in touch (via video call) and talk until the night, and we can't live a day without it." R2, R7, and R8 noted that after the first three to four months of separation, they did feel a certain distance. They usually complained of fatigue, depression, and an unwillingness to communicate with anyone, including their spouse and parents. R2 noted that over time, she began to suspect that her husband was cheating on her, that he no longer loved her as much as he used to, and that he realized that he could do things easily without her. That is why she avoids any long and frank communication with her husband, saying that "it makes her feel even worse". R3 and R6 answered in much the same way, indicating that even when living together in their home country, they did not feel any special moral closeness with their husbands, and separation did not change anything in this sense.

Thus, using the example of respondent R2, we found that Thomas theorem does work. In addition, we confirmed that the

way spouses experience separation is related to their previous (pre-war) experience of communication and interaction.

To find out the respondents' identities, we asked them to characterize themselves with three nouns. It is noteworthy that for all respondents, the first two positions were necessarily represented by family identities: all of them (except R5) had the identity of "mother" in the first place, and only R5 first characterized herself as "wife", then as "mother", and the third identity was related to her profession and occupation. Respondents R1, R2, R4, and R7 put the identity of a wife in the second place after the identity of a mother, and respondent R8 put the same identity in the third place. Respondents R3 and R6 did not identify themselves as wives at all. In addition to the identity of "mother", R3 mentioned herself in second place as a refugee and in third place as a daughter. Respondent R6 mentioned her professional identity in the second place and her national identity ("Ukrainian") in the third place.

Taking into account the advice and developments of representatives of symbolic interactionism, we tried to clarify the marital identity of the respondents and therefore asked them, "What did it mean to you personally to be your husband's wife (before the full-scale invasion)?" Here we have a wide variety of answers: R1, R4, and R7 said that they were "partners, assistants" for their husbands; R2 said: "I am like a little child for my husband"; R3: "housewife, cook, etc."; R5: "lover, partner, friend"; R6: "mother of his children, his nanny, cleaner, breadwinner"; R8: "mother of his children, friend".

As we can see, the identities indicated by the wives fully reflect their relationships with their husbands. This is especially true for R2, R3, R5, and R6. For example, R2 said that she unreasonably suspects her husband of infidelity. It was clear from her story that she was dissatisfied with her husband's behavior but could not do anything about it. Perhaps this kind of helplessness, as well as other incidents of marital life, lead her to believe that she is like a "child" to her husband (by the way, her husband not only works steadily in the war conditions but also holds a high managerial position). The high morality and intimacy of the relationship with her husband are reflected in R5's identity as being a "beloved" one and a "friend". It is not surprising that R3 and R6, who have rather "cool" relationships with their husbands, were overwhelmed with household chores and responsibilities while living together and, in some cases, suffered from complaints and insults from their husbands, indicating those related to household life as their marital identities.

We also asked the respondents how their marital identities had changed: "What does being your husband's wife mean to you personally NOW?" The identities of the vast majority of respondents have not changed, but the identity of "partner" has come to the fore among all the others. R2 remained a "child" for her husband, and R5 did not lose her identity as a "beloved" one. R3 and R6 noted a radical change in marital identities: all those related to housework disappeared from their lists, R6 remained only "the mother of his (her husband's) children", and R3 described herself as "the woman with whom he (her husband) is married and has joint property". In other words, the last two cases clearly show a line of deterioration in relationships that started before the full-scale invasion.

There was also no unanimity of opinion regarding the redistribution of family roles. Respondents R1, R2, and R7 noted that it was difficult to adapt, as they had to solve all issues (including organizational ones) on their own. The opinion of these respondents is reflected in the answer of R2: "When my daughter and I lived at home, we had the following rules: I was responsible for "small things" within the walls of our house, and my husband was responsible for "big things" outside these walls. So he earned money, paid for all utilities, took care of the cars (we have two), solved issues with repairing things that broke down, chose and bought computer and construction equipment, and so on. Here, abroad, I have no husband, and I have to do everything myself". Respondents R4 and R8 noted that there were no particular changes in their family roles and that men still provide the financial basis of existence and help in any way they

can. Respondents R3 and R6 said they were relieved by the "role unloading" that had occurred, as they did not have to "look after their husbands". Of all the respondents, R5 again stood out, emphasizing that namely during the separation her husband took on the responsibility of monitoring the education of his son and daughter, who study in parallel at a German and Ukrainian school: "Earlier, before the full-scale invasion, my husband did not worry much about the children's education. I was in control of this issue myself, attending parent meetings, and so on. Now I control their education in the German school, and he takes care of their education in the Ukrainian school... He does lessons with the children, explains the educational material to them in Zoom, or communicates with teachers…".

At the same time, all respondents, without exception, noted that the role set of their husbands has changed quite significantly: all of them have to perform household duties that were mainly assigned to women in peacetime. The opinion of all the respondents is reflected in the answer of R7, which we have chosen to illustrate as a typical one: "Life has become much harder for men. First, there are problems with work and the constant search for income. Secondly, all the household chores are on him. He cooks for himself now and does the laundry... I'm not sure if he cleans the apartment (laughing), but he definitely washes the dishes because I check them (laughing again). He even planted a vegetable garden at the dacha - potatoes, cucumbers, and zucchini. And he takes care of it himself...."

Thus, it can be stated that family identity, family roles, and the quality of relationships (interactions) between spouses are inextricably linked. For example, a respondent who characterized herself primarily as a "wife" and a "beloved" one for her husband (and only then as a mother) notes the constant close communication and high moral closeness with her husband, despite the long separation and distance. Those respondents who did not recall themselves as wives at all said that they did not and do not feel moral closeness with their husbands and communicate with them only when it is urgent, in case of some domestic or financial issues, etc. The connection between identity and roles is also evident. For example, those respondents who did not recall their identity as a wife not only do not feel role tension due to the redistribution of roles but even experience a certain "role unloading".

We asked the respondents which family problems most often arise during the period of distance living, whether they are discussed with their husbands, and how they are solved. R5 said that the biggest problem was the lack of physical contact with her husband: "We have a problem that we cannot touch each other, lie down together, hold hands... This is a very big problem for us, and it is impossible to find a solution... Perhaps we somehow compensate for this by talking on the phone for many hours in the evening and at night via video... Although we meet about once a month in western Ukraine, it is not enough for us…" R2 noted that the main problem is misunderstandings due to her suspicion and jealousy. At the same time, she noted that this problem is usually solved by "negotiations": "I do not hide from my husband that I suspect him of something bad. Sometimes we even have whole phone scandals about it. Of course, he gets angry, but he is balanced and restrained, so everything ends with his assurances that I am wrong. This calms me down for a while…" R1, R7, and R8 focused more on domestic problems and issues: caring for elderly relatives who remained in Ukraine, caring for animals left with their husbands, problems with work and finances, health problems of family members, and problems with children's education. The women emphasized that even though they are not really able to help each other with a number of these problems, they definitely discuss them with their husbands, give each other advice, sometimes argue, and sometimes even cry together. It was quite expected that the answers of R3 and R6 would differ significantly from the others in this aspect. Let us summarize these answers in the words of respondent R6: "Somehow it happened that we have no common problems now, so there is nothing to discuss... He has his own problems there, and I have mine here. So we solve them

on our own. Everyone is alive and well; the house is intact, and thanks God for that". In our opinion, a sense of shared problems and a common desire to solve them is a special indicator of the resilience of Ukrainian families who were forced to separate because of the war.

In general, the results of our study allow predicting the further development of relationships in the families represented by our respondents, namely: R5 has no risk of losing her relationship with her husband; her stay abroad is currently forced (due to her work contract with the institution), however, if this contract did not exist, she would have reunited with her husband long ago, despite the fact that the war is still ongoing; R1, R4, R7 and R8 have adapted to the situation of separation as much as possible and, perhaps, a certain loss of the feeling of intimacy in this case is a protective reaction, but there is a risk that with time passing and the continuation of separation, intimacy will be lost more and more, which will negatively affect marital relations and may even lead to divorce; the relationship with the husband of respondent R2 is at risk, because in this case the Thomas theorem may work, the situation of "betrayal of the husband" artificially modeled by herself already has negative consequences (as if the betrayal really happened), and in the future it may also lead to a significant deterioration of the relationship. Respondents R3 and R6 have the most difficult prospects for maintaining marital relations: the nature of their interaction with their husbands is superficial and somewhat forced; they do not feel the need for this interaction at all (as their husbands most likely do); they do not have common topics for discussion; they do not have common problems (at least, they think that these problems are not common).

In general, our research has shown that typical problems in the relationship between spouses separated by war are as follows:

- Lack of physical intimacy, which negatively affects the strength of feelings. Emotions become passive (as evidenced by the answers of the vast majority of respondents, except for one);
- Unwillingness to communicate, concealing problems. This leads to frustration, hidden offenses, misunderstandings, and dissatisfaction with each other's actions (this problem was clearly manifested in the case of two respondents, and four other participants in our study showed clear signs of emotional "cooling" in their relationships with their husbands);
- Inflating the problem without real evidence of its existence (the effect of the Thomas theorem was clearly demonstrated by one of our respondents).

Based on the data obtained, it can be stated that, first, spouses who were satisfied with their marriage before Russia's full-scale invasion of Ukraine, while being at a distance, resort to a strategy of cooperation, as well as have mutual understanding and mutual support.

Second, couples whose marital satisfaction was low before Russia's full-scale invasion of Ukraine tend to use a strategy of conflict avoidance and/or ignoring existing problems faced by the marriage partner and never use a strategy of cooperation.

In any case, the quantitative and qualitative indicators of interaction between spouses (frequency and duration, positive or negative connotations, etc.) are the main factors that influence how long-distance relationships unfold in the context of numerous stressors created by war. Therefore, if spouses feel that they are losing their relationship, they need to resume the frequency of interactions, try to communicate on any occasion and whenever possible, and try to maintain a constructive nature of interactions and communication. These are the prospects for maintaining long-distance relationships in times of war.

It should be noted that we also considered the problem of long-distance family relationships from the perspective of symbolic interactionism because this approach is used in family counseling. If spouses cannot cope with the loss of their relationship on their own but do not want to divorce and

understand the need to establish and further strengthen this relationship, they should seek the help of a family psychologist. Special counseling programs for married couples experiencing a relationship crisis or a crisis of interaction are aimed at identifying unrealistic or potentially dangerous perceptions that lead to emotional distancing and conflicts. At the same time, the work of a counseling psychologist is also carried out in the aspect of forming and emphasizing the similarity of expectations among partners, which is necessary for the successful distribution and fulfillment of family roles.

The prospects for further use of the results of our in-depth interviews are:

1) The creation of tools for quantitative research of long-distance marital relationships in wartime (for conducting an online survey of both women abroad and their husbands who stayed at home);

2) On this basis, the selection of psychological methods for family counseling for couples will help restore, strengthen, and maintain the proper level of relationships between husband and wife in those couples who have suffered or continue to suffer from forced long-term separation.

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Primary Paper Section: A

Secondary Paper Section: AO

INVECTIVE VOCABULARY IN THE LANGUAGE OF THE UKRAINIAN MASS MEDIA DURING THE RUSSIA-UKRAINE WAR: STYLISTIC LAYERS AND PRAGMATICS OF MEANING

[a]MARYNA NAVALNA, [b]NATALIIA KOSTUSIAK, [c]YAROSLAVA SAZONOVA, [d]OKSANA PROSIANYK, [e]OLESIA SKLIARENKO, [f]YULIIA CHERNOBROV, [g]ALLA OVSIIENKO, [h]OKSANA PRYIMACHOK, [i]TETIANA SHYNKAR

[a]*National University of Life and Environmental Sciences of Ukraine, 15, Heroyiv Oborony Str., 03041, Kyiv Ukraine*
[b,h]*Lesya Ukrainka Volyn National University, 13, Voli Ave., 43025, Lutsk, Ukraine*
[c]*H. S. Skovoroda Kharkiv National Pedagogical University, 29, Alchevskyh Str., 61002, Kharkiv, Ukraine.*
[d]*S. Kuznets Kharkiv National University of Economics, 9a, Nauky Ave., 61166, Kharkiv, Ukraine,*
[e,i]*Hryhorii Skovoroda University in Pereiaslav, 30, Sukhomlynsky Str., 08401, Pereiaslav, Ukraine*
[f]*Bila Tserkva National Agrarian University, 8/1, Soborna Str., 09117, Bila Tserkva, Ukraine*
[g]*State University of Information and Communication Technologies, 7, Solomenska Str., 03110, Kyiv, Ukraine*
email: [a]m.navalna@gmail.com, [b]kostusyaknataliia@vnu.edu.ua, [c]sazonova.yaros1ava.hnpu@gmail.com, [d]oxpros@gmail.com, [e]lesiaskliarenko.82@gmail.com, [f]chernobrovv@gmail.com, [g]ovsiienko__alla@ukr.net, [h]pryjmachokoksana@vnu.edu.ua, [i]tatiana.panchenko@ukr.net

Abstract: In scientific research, the invective vocabulary of the period of the Russia-Ukraine war (2022-2023) was analyzed using the language material of the Ukrainian mass media. The corpus of collected material gave reasons to single out the following groups and subgroups of invectives: 1. Personal: 1) immorality, humiliation of dignity and qualities; 2) assessment of mental abilities; 3) assessment of physical characteristics and invective designations of a person's appearance. 2. Social: 1) immorality of relations, such as lies, fraud; 2) manipulative actions regarding social processes, personalities, etc.; 3) invectives of social origin and status, political views, etc. As evidenced by the collected mass media material of the period of the Russia-Ukraine war (2022-2023), in the language of modern Ukrainian journalism, invectives of various kinds are widely used, which give a negative assessment mostly to the leaders of the aggressor country or those politicians who support the Russia-Ukraine war, and as well as citizens who are on the side of the military invasion. Under the influence of extra-linguistic factors – the Russia-Ukraine war – we traced the trend towards actualization of offensive vocabulary in the language of the Ukrainian mass media. Invectives mostly give the language of the mass media a negative assessment: they convey contempt for the invaders and especially for their politicians.

Keywords: Ukrainian language; mass media language; journalism; invective vocabulary; negative evaluation; stylistic role; literary norms; non-linguistic factors; Russian-Ukrainian war.

1 Introduction

The trend towards looseness, frankness, and sometimes vulgarization of speech that we observe today is not distinguished by its novelty or intensity from among analogous processes taking place in the post-Soviet space or in historical terms ‒ in the language of any country where conflicts, revolutions, or other social changes take place. In addition, in the era of rapid development of the mass media and the Internet, these processes are becoming more active in the communication spheres of politically stable countries, becoming a comprehensive and all-absorbing phenomenon. To implement the mentioned tendency, journalists often use invective vocabulary. In the Ukrainian information space, the vocabulary of media workers became particularly active during the full-scale Russia-Ukraine war (we consider the period 2022-2023).

Invective vocabulary in the language of the Ukrainian mass media is analyzed by modern researchers L. A. Bilokonenko [1], N. M. Kostusiak [11], Y. S. Masel [13], O. G. Mezhov [14], I. V. Muratova [15], M. I. Navalna [16; 17], L. S. Topchii [21], S. V. Formanova [8-10], and others.

Researchers of invective vocabulary describe different approaches to its study. Such a broad approach to the study allows invective to be attributed to vocabulary that characterizes the speaker's attitude to the subject of speech. In the narrow sense, invective units are defined as verbal (sometimes combined with non-verbal) substitutes for physical violence that cause offense to the opponent. Invective can also be any rough, vulgar, uncodified, taboo language designation of a person with evaluative semantics, which by its form or meaning can offend the object of evaluation [13].

So far, the following approaches to the definition of invective as a linguistic phenomenon have been formed in linguistic studies: the identification of invective with swearing, which is considered as a sign fixed in linguistic usage, that has a taboo character (i.e., it lies outside the boundaries of normative language and has a mainly oral character) and stable stylistic markers, such as "vulgar", "swearing", "rude"; invective is any word used to insult the addressee. In the language system, this word is recorded as a potential invective, that is, it contains in its meaning critical characteristics of a person. According to this opinion, the category of invective includes all words that can potentially offend the addressee; invective is defined as an insulting word in the sharpest form, swearing as an insult [15, p. 198].

Researchers consider speech insult from psycholinguistics, which is caused by a derogatory statement containing a negative-evaluative (pejorative) component, primarily invective. That is, the addressee's insult is a consequence of the addresser's use of invective. Not every negatively colored vocabulary can cause a feeling of offense, but mostly that which refers to the semantic field of "Human" (his appearance, inner world, behavior, activities, etc.) and is aimed at degrading his status in society [14, p. 99]. Linguists suggested the following classifications: 1. Vocabulary, which contains a negative evaluative (pejorative) and offensive (invective) seme in its lexical meaning: non-taboo colloquial, derogatory, familiar, swearing, slang words that have the appropriate marking in dictionaries (rough, contempt., fam., colloq.m jarg.); taboo obscenities, jargonisms, etc.; vocabulary that acquires a negative evaluative (pejorative) and offensive (invective) connotation as a result of metaphorical transfer based on associations with the animal world, objects and environmental phenomena; 2. Vocabulary (codified, normative) that does not contain negative-evaluative (pejorative) and offensive (invective) seme in its main lexical meaning, but can acquire them in the context as a result of reinterpretations.

Invective vocabulary contains varying degrees of offensive assessment of external and internal features of a person, primarily: a) mental characteristics and deviations, moral qualities, intellectual state, experience, mental activity, character traits, level of education; b) behavior, lifestyle, actions, habits, abilities, type of activity, occupation, professional and business qualities; c) appearance, physical qualities and defects associated, in particular, with negatively evaluated nominations of body parts (somatisms); d) social origin and status, material condition, age, ethnic, national, racial, gender, religious, professional affiliation, political views, antisocial deviant groups. Invective vocabulary is one of the most common means of expressing verbal aggression against representatives of certain ethnic groups, races, religions, sexual minorities, etc. [14, p. 100].

2 Materials and Methods

In his works, Yu.S. Masel supports the well-known classification in the following main areas: I. Invectives of a "personal" nature: 1) humiliation of the addressee's moral dignity and qualities; 2) negative assessment of mental abilities; 3) negative assessment of physical characteristics; 4) invective designations of a person's appearance; II. Invectives of a "social" nature: 1) racial discrimination; 2) sexual and gender invectives; 3) invectives conveying the immorality of relations, such as lies, fraud. III. Blasphemy [13] From the above, it is obvious that all invectives are expressive units with a whole range of functions. Among the main functions of invectives noted in scientific literature, leading

in journalistic discourse, the following can be distinguished: expressive, pejorative, evaluative, manipulative, etc. [13].

The purpose of the article is to investigate the lexical-semantic parameters of the invective vocabulary of the language of modern mass media, to clarify its stylistic role. Achieving the set goal involves solving the following tasks: 1) to characterize invectives from the review of scientific works of researchers; 2) to establish non-linguistic factors of the intensity of the use of invective vocabulary; 3) to highlight thematic groups of invective vocabulary; 4) to analyze negatively evaluative lexemes with actually offensive connotations that function in the language of the Ukrainian mass media (the source base of the study was the invective recorded in Ukrainian printed and online publications in 2022-2023).

The following research methods made it possible to implement the set goal and task: descriptive, which made it possible to inventory, systematize, and classify invective vocabulary selected from the language of the mass media; the method of complex analysis, which contributed to the consideration of the analyzed units in the lexical-semantic aspect; the method of contextual semantic analysis, which made it possible to study invectives in relation to the textual environment; methods of component analysis - for researching the seminal characteristics of lexical units.

3 Results and Discussion

In modern domestic Ukrainian and foreign linguistic literature, many different classifications of invective vocabulary are offered. Almost all classifications are based on thematic or pragmasemantic features. The corpus of collected material from the language of the Ukrainian mass media during the Russia-Ukraine war period gives reasons to divide the invectives into the following directions:

1. Personal: 1) immorality, humiliation of dignity and qualities; 2) assessment of mental abilities; 3) assessment of physical characteristics and invective designations of a person's appearance (perhaps based on his behavior).

2. Social: 1) immorality of relations, such as lies, fraud; 2) manipulative actions regarding social processes, personalities, etc.; 3) invectives of social origin and status, political views, etc.

The fullness of the defined subgroups is not the same, lexemes have different functional features, the vocabulary does not always correspond to the standard of the Ukrainian language, journalistic style in particular.

1. Personal: 1) immorality, humiliation of dignity and qualities. This subgroup covers lexemes such as: alcoholic "one who suffers from alcoholism; a drunkard" [4, I, p. 34], e.g.: "*The main alcoholic of Russia Medvedev began to complain about Putin - mass media*" (https://www.5.ua, August 18, 2022); "*Who can best coordinate alcoholics and drug addicts, if not the main alcoholic of Russia*" (Putin about Medvedev) (https://www.volyn.com.ua, August 12, 2022).

For the most part, the analyzed lexeme in the language of the Ukrainian mass media is used in relation to the former President of Russia Dmitro Medvedev, mainly in the phrases "*the main alcoholic of Russia*", "*the dwarf alcoholic*", cf.: "*Medvedev insulted Putin, who called him "the main alcoholic of Russia": what is known about the scandal*" (https://news.obozrevatel.com, August 18, 2022); "*How the "dwarf alcoholic" Medvedev sees the year 2023*" (https://espreso.tv, December 31, 2022). The adjective *dwarf*, which conveys the physical characteristics of a person by height, emphasizes Dmytro Medvedev's flaws even more acutely.

The subgroup "immorality of relations, such as lies, fraud" includes the synonymous lexeme: *алкаш* ("*drunkard, alcoholic*") [7, p. 14], e.g.: "*Алкаш медведєв назвав кофту Зеленського "засмальцьованою" і пригрозив Європі «зникненням»*" ("*Drunkard Medvedev called Zelensky's jacket*

"greased" and threatened Europe with "disappearance"*) (https://www.volyn.com.ua, February 11, 2023); "*In this case, Karaganov is a figure who is not yet as well-known as Dimon Alkash Medvedev*" (https://wz.lviv.ua, June 14, 2023). The indicated word again negatively characterizes the former President of Russia, Dmitro Medvedev. Familiarity and vulgarity are added to Ukrainian mass media texts by a synonymous jargonized lexeme: *бухарик* ("jarg. alcoholic, drunkard) [5], cf.: "*Cunning drunkard Medvedev is an obvious substitute for Putin..*". (https://www.unian.net, November 5, 2022).

To indicate Dmitry Medvedev's addiction to alcoholism, journalists use the lexeme: *blue* "1. Which has the color of one of the main colors of the spectrum - the middle between light blue and violet. 2. Shade of this color (about the face, skin). In a drunkard" [4, IX, p. 182], e.g.: "*We have already talked about what role the eternally "blue" plays in the Kremlin [about Medvedev - author]. Now the Telegram channel Generall SVR has shared interesting information about how Putin mocks the person who was once called the Russian president*" (https://tsn.ua, August 13, 2022). The authors use the substantive adjective *blue*, which performs the functions of a noun, it can be considered a synonym for the previously analyzed lexemes (*алкоголік, алкаш, бухарик* (*drunkard*)), the use of which gives journalistic texts imagery and sarcasm.

To the subgroup "immorality of relations, such as lies, fraud" we include the lexeme: *bastard* "1. Outwardly ugly person. 2. A person who has lost his best qualities; a freak" [4, I, p. 474]. In the language of modern Ukrainian media texts, the President of the Russian Federation, Volodymyr Putin, is called an offensive word for the immorality of his behavior, actions and actions of those who support him, cf.: "*You raised a bastard and a murderer": the content of a note that a Russian woman left on the grave of Putin's parents became known*" (https://tsn.ua, October 13, 2022); "*People do not feel that they are becoming moral bastards - this is their normality. ... Putin plans to continue the offensive against Ukraine*" (https://wz.lviv.ua, March 31, 2023).

Often, with the noun *bastard*, we record the adjectives *Kremlin*, *damned*, etc., e.g.: "*The Kremlin bastard has been signaling through intermediaries that he is ready to negotiate a ceasefire since at least September of this year*" (https://racurs.ua, December 24, 2023); "*Damn bastard Putin and NATO's failure: sports stars talk about the war that Ukraine has already won*" (https://sport24.ua, March 8, 2022); "*The search for Kremlin bastard Putin is only the beginning*" (https://mykyivregion.com.ua, April 1, 2023).

Russian politician Yevgeny Prigozhin and Hungarian politician Viktor Orban were included in this category of politicians for their immoral behavior, see: "*Dirty bastards: Prigozhin and Putin were on the cover of a French newspaper*" (https://mmr.ua, June 28, 2023); "*A bastard Orban is no different from Putin's bastard, you can't put a finger in their mouth, because they will take your hand away...*" (https://gazeta.ua, December 10, 2023); "*And this bastard, Orban, who does not even hide that he is only interested in money, is kept in the EU? And what about the "values" that the EU talks about in the morning...*" (https://censor.net, December 20, 2023).

Under the influence of extralinguistic factors - the large-scale Russian-Ukrainian war - native speakers and authors of mass media texts developed a negative attitude not only towards politicians, but also towards the Russian military and ordinary residents of the aggressor country, e.g.: "*Russian bastards fired 577 shells in Kherson region in a day, there is destruction*" (https://newsua.one, December 17, 2023); "*We will do everything in our power to take revenge on the Russian bastards, Poroshenko is quoted as saying by the Eurosolidarity website*" (https://interfax.com.ua, June 24, 2023).

To the subgroup "immorality of relations, such as lies, fraud" we include the lexeme *gad*: "1. Amphibious animal or reptile. 2. transferred, despised. About a disgusting, insidious person" [4,

II, p. 9]. Journalists call both Putin and the Russians directly involved in the war a gad for immorality and treachery, cf.: "*Russian actor Pashinin called Putin a "dwarf" and a "nasty gad*" (https://tsn.ua, October 7, 2022); "They [about Russians - approx. author] are gads. An innocent child was killed by orcs" (https://suspilne.media, 03/26/2022).

The same subgroup includes the lexeme *impudent* "a person who acts defiantly, unceremoniously, violating moral norms, and does not pay attention to the attitude of others" [4, V, p. 226]. For immoral behavior, ignoring good deeds and fraud, the authors offensively call with this word thieves, refugees, etc. For example: Where do "*impudent refugees*" come from? A psychologist explains (https://tyzhden.ua, March 9, 2022); "*Waylaid near the terminal: an impudent man from Mukachevo stole almost 20 thousand UAH from a pensioner*" (https://zakarpattya24.com, February 22, 2023).

Also, in some places in mass media texts we come across the use of the lexeme *psycho*, cf.: "*Psycho from the Caucasus after "revelation from above" went to prison. In Moscow, the police detained a 57-year-old resident of Ingushetia who wanted to meet with Putin and "help the Russian people*"" (https://tsn.ua, September 12, 2023); "*When I warned the West about Putin, I was ignored as an unbalanced and embittered psycho", says the former president of Georgia*" (https://www.bbc.com, July 19, 2023).

This subgroup includes the vocabulary *psychopath* – "a person with a mental disorder, mental abnormality; an unbalanced person, whose words, thoughts, actions are assessed as abnormal" [4, II, p. 376]. In the Ukrainian mass media, only the President of the Russian Federation is referred to as such, e.g.: "*Psychopath with signs of sadism: an American psychiatrist assessed the President of the Russian Federation. The dictator behaved strangely during Shoigu's report*" (https://glavcom.ua, July 19, 2022); "*A psychopath feeds on conflicts, lives in them and draws energy from them. Ignorant and a demagogue, Putin, however, has the support of a huge number of people*" (https://www.ukrinform.ua, July 4, 2022); "*Putin is not a sociopath, he is a psychopath. Psychopathy is a personality disorder, not a mental illness. This is a huge difference. Psychopaths are not treated*" (https://www.unian.ua, August 29, 2023); "*Psychopath, narcissist and sadist: an American psychiatrist diagnosed Putin*" (https://focus.ua, July 20, 2022).

The spread of invective and its actualization in the language is evidenced by the use of complex words such as: psychopath-charismatic, psychopath-sadist, etc., for example: "*Putin is a psychopath who has lost his adequacy - diagnosis (heading). Putin, according to Fallon's definition, is a charismatic psychopath, he is not one of those who openly shows aggression*" (https://nv.ua, July 21, 2022); "*Malignant psychopath-sadist": a psychiatrist described Putin's condition... American psychiatrist James Fallon believes that the Kremlin dictator is sick...*" (https://fakty.ua, July 20, 2022).

Functioning in the language of the mass media lexemes *psycho, psychopath* and linguistic units derived from them generally characterize the politician as an unbalanced person, whose words, thoughts, actions are evaluated by society and people as abnormal. Usually, such words give media texts colloquialism and vulgarity. The analyzed lexemes correspond to the stylistic marker - expletives.

The invectives in the subgroup "3) evaluation of physical characteristics and invective designations of a person's appearance (perhaps based on his behavior)" seem interesting. In particular, the lexeme *dwarf*: "1. An unnaturally small person; midget, stunted, stunted, stunted. // About a very low, very small object. 2. (figurative) About a very insignificant from a certain point of view, worthless person" [4, IV, p. 107]. In the language of the Ukrainian mass media, we fix the lexeme in the third figurative meaning in relation to the head of the Russian Federation, for example: "*Dwarf with an atomic bomb. The head of EU diplomacy humiliated Putin and Russia*" (https://glavcom.ua August 20, 2023). We often fix the invective

with the adjective *bunker*, because according to open information, Volodymyr Putny is hiding in a special bunker, cf.: "*Bunker dwarf Putin wants to know what is hitting him. Serhiy Kolyada on how ATACAMS long-range missiles affect Putin*" (https://www.kyivpost.com, October 27, 2023).

As a synonym for the phrase *bunker dwarf*, journalists use the formation *bunker old geezer*, e.g.: "*This is bunker old geezer. He really lives in his painful world, and he faces two options: either the dock in The Hague, or an inglorious death somewhere in a bunker*" (https://tsn.ua, October 24, 2023); "*Yandex blocked the image of Russian dictator Vladimir Putin at the request of the bunker old geezer and Nazi symbols at the request Z*" (https://www.pravda.com.ua, January 30, 2023). In this way, the authors try to humiliate, call names, emphasize the inadequacy of the president of the aggressor country.

Ukrainian journalists refer to Russians as different animals and creatures based on their behavior or thoughts, e.g.: *pig, zombie, frog*, etc. Hatred and contempt for the Russian population or those who generally support the war is further emphasized by the pejorative lexeme *dumb-headed*, cf.: "*Shariy from Spain complains about Russians: "dumb-headed pigs" (heading). Anatoly Shariy, who is known for his criticism of the Ukrainian authorities and manipulations, became angry with the Russians*" (https://www.rbc.ua, December 12, 2023); "*And this fat, stupid, dumb-headed frog named Povorozniuk repeats the narratives of Russian propaganda", the journalist emphasized*" (https://prm.ua, 12/16/2022).

This subgroup includes the lexeme nit "1. Lice egg. 2. Figurative, used as a swear word" [4, II, p. 92]. Journalists refer this offensive word to:

- The self-proclaimed president of Belarus, Oleksandr Lukashenko, cf.: "*Lukashenko finally turned into a slave and a nit (heading). A nit is Putin's word, which Lukashenko simply uses to lick his master's ass*" (https://glavcom.ua, March 8, 2023);
- President of the Russian Federation Vladimir Putin, for example: "*On the monument, which is usually installed on the grave of the deceased, folk craftsmen made a portrait of Putin and wrote several "soulful" words: nit, criminal...*" (https://bigkyiv.com.ua, February 28, 2022); "*The astrologer named the date of Putin's death (heading). That is, this nit can live for a long time, another 2 years, - said the astrologer*" (https://www.unian.ua, April 11, 2022).
- Other presidents and politicians, cf.: "*Zelenskyi is a "nit": Lukashenko hysterically called Zelenskyi (heading). Just a nit! Such operations are not carried out without approval...*" (https://tsn.ua, March 7, 2023); "*Pro-Russian nit: The mayor of Odesa called for compromises (heading). The mayor of Odesa called for compromises with Moscow*" (https://newsua.one, August 29, 2022).

Calling Vladimir Putin a nit, the authors of the texts use proverbs and sayings containing invectives in the titles of the texts as a stylistic device, thus attracting the information consumer and expressing a negative assessment of the persons they are calling names, cf.: "*Russian louse or Ukrainian nit - who is bigger (heading). This nit imitates some reforms, creates completely ineffective processes for an infinite time... Kuchma explained why Putin will not agree to peace negotiations*" (https://33kanal.com, February 23, 2022).

2. Social: 1) immorality of relations, such as lies, fraud. The lexeme *degenerate* "1. A person with signs of degeneration; 2. transferred, despised. A person of immoral, unworthy behavior; bastard" [4, II, p. 230]. The indicated lexeme and some other invectives of this subgroup can also be attributed to personal characteristics, but since we are talking about public figures, we attribute them to social ones. The decisive factor in the division of invectives into groups is the context.

The corpus of the collected material shows that we consider the lexeme *degenerate* to be the invective in a figurative sense,

which is used to call various Russian politicians, cf.: "How can you personally thwart the most insidious plan of the degenerate Putin..." (https://pravda.if.ua, April 4, 2022); "*The degenerate Patrushev stated that Russia twice saved the USA from collapse, but will not save again*" (https://argumentua.com, March 28, 2023); "*Prigozhin very bluntly hints that Shoigu cannot raid anything on his own*" (*he directly calls him a "Tuva degenerate")*" (https://www.unian.ua, June 12, 2023); "*Prigozhin emphasizes that "no one would have stopped the Russian army of occupation" if "the degenerates had not built long columns""* (https://tsn.ua, January 14, 2023). In this way, Ukrainian journalists express disdain for famous persons, and also testify to the disrespect of politicians for each other.

In the language of the Ukrainian mass media, we record the use of the lexeme *hypocrite,* "hypocritical person" [4, IV, p. 501] (hypocrisy is "inconsistency of words and deeds with true beliefs, intentions, feelings. // Feigned cordiality, benevolence, which hides evil intentions; insincerity" [4, IV, p. 501]). Most often, this invective refers to the inconsistency between the actions and words of Russian politician Sergei Lavrov, Hungarian politician Viktor Orban, etc., cf.: "Sabbath of hypocrites: Lavrov spoke about his desire to end the 'Ukrainian conflict' as soon as possible" (https://www.dsnews.ua, April 17, 2023); "*Pope: Hypocrites are unable to truly love*" (https://www.pravda.com.ua, August 25, 2023). The authors, calling famous people hypocrites, emphasize the insincerity of actions, statements and intentions of politicians.

The subgroup "2) manipulative actions regarding social processes, personalities, etc." is small in terms of the volume of collected material from the language of the Ukrainian mass media. Lexeme *marginal* "a person who is on the border of different systems of social values, cultures and who is subject to their conflicting influence, which leaves a certain imprint on his psyche and way of life; a person who has group affiliation without group identification, a person who has lost former social ties and has not adapted to new living conditions. 2. A person who does not recognize generally accepted norms and rules of behavior. 3. Colloquial. Provincial" [6] in the language of the Ukrainian mass media calls Vladimir Putin for his inadmissibility of certain norms, laws, human morality, cf.: "*No one noticed how Putin became the main marginal of the country*" (https://www.5.ua, August 18, 2022).

The linguistic unit of this subgroup is *jesters* "1. substitute A person at the court of a monarch or noble lord who entertained the host and his guests with various pranks, jokes, etc. 2. A comedic character in ancient plays. 3. figurative, despised. About a person who, for the fun of others, pretends to be a fool. 4. Dial. Milkmaid, baby" [4, I, p. 196] refers to Dmitry Medvedev, whom journalists show their disdain for, cf.: "*She went to see a young lover: it became known with whom the wife of the Kremlin jester Medvedev, Svitlana, is having an affair*" (https://tsn.ua, July 24, 2022).

Among a number of subgroups, "3) invectives of social origin and status, political views, etc." is the most numerous. Invective puppet "1. A puppet in a puppet theater controlled by an actor with the help of a special device. 2. Figurative. About a person, government, etc., who blindly fulfill someone's will" [4, IV, p. 628] again negatively characterizes the former head of the Russian Federation, cf.: "*The puppet of Russian President Putin is often heard by everyone. From the mouth of Medvedev, you can often hear what the dictator himself does not dare to say publicly*" (https://tsn.ua, August 13, 2022); "*Decided to go to the other world, but failed: what is known about the suicide attempt of Putin's puppet – Medvedev*" (https://tsn.ua, June 28, 2022).

We fix in the language of mass media the abusive lexeme *moron* "1. medical. A person suffering from mental retardation. 2. figurative. About a stupid person. 3. abusive. It is used to insult someone, to condemn someone's behavior" [Dictionary. UA], which was used in relation to Czech Prime Minister Andrej Babis, cf.: "*In the Czech Republic, Minister of Labor and Social Affairs Jana Malachova called Prime Minister Andrej Babis a*

moron, not knowing that cameras are in the studio..." (https://www.pravda.com.ua October 10, 2022).

Ukrainian journalists did not leave without attention the negative assessment of not only the Russians, but also the Hungarian politician Viktor Orban, calling the *idiot* "1. An unintelligent, limited, undeveloped person. 2. Mentally underdeveloped, weak-minded person. // It is used as a swear word" [4, V, p. 302], e.g.: "*Racist idiots set off an explosion of ammunition at the Zaporizhzhia NPP,"* – *Energoatom*" (https://radiotrek.rv.ua, March 14, 2022); "*I wish the Orbánites to fail the elections and give"* Hungary the opportunity to correct all the crap that *"Fidesz"* led by this moron *created...*" (https://censor.net, October 5, 2023).

The lexeme *fool* is widely used in the language of mass media "1. Colloquial. Mentally limited, stupid person. // Abusive. It is used with the purpose of insulting someone, condemning someone's behavior" [4, II, p. 437]. The authors deliberately use it to offend:

- Vladimir Putin, e.g.: "*Putin was a huge fool and did not foresee a plan "B" for the war in Ukraine – NYT*" (https://www.unian.ua, May 11, 2023); "*Putin is the most dangerous fool in the world: in Ukraine he can neither win, nor lose, nor stop, - NYT*" (https://espreso.tv, May 11, 2023);
- Dmitry Medvedev, for example: "*After all, Medvedev is just a clinical fool and he proved it back in 2008...*" (https://espreso.tv, January 28, 2023); "*Feigin: Medvedev is a fool and an idiot. He drinks and reflects on the topic of the second term, which did not take place*" (https://gordonua.com, May 4, 2023);
- Other politicians, e.g.: "*Deputy Chairman of the Security Council Dmytro Medvedev called Graham an "old fool" and added that "in his beloved America they regularly kill...*" (https://www.bbc.com, May 29, 2023); "*The publication reports that Italian intelligence was concerned by the statements of Medvedev, who called Crosetto a "rare fool""* (https://www.volynnews.com, March 16, 2023); "*Presidential vocabulary: Medvedev called the USA "Pindostan" and the ex-director of the CIA an "old fool""* (https://www.dsnews.ua, October 12, 2023).

The corpus of the collected material attests to the active use of the invective *loony* "colloquial. Jerk, stupid; 1) One who pretends to be a naive, innocent person. 2) Lyle. Foolish, stupid. [5], which negatively characterizes:

- Vladimir Putin, e.g.: "*Famous businessmen of the Russian Federation called Putin a "loony" (heading). Entrepreneurs are convinced that hell and a terrible future awaits the aggressor country*" (https://glavcom.ua, April 26, 2023); "*Putin is a loony", the "Unbreakable Country" marathon*" (https://www.5.ua, April 26, 2023); "*Russia is in the clutches of a loony, Putin is an idiot" (heading). Putin is a loony, Russia is a scorched desert, and another participant in the conversation, Mykola Matushevskyi, called the President of Russia Vladimir Putin a "jerk"...*" (https://www.ukr.net, December 27, 2023); "*A grandiose political loony": Jim Carrey (heading). We will remind you that previously the singer Madonna published a video in which she supported Ukraine and compared Putin to Hitler and Lenin*" (https://www.unian.ua, February 28, 2022);
- Other politicians, e.g.: "*Russian President Vladimir Putin called the former head of the Moscow anti-doping laboratory, an informant of the World Anti-Doping Committee, Rodchenkov a "loony"* (https://www.radiosvoboda.org, January 30, 2022); "*A dishonorable loony. Kyslytsia reacted to Lavrov's statement about the war in Ukraine...*" (https://www.ukr.net, October 27, 2023);
- Russians, e.g.: "*Let's not do what loonies idiots do - they beat on civilian objects, residential areas. Of course, we will not do this*" (https://www.bbc.com, June 13, 2023); "*The occupier complains to his mother: "I'm just a loony*

who took the summons..." (https://glavnoe.in.ua, January 6, 2023).

Also, the use of invective lexemes *arsehole, knobhead, patsy* (*мудак, мудило, лох*) testifies to the active use of substandard vocabulary in the language of Ukrainian journalism. Such language units make the language much more expressive, negatively characterize politicians, showmen, thus humiliating them and condemning their actions.

The invective lexeme *wretch* "one who commits shameful, vile acts; bastard // It is used as a swear word" [4, V, p. 277] in the language of journalistic texts acts as an offensive lexeme in relation to the shameful, vile, insidious actions of traitors, as well as those who violate the law, cf.: "*Only a wretch and a traitor at the moment of real danger of an attack on his country can demonstratively display a flag of aggressor countries on his avatar*" (https://24tv.ua, January 27, 2022); "*I call on other factions to "live in a new way" and cleanse themselves of wretches who have no place in politics*" (https://hromadske.ua, August 10, 2023); "*Any wretch will be better for Russia than Putin – Gozman*" (https://uatv.ua, December 9, 2023); "*It is not Austria learning from Hungary, but the opposite. And I never understood why everyone forgives them (Austrians - author) so easily, treats them with ease, compared to Orban or other wretches of the EU" - the publication quotes one of the EU diplomats*" (https://www.pravda.com.ua, December 16, 2023); "*Wretch!!! A policeman was detained in Kharkiv for a huge bribe, he covered up a terrible crime*" (https://www.pravda.com.ua, September 12, 2022); "*A 27-year-old wretch selling Subutex and Amphithamine in Lviv was detained by the police*" (https://visrozdil.lviv.ua, March 9, 2023).

The subgroup "invectives of social origin and status, political views, etc." includes a number of invective tokens that mark and insult Russians.

The widely used word *katsap* "colloquial. - a derogatory name for a Russian" [4, II, p. 437] is used by mass media of various forms and types in the language, e.g.: "*The world was horrified when it saw shocking photos of the atrocities of the Russian military in the liberated villages and towns of Bucha, Irpen. People in anger curse our ruthless neighbor, calling him a cursed katsap. And it turns out that this word is translated as "knacker"*". (https://visnyk.lutsk.ua, April 16, 2022); "*Katsap lies like an old goat": GUR reacted to the fake...*" (https://www.nta.ua, November 18, 2023); "*1,010 katsaps died last day on Ukrainian soil*" (https://k-z.com.ua, December 27, 2023); "*Lviv stinks of katsaps, liberals and betrayal...*" (https://ua.korrespondent.net, October 3, 2022); "*In the field, we met an armored personnel carrier with katsaps*" (https://grnt.media, December 14, 2022); "*Last day, Ukrainian soldiers killed 400 katsaps, in total, since the day of the large-scale invasion, the fighters of the Armed Forces of Ukraine have destroyed 276,670 Rashists*" (https://k-z.com.ua, September 26, 2023).

In the heading complexes of publications, we also record the lexeme *katsap*, used both in quotation marks and without them, for example: "*Why do we call them katsaps? (heading). The word "katsap" has become an integral symbol of our historical and cultural heritage, a caustic marker in the confrontation with the Moscow occupiers*" (https://censor.net, July 21, 2023); "*Katsap means knacker, and orc means cruel beast (heading). It was after this bloody massacre that Russians got the nickname "katsap" - this word comes from the Tatar "kassap", which means butcher...*" (https://visnyk.lutsk.ua, April 16, 2022). The different graphic representation of the lexeme proves, first of all, that the word is characteristic of oral speech, that it contrasts with the written style. In this way, the journalists note that the norms of the literary language have been deliberately violated.

The functioning of the lexeme *katsap* in the language of Ukrainian journalism testifies to the disdain of Russians by both authors and Ukrainians in general. The *orc* lexeme "1. The Roman deity of death, identified with the Greek Hades; the Etruscans depicted the Orc as a bearded giant. 2. A warlike

mythical creature, larger than a human, with greenish skin" [5], meaning "a derogatory name for Russians", cf. "*...asked not to call Russians orcs: "We are warriors, not some kind of* junk". *Orcs belong to the standard species of fantastic creatures...*" (https://lb.ua, August 19, 2022); "*How the war with the orcs changes the worldview of Ukrainians*" (https://novakahovka.city, April 24, 2023); "*Orcs from Mordor and folklore during the war*" (https://lyuk.media, May 17, 2022); "*Orcs, not people: Russian officers kill their own...*" (https://www.volyn.com.ua, March 1, 2022); "*Orcs carried out an assault in two directions*" (https://glavred.net, April 25, 2022); "*A resident of the community near Chernihiv: "Whoever has not seen an orc, does not know what war is...*" (https://cntime.cn.ua, April 12, 2023); ""*Because the orcs are idiots": Mariupol partisans about another poisoning of Russian servicemen*" (https://www.kyivpost.com, October 16, 2023); "*Orcs" and "Rashists": KZHE explained whether it is worth using stylistically colored vocabulary in materials about the war*" (https://zmina.info, May 28, 2022); "*The war in Ukraine: in Izyum, the Orcs created a hospital in a school, in Zaporizhzhia they planted explosives in a hospital*" (https://bigkyiv.com.ua, April 4, 2022).

Often, the analyzed invective lexeme is used in the headings of publications in order to attract the attention of the information consumer, since the invective lexeme contrasts with the commonly used vocabulary and gives a negative evaluative characteristic to Russians, e.g.: "*Orcs: who are the orcs and why did they invade Ukraine (heading). Russia's invasion of Ukraine. Who are called orcs and what awaits the orcs in Ukraine in 2022*" (https://www.stb.ua, May 25, 2022); "*The number of dead orcs has increased rapidly since the start of the war (heading). Operational information as of the morning of April 24. The total combat losses of the Russian Federation as a result of the invasion of Ukraine in personnel amount to approximately 21,800...*" (https://kg.ua, April 25, 2023).

To this subgroup we classify the *rashist* invective "a derogatory name for Russians", which is widely recorded in the author's texts, e.g.: "*In the territory of the occupied part of the Zaporizhia region, rashists do not allow parents to bury the bodies of murdered teenagers*" (https://trueua.info, December 27, 2023); "*How to continue the war if the rashists are buried everywhere and have air superiority*" (https://defence-ua.com, October 16, 2023); ""*Racists": the history of "Russian fascism" from theories to practice*" (https://www.bbc.com, October 1, 2022); "*18 hours ago – rioters fired at an evacuation train at the Kherson train station*" (https://ua.news, December 27, 2023); The Council recognized "rashism" as the state ideology of the Russian Federation (heading). ""*Rashism" is a term that describes the political ideology of the Russian regime, and which began to be widely used since the beginning of the big war. The invaders are Rashists*" (https://life.pravda.com.ua, May 4, 2023).

We consider the lexemes *katsap, ork, rusnia, rashist* to be synonymous invectives that have the same stylistic role in the texts of the Ukrainian mass media.

The analyzed subgroup includes the disparaging lexeme *dullard* "abusive. Same as fool" [4, IV, p. 62]. Journalists call the head of the Russian Federation, Russians, as well as Ukrainian officials who take rash steps and actions that harm Ukraine, with an insulting word, see: "*Kuchma on his fingers explained why Putin is a dullard*" (https://insider-media.net, August 4, 2022); "*... a dullard in the Kremlin started aggression against Ukraine. Now my traditional warning: to all the fans of dulard in the Kremlin – both in Russia and abroad - the situation will change*" (https://yvu.com.ua, July 27, 2022); "*Because for every common sense, in order to protect personnel, there will definitely be a dullard in the ranks who will say otherwise...*" (https://patrioty.org.ua, December 27, 2023); "*Dullards or suicides? We still sell raw materials (heading) to the Russian Federation ... in particular, the ore goes to the Russian Federation. The export of titanium concentrates continues even during the war*" (https://gazeta.ua, August 7, 2023).

The president of the Russian Federation is characterized by the insulting invective of a *cretin* "1. A patient with cretinism. 2. Abusive. A fool, a stupid, worthless person; idiot (in 2 meanings)" [4, IV, p. 337], e.g.: "*Putin is a cretin who lost mrbles, he is armed and dangerous (heading). Vladimir Putin is an impostor, state criminal, usurper of power, Article 278 of the Criminal Code of the Russian Federation, up to 20 years in prison. And it has been like this for a long time, at least since 2012*" (https://opinions.glavred.net, December 27, 2023); "*A Russian publicist called Putin a cretin. Cretins always have their thumb clenched in a fist...*" (https://znaj.ua, March 5, 2022). The head of the Russian Federation himself calls his generals this insulting word, e.g.: "*In a comment on the progress of the offensive of the Russian Armed Forces in the Vugledar region, the Russian president called Russian generals, and Muradov in particular, cretins*" (https://focus.ua, February 17, 2023).

As a swearing, insulting word *buzzard* "ignorant, ignorant person; ignoramus. // It is used as a swear word" [4, V, p. 262] Ukrainian journalists use in relation to Vladimir Putin or his generals, cf.: "*Putin is a man of little culture, and this is very dangerous. This is an buzzard who actually pretends to be an buzzard. He is absolutely deliberately misinforming. This is one of the main methods of his activity – lying*" (https://wz.lviv.ua, December 29, 2023); "*Why is Shoigu despised in the Russian army? And Putin is afraid to replace a Tuvan with a professional general, because it is not known what that professional will do. And the Tuvan is a buzzard, ignorant in his business...*" (https://armyinform.com.ua, February 11, 2023); "*And here Girkin openly declares that the generals are senseless corruptors and fooled Putin for years, Shoigu is a buzzard, Putin is a bad strategist*" (https://without-lie.info, December 29, 2023); "*The educational "reform" is like a show from the buzzard during the war...*" (https://radiotrek.rv.ua, November 1, 2023); "*Buzzard Vladimir Putin probably does not know this and does not suspect what fate awaits him in the near future*" (https://nw.com.ua, May 30, 2023).

We stand in solidarity with researchers who consider that media texts of the period of the active phase of the Russia-Ukraine war present an extensive group of language units that perform different roles, but in the texts they often acquire a special ironic sound, expressively emphasize the groundlessness and illogicality of someone's actions, in some places they vulgarize the speech of modern journalism. In the media space of the period of the Russia-Ukraine war, a negative assessment prevails among the lexical means [11, p. 130].

Adjective *dumb-headed* "pron. Unintelligent; obtuse // An unintelligent person" [4, X, p. 322] are used in the language of the Ukrainian mass media to insult officials, citizens who blindly believe in those in power, most of the examples are related to Russian politicians and citizens, cf.: "*There are only dumb-headed people around, only sheep in power - stupid uneducated and thieves!*" (https://blogs.pravda.com.ua, November 20, 2023); "*It is impossible to even imagine plausible versions, except for the motives of the dumb-headed, the sycophants of the same dumb-headed, and those in power...*" (https://blogs.pravda.com.ua, December 27, 2023); "*Dumb-headed Putinist": Andriy Danylko humiliated a stook from "Putin's squads"*" (https://uainfo.org, April 30, 2023); "*Russians are dumb-headed. Bolshunov behaved like a monkey. Czech skier Tereza Beranova believes that Russians behave inappropriately, both in races and when communicating on social networks*" (https://news.obozrevatel.com, December 23, 2023).

Invective *traitor* "one who betrays" [4, III, p. 698] in mass media texts is presented regarding the actions of citizens who work for the enemy during the war, for example: "*The traitor was arrested by the internal security department. Prior to this, there was the detention of a Russian agent in the Kharkiv SBU department who leaked information to the enemy...*" (https://www.unian.ua, February 28, 2023); "*Thousands of traitors were exposed - the SBU told about their work. Since the beginning of the full-scale war, the SBU has exposed more than*

2,000 traitors and more than 300 personnel agents of the Russian special services..." (https://www.unian.ua, August 31, 2023); "*The SBU has exposed more than 2,000 state traitors since the beginning of the war. This was stated by the head of the SBU, Vasyl Malyuk, to The Wall Street Journal*" (https://www.ukrinform.ua, October 12, 2023). Sometimes it is about politicians, which led to the formation of a complex lexeme of politician-traitors, e.g.: "*Politicians-traitors who fled to Russia after the start of the war (heading) After the start of a full-scale invasion of Russia, many deputies from the OPZZ fled to the territory of the aggressor country, list of traitors*" (https://tsn.ua, October 24, 2023).

The term "*collaborator*" was updated during the Russia-Ukraine war. In the "Dictionary of the Ukrainian Language", only the word *collaborationist* is interpreted in the following interpretation: "a traitor to his homeland who collaborated with the fascist invaders in the countries occupied by them during the Second World War" [4, IV, p. 216]. Currently, a collaborator is a "traitor to his homeland who cooperates with invaders in the territories occupied by him", e.g.: "*Who is a collaborator can be determined only by a court... Therefore, this stage of verification is mandatory and it is mandatory that law enforcement agencies, pre-trial investigation agencies find out about each persons...*" (https://www.radiosvoboda.org, April 10, 2023); "*Immediately after the start of the full-scale invasion, amendments to the Criminal Code were adopted to establish liability for treason. Collaborators must answer*" (https://jurliga.ligazakon.net, February 1, 2023). The active use of the noun causes the formation of derivative words, e.g.: *teacher-collaborator*, cf.: "*The authorities know almost all the surnames of the teacher-collaborators, they will answer to the law, - Shkarlet*" (https://life.pravda.com.ua, November 14, 2022).

Also, journalists often use the invective lexeme *terrorist* in the headlines of articles, e.g.: "*Terrorists like Putin and Hamas must lose (heading). Terrorists like Russian President Vladimir Putin and Palestinian Hamas seek to hold free and democratic nations hostage...*" (https://www.ukrinform.ua, October 11, 2023); "*The psychology of a terrorist: what Putin is afraid of (heading). War for Putin is the defensive reaction of a sociopath and narcissist who has gone through humiliation*" (https://www.radiosvoboda.org, March 20, 2022); "*Putin is a world-class terrorist! (heading) Here it will be about the international crimes of Putin, who has been committing crimes in violation of all laws for many years*" (https://playua.net, October 12, 2023).

Often, the head of the Russian Federation and others like him are called a sadist, "a person with sadistic tendencies, obsessed with sadism" [4, IX, p. 11] for example, "*...Putin is a fascist, he is a sadist, I will not talk to this maniac (heading). The President of Ukraine, Volodymyr Zelenskyy, believes that the war will eventually end with diplomacy. But he emphasized that he is not ready to talk with the Russian dictator...*" (https://ua.news, October 23, 2022); "*Freedom for participating in the war in Ukraine. RosZMI announced the names of murderers and sadists pardoned by Putin*" (https://espreso.tv, November 14, 2013).

The use of the lexeme sadist in complex formations proves its active functioning in journalism, e.g.: "*A sadist collaborator detained in the occupied territory received the term...*" (https://uanews.net, December 23, 2023); A sadistic militant who led residents of the Kherson region to be "shot" was sentenced: how was he punished (https://tsn.ua, October, 16, 2023); "*The SBU identified the sadistic occupier who tortured civilians in the Mykolayiv region: what is known about him*" (https://tsn.ua, October 13, 2023).

4 Conclusion

As evidenced by the collected mass media material of the period of the Russian-Ukrainian war (2022-2023), in the language of modern Ukrainian journalism, invectives of various kinds are widely used, which give a negative assessment mostly to the leaders of the aggressor country or those politicians who support

the Russia-Ukrainie war, and as well as citizens who are on the side of the military invasion.

The corpus of invectives gave grounds for division into: 1. Personal: 1) immorality, humiliation of dignity and qualities; 2) assessment of mental abilities; 3) assessment of physical characteristics and invective designations of a person's appearance. 2. Social: 1) immorality of relations, such as lies, fraud; 2) manipulative actions regarding social processes, personalities, etc.; 3) invectives of social origin and status, political views, etc. It is worth noting that this division is rather arbitrary, since invectives in different contexts can refer to different subgroups.

Namely under the influence of non-linguistic factors, we trace the trend towards actualization of offensive vocabulary in the language of the Ukrainian mass media. Invectives mostly give the language of the mass media a negative assessment: they convey contempt for the invaders and especially for their politicians, emphasize their ill-manneredness, vulgarity, and insolence in opposing the Ukrainian military and the people.

We see the prospects of the research in a detailed study of the potential of invectives of other parts of the language, as well as in the formation of directories and dictionaries for recording language units that have acquired additional meanings and are not recorded in lexicographic works.

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NOMENS FOR DESIGNATION OF PERSONS IN THE UKRAINIAN MEDIA DISCOURSE

[a]MARYNA NAVALNA, [b]NATALIIA KOSTUSIAK, [c]OLEKSANDR MEZHOV, [d]NATALIIA SOVTYS, [e]TETIANA KHOMYCH, [f]VALENTYNA HLUSHYCH, [g]NATALIIA ADAKH, [h]OKSANA PRYIMACHOK, [i]OLESIA SKLIARENKO, [j]LARYSA HOLOIUKH

[a]*National University of Life and Environmental Sciences of Ukraine, 15 Heroiv Oborony Str., 03041, Kyiv Ukraine*
[b,c,h,j] *Lesya Ukrainka Volyn National University, 13 Voli Ave., 43025, Lutsk, Ukraine*
[d,g]*Rivne State University of Humanities, 12, Stepan Bandery Str., 33028, Rivne, Ukraine,*
[e]*T. H. Shevchenko National University «Chernihiv Colehium», 53, Hetmana Polubotka St., 14013, Chernihiv, Ukraine*
[f]*S. Kuznets Kharkiv National University of Economics, 9a, Nauky Ave, 61166, Kharkiv, Ukraine*
[i]*Hryhorii Skovoroda University in Pereiaslav, 30 Sukhomlynsky Str., 08401, Pereiaslav, Ukraine*
email: [a]*m.navalna@gmail.com*, [b]*kostusyaknataliia@vnu.edu.ua*, [c]*mezhovoleksandr@vnu.edu.ua*, [d]*NataliaSowtys@gmail.com*, [e]*vantrans2015@gmail.com*, [f]*valentinag1ushych@gmail.com*, [g]*nata1ia.adah@rshu.edu.ua*, [h]*pryjmachokoksana@vnu.edu.ua*, [e]*lesiaskliarenko.82@gmail.com*, [j]*HoloiukhLarysa@vnu.edu.ua*

Abstract: The article analyzes the nomens of the period of the Russian-Ukrainian war (2022-early 2024) based on the language material of modern Ukrainian mass media. The study of the texts of the most popular Ukrainian mass media resources made it possible to identify the main nomens used to designate persons, which were actualized as a result of extraneous factors, in particular, the war and the negative consequences it caused. It was possible to classify the nomens lexicon for designation of persons, in particular, the substantive units recorded in the language of modern Ukrainian mass media, to determine the lexical-grammatical and functional load of these nomens. During the research, the following methods were used: descriptive, which made it possible to inventory, systematize, and classify terms selected from mass media texts; by the method of complex analysis, which contributed to the analysis of lexical units in the lexical-grammatical aspect; the method of contextual semantic analysis, used to study nomens to designate persons with an emphasis on the intratextual environment; the method of component analysis - in order to reveal the semantic features of lexical units.

Keywords: nomen, vocabulary; lexeme; media; discourse; extra-linguistic factors; war; functionality; colloquialism; negative evaluation.

1 Introduction

In the modern world, any living language as an open and dynamic system is constantly in the process of development, undergoing quantitative and qualitative changes. The latter are the most characteristic of the lexical level. After all, the vocabulary in its existing composition can never exhaustively reproduce the entire immensity of human experience and the surrounding external world, therefore, most of the lexical-semantic groups of the language are in a dynamic state, that is, in the constant creation of innovations, new variants of meanings, etc.

In the modern linguistic paradigm, priority is given to research devoted to the issue of the connection of language with human' thinking, his inner world, creative activity, perception of the environment, universal human and social values and assets. It is obvious that one of the leading trends in linguistics is the study of "language – person" and "person – language" correlations. The active replenishment of the corpus of lexemes to denote persons is a convincing evidence of the strengthening of anthropocentrism in the modern Ukrainian language, which is based on the idea of a generalized linguistic subject, as well as the expression in language and speech of a wide variety of intentions and manifestations of will. Undoubtedly, this is facilitated by a number of factors of both extra-linguistic and intra-linguistic nature, which act mainly in a complex manner, sometimes overlapping. Among the non-linguistic ones, it is customary to consider: the independence of Ukraine; the acquisition by the Ukrainian language the status as a state language, the growth of its social prestige, general openness and democratization; elimination of censorship and self-censorship, tangible intellectualization of society, etc. Linguistics

traditionally include the systematicity of language, revival of its specific structural features, the tendency to integrate language elements, the principle of saving linguistic energy, actualization of expressive language forms, etc. If we take into account the time limits, then 2022 – the beginning of 2024 became decisive for the action of non-linguistic factors, in particular, the full-scale Russian-Ukrainian war, which affected the lexical composition of the Ukrainian language in general and modern mass media discourse in particular and continues to change them.

The selection and comprehensive study of thematic groups uniting linguistic units to designate the names of persons is of considerable scientific interest. They are heterogeneous in content, quantitative and qualitative parameters, active functioning, stylistic features, normative and codification. I. R. Vyhovanets and K. G. Horodenska classify personal nouns as an intermediate class between the groups of predicate and non-predicate nouns, since the named nomens have a complex semantic structure and combine the parameters of units of two varieties [20, p. 49]. In the linguistic literature, the classification and multidimensional interpretation of nomen units to denote persons have repeatedly been the subject of scientific research. A team of authors led by E. A. Karpilovska participated in solving the problems raised [3], as well as N. F. Klimenko [5], L. P. Kislyuk [4], M. I. Navalna in a single work and in co-authorship with other scientists [8-10], N. M. Kostusiak [6; 7] and N. M. Shulska [13; 14] in publications by O. A. Ponomaryova [11], M. I. Stepanenko [14], O. A. Styshov [16], L. M. Tomilenko [17], O. F. Tyutenko [18], L. R. Shpachuk [12], V. O. Yunosova [21], and others. We consider it obvious that most nomens clearly reflect the challenges and peculiarities of a certain era in the life of Ukrainian society. The period outlined in 2022 – the beginning of 2024 characterize lexemes to designate persons who participate in war or have a particular relationship to military actions. It is worth noting that previously military topics were rarely the subject of analysis, since there were no large-scale wars on the territory of Ukraine. Now the vocabulary that denotes the persons involved in the Russia-Ukraine war has been updated and needs additional study from the point of view of lexical-grammatical originality and functional parameters.

2 Materials and Methods

Nouns that denote persons constitute a large and heterogeneous group of words. Such nomens include common names of people according to their profession, social status, external features, character traits, relationship to the place of stay, family relationships, etc. A peculiar functional manifestation is inherent in the nominations activated during 2022 – the beginning of 2024 in the most popular Ukrainian mass media resources that served as research material.

The purpose of the article is to investigate the nomen lexicon for the designation of persons, recorded in the language of modern Ukrainian mass media, to determine the lexical-grammatical originality and functional load of the selected nomens.

Achieving the set goal involves solving the following tasks: analyze the proper noun vocabulary, in particular, nomens to designate persons who protect the country, nomens to designate enemies, nomens to designate the affected persons; to outline the lexical range of substantivized syntactic derivatives, to highlight and clarify the peculiarities of the nominations of persons taking (potentially able to take) part in military operations; to single out substantives for designation of persons affected by military operations; to determine the frequency of use of nouns to denote persons both in mass media texts and in the heading complexes of information resources; to characterize the functional and stylistic features of nomens during the Russia-Ukraine war.

The following research methods made it possible to achieve the goal and complete the task: descriptive, which is used to inventory, systematize and classify nomens selected from mass

media texts; the method of complex analysis, which contributed to the analysis of lexical units in the lexical-grammatical aspect; the method of contextual semantic analysis, used for the study of nomen to denote persons with an emphasis on the intratextual environment; the method of component analysis – in order to reveal the semantic features of lexical units; the method of quantitative calculations - to determine the trends in the use of nomens in the texts and headings of media publications.

3 Results and Discussion

The corpus of the collected material gave reasons to combine the nomens lexicon that marks persons, actualized in the mass media discourse, into three subgroups: 1) nomens to denote persons who protect the country; 2) nomens to designate enemies and traitors; 3) nomens to designate the affected persons. The formal explanation of the nominations of the first group is related to substantives such as military serviceman, volunteer, defender, conscript, etc. During the Russian-Ukrainian war, the frequency of using military names of professions and their varieties increased in the media space. Among the number of lexemes of this variety, in view of the quantitative manifestations, the linguistic unit military *serviceman* – "a person who serves in the army" – is dominant [1, I, p. 670], e.g.: "*In the near future, military serviceman will be demobilized - Danilov (heading)*" (https://www.pravda.com.ua, November 24, 2023); "*In Odesa, a serviceman took a woman and a child hostage, they were released (heading)*" (https://www.pravda.com.ua, December 28, 2023), etc.

Not only citizens of the country where the war is going on, but also representatives of other states that usually support the patriotic achievements of Ukraine take part in the war. Such persons are called *volunteers*. In modern lexicography, the specified nomination is interpreted as "one who joins the army of his own free will // One who of his own free will undertakes to perform some duty, some work" [1, II, p. 324]. The analyzed lexeme is recorded to a lesser extent in the headline complexes of media publications, mainly in the texts, cf.: "*At the time of the invasion, no one found out whether the volunteer's documents were fully processed, whether he was a soldier of the Armed Forces of the Soviet Union or of the Russian Armed Forces? Moreover, there was no one to avoid or hide or prevent mobilization. Everyone fought to the death for one thing - for Ukraine*" (https://www.pravda.com.ua, December 3, 2023); "*Georgian volunteer Irakli Kurtsikidze died at the front in Ukraine*" (https://www.pravda.com.ua, November 13, 2023, etc.

On various mass media resources, a noun is presented to designate the person - *defender* – "1. The one who defends, protects someone, something from attack, hostile actions, etc.; defender. // The one who does not allow wrongs against someone, something, intercedes for someone, something; deputy, patron 2. legal Someone who defends the interests of the accused during the trial; lawyer. 3. hist. Supporter of defense" [1, V, p. 551]. Journalists generally call those who take part or previously participated in the Russian-Ukrainian war, defending the integrity and independence of Ukraine, cf.: "*The defenders advanced on the left bank of the Dnieper in the Kherson region, have partial success – analysts (heading)*" (https://www.pravda.com.ua, November 13, 2023); "*On December 22, the bodies of 66 defenders of Ukraine were returned to the territory under the control of the government of Ukraine*" (https://www.pravda.com.ua, December 22, 2023).

In the language of mass communication, we record the complex lexeme *тероборонець* (*territorial defender*), which is not presented in Ukrainian lexicographical works. This nomination was formed as a result of collapsing the phrase "participant of territorial defense groups". With the beginning of the war, territorial defense – a system of nationwide, military and special measures, carried out in peacetime and in a special period with the aim of countering military threats, as well as providing assistance in protecting the population, territories, natural environment and property from emergency situations - became active. Ukrainians also began to quickly and voluntarily create territorial defense units on the ground, which became a

prerequisite for the activation of the derivative territorial defender, e.g.: "*Загинув 19-річний тероборонець із Краматорська* (заг.)" "*19-year-old territorial defender from Kramatorsk was killed (heading)*" (https://tehnopolis.com.ua, October 10. 2023); "*Ілля Зелінський, історик, активіст, тероборонець, учасник АТО/ООС, нині командир взводу 126 бригади Тероборони ЗСУ, з першого дня російського вторгнення захищав Миколаїв, брав участь у визволенні Херсона*" ("*Ilya Zelinsky, historian, activist, territorial defender, member of the ATO/UOS, currently the commander of the 126th platoon of the Territorial defense brigade of the Armed Forces of Ukraine, defended Mykolaiv from the first day of the Russian invasion, participated in the liberation of Kherson*") (https://www.ukrinform.ua, February 16, 2023), etc.

In Ukrainian informational journalism, an unequivocal noun denoting "*призовник*" ("*a conscript*") – "one who is called up for military service" has become widespread [1, VII, p. 622], cf.: "*Як повідомляє видання, з посиланням на «високопоставленого чиновника», зміни включатимуть використання комерційних рекрутингових компаній для проведення більш цілеспрямованого призову. Призовники зможуть обирати напрями служби, які відповідають їхнім навичкам*" ("*According to the newspaper, citing a "high-ranking official", the changes will include the use of commercial recruiting companies to carry out a more targeted recruitment. Conscripts will be able to choose areas of service that match their skills*") (https://www.pravda.com.ua, November 27, 2023).

The lexicon of the first subgroup "nomens to denote persons who protect the country" in the language of the Ukrainian mass media functions in direct meanings, the texts of journalists with these nominations are usually neutral, they are devoid of emotional and expressive coloring and expressive evaluation.

In the second subgroup, "nouns for enemies and traitors", commonly used words also prevail, e.g.: "*ворог, дезертир, окупант, загарбник, завойовник, садист, терорист, агресор, зрадник, колаборант, нападник, найманець*" (*enemy, deserter, occupier, invader, conqueror, sadist, terrorist, aggressor, traitor, collaborator, attacker, mercenary*), etc. The corpus of collected material testifies that in the Ukrainian media, among the named nominations, the lexeme *enemy* dominates, mostly used in the headlines. In the dictionary it is interpreted as "1. One who is in a state of enmity, struggle with someone; enemy, adversary. // A principled opponent of anything. 2. common. Adversary in war, in hostilities. 3. figurative. A pest of agricultural plants, forests, etc. [1, I, p. 739], e.g.: "*The enemy attacked Kharkiv Oblast at night with four S300/400 missiles - summary (heading)*" (https://www.pravda.com.ua, January 23, 2024); "*In the Kupyansk direction, the enemy has regrouped and is advancing from several directions (heading)*" (https://www.pravda.com.ua, November 15, 2023); "*Zelensky: The enemy will not become simpler, but Ukraine must become more powerful (heading)*" (https://www.pravda.com.ua, October 26, 2023), etc.

As evidenced by the index of actual material, the lexeme enemy is synonymous with the following nomen:

▪ *occupier* – "one who takes (participated) in the occupation; invader [1, V, p. 686], cf.: "*On the front during the past day, there were 53 clashes, the occupiers tried to advance on the left bank of the Dnieper (heading)*" (https://www.pravda.com.ua, January 22, 2024); "*The occupiers are intensifying their attacks and want to seize the initiative before the presidential elections of the Russian Federation – ISW (heading)*" (https://www.pravda.com.ua, December 22, 2023); "*The NSDC created the Occupant website with data on captured Russians (heading)*" (https://www.pravda.com.ua, May 13, 2022); "*The main goal of the Russian occupiers in the Kharkiv region is now the recapture of Kupyansk-Vuzlovoi*" (https://www.pravd a.com.ua, December 22, 2023); "*The occupiers attacked Ukraine at night with 31 drones, almost all of them were shot down (heading)*" (https://www.prav da.com.ua, December 16, 2023), etc.;

- **invader** – "one who forcibly seizes something; the conqueror" [1, III, p. 71], cf: "***Invaders*** *bring doctors from St. Petersburg to occupied Melitopol – opposition* (heading)" (https://www.prav da.com.ua, January 10, 2024); "***Invaders*** *continue to kidnap Ukrainian children – CNS (heading)*" (https://www.pravda.co m.ua, August 25, 2023); "*At TOT, the* ***invaders*** *force children to write letters to the occupiers - opposition (heading)*" (https://www.pr avda.com.ua, November 29, 2023);

- **conqueror** – "1. The one who participates in subjugation, conquest of countries, enslavement of peoples by military force; the opposite is a liberator. 2. figurative. The one who penetrates into the secrets of something, explores, conquers something unknown, unmastered" [1, III, p. 58], cf.: "*President of the Russian Federation Vladimir Putin stated that the Golden Horde for Moscow was always better than the "Western* ***conquerors***""" (https://www.pravda.com.ua, November 11, 2023); "*The book was published exactly when the racist* ***conquerors*** *attacked Ukraine*" (https://lib.itc.gov.ua, November 13, 2023); "*The Russian* ***conquerors*** *have once again resorted to the tactics of night shelling of residential quarters of the cities, reports the General Staff of the Armed Forces of Ukraine*" (https://bilahata.net, January 23, 2024).

In media journalism, along with the analyzed substantives, subordinate attributive units with a hidden and pronounced negative emotional-expressive color often function. In addition to clarifying the semantics of the reference word, they give additional characteristics to the named persons. In our opinion, Western and Russian adjectives reveal their hidden meaning, because when used in isolation, they have the status of stylistically neutral, but in the sentences presented above, after getting into a certain contextual environment, these units acquired new shades. The updated semantic and stylistic range of the western lexeme is evidenced by the design of the phrase structured by it in quotation marks. In contrast to these adjectives, the clearly expressed negative evaluative potential realizes the racist attribute, which has gained relevance since the beginning of the full-scale invasion.

The peculiarity of the lexeme *conqueror* lies in its modeling of complex derived words, e.g.: racist conqueror, Putin conqueror, etc., cf.: "***Putin-conqueror*** *breaks popularity records among Russians (heading)*" (https://www.pravda.com.ua, May 14, 2023).

In the second subgroup, "names to denote enemies and traitors", we single out a number of tokens, including *deserter, traitor, collaborator*, etc., which designate those who sided with the occupying forces. Mass media textual material attests that these words usually refer to traitors in various armies and societies. In particular, the word *deserter* means "one who has committed desertion. // figurative, despise. The one who neglects his public or official duties, avoids work" [1, II, p. 231] – denotes representatives of both sides participating in the war, cf.: "*DPSU about a* ***deserter*** *who fled to the Russian Federation: He does not possess secrets, but instead killed more than one occupier (heading)*" (https://www.pravda.com.ua, October 10, 2023); "*In the captured Kherson region, Russians go around houses in search of their* ***deserters***" (https://www.pravda.com.ua, August 13, 2023). The analysis of the specified nomination in the context of the persistence of trends makes it possible to focus attention on juxtapositions that serve as a means of condensation and at the same time informativeness of the statement, e.g.: *deserter major, deserter entrepreneur*, etc., cf.: "*Ukrainian* ***deserter major*** *was captured in Zhytomyr region*" (www.pravda.com.ua, August 13, 2023).

In media texts, the noun *traitor* is common – "one who betrays" [1, III, p. 698], cf.: "*SBU liquidated a* ***traitor*** *from Kharkiv region who fled to Russia – source (heading)*" (https://www.pravda.com.ua, December 23, 2023); "*The sentence was given to a* ***traitor*** *who "led" more than 120 units of Russian equipment to the outskirts of Kyiv (heading)*" (https://www.pravda.com.ua, November 10, 2023). Journalists

usually use the analyzed lexeme in the headline complexes of publications in order to provide the widest possible dissemination of information about such persons.

We consider the nomen *collaborator* to be synonymous with the lexeme *traitor*. The "Dictionary of the Ukrainian Language" does not fix the meaning of this word, it presents only *collaborationism* in a rather narrow and outdated meaning "treasonous cooperation with the fascist invaders in the countries occupied by them during the Second World War" [1, IV, p. 216]. We interpret the nomination of a *collaborator* as "a traitor to the motherland who cooperates with the invaders in the territories occupied by him", for example: "*The* ***collaborators*** *have run out. The occupiers in the south and east of Ukraine experience a lack of personnel (heading)*" (https://www.pravda.com.ua, December 24, 2023); "*According to the Center of National Resistance, local* ***collaborators*** *from TOT are being sent to Siberia for training*" (https://www.pravda.com.ua, December 12, 2023).

In the headlines and texts of media publications, Ukrainian journalists use tokens to designate enemy persons:

- **sadist** – "a person with sadistic tendencies, obsessed with sadism" [1, IX, p. 11], cf.: "*Putin is a* ***sadist***, *ready to kill everyone who disagrees with him – Zelenskyi (heading)*" (https://aspi.com.ua, July 21, 2023); "*Ihor Kondratyuk: Putin is a maniac, a* ***sadist***, *a murderer. Anyone. But not a human (heading)*" (https://espreso.tv, May 17, 2022). The lexeme *sadist* is recorded in complex derivative formations, e.g.: occupier-sadist, militant-sadist, etc., cf.: "*SBU identified the* ***occupier-sadist*** *who tortured civilians in the Mykolaiv region: what is known about him (heading)*" (https://tsn.ua, November 13, 2023); "*The Security Service of Ukraine informed about the suspicion of a* ***sadist militant*** *from the Russian Federation who tortured civilians during the occupation of Mykolaiv Oblast (heading)*" (https://www.nikpravda.com.ua, November 13, 2023). As evidenced by the presented illustrative material, in the studied media sources, the analyzed nomination serves as a negatively evaluative means of specifying the semantics of other nouns belonging to both proper and general names;

- **terrorist** – "supporter of terror tactics; a participant in terrorist acts" [1, IX, p. 94], cf.: "***Terrorists*** *in Donetsk region freed the so-called "government" of the occupied regions of the region (heading)*" (https://www.pravda.com.ua, June 8, 2023);

- **aggressor** – "one who resorts to aggression; attacker, invader" [1, I, p. 18], e.g.: "*The* ***aggressor*** *sends out a virus on behalf of the SBU - special service warning (heading)*" (https://www.pravda.com.ua, April 6, 2023); "*When we drive out the* ***aggressor***, *Ukraine must get a decent place in the security infrastructure – Zelenskyi (heading)*" (https://www.pravda.com.ua, April 24, 2023); "*The Ukrainian authorities are trying to follow the path of the* ***aggressor***, *destroying democracy (heading)*" (https://espreso.tv, February 20, 2023). Although the specified noun has a singular form, it denotes a set of persons who initiated military actions on the territory of Ukraine;

- **mercenary** – "1. The one who hired a job for a private owner, entrepreneur; hired worker 2. Soldier or officer of the mercenary army; mercenary 3. figurative, despised. The one who protects other people's interests not out of conviction, but out of selfish motives" [1, V, 96]. Namely with the second meaning, the analyzed lexeme functions in modern mass media, e.g.: "*Russians are recruiting Cuban* ***mercenaries*** *for the war against Ukraine – CNS (heading)*" (https://www.pravda.com.ua, October 26, 2023); "*British intelligence noticed the rehabilitation of the "Wagner"* ***mercenaries*** *in Russia*" (https://www.pravda.com.ua, November 23, 2023); "*Russia recruits* ***mercenaries*** *from Serbia into the army, they are settled in the Moscow region – media (heading)*" (https://www.pravda.com.ua, October 6, 2023); "*Deripaska supplies* ***mercenaries*** *for the Russian*

army through his company – media (heading)" (https://www.pravda.com.ua, August 1, 2023);

▪ *contractor*. The "Dictionary of the Ukrainian Language" does not submit this nomination, recording only the noun *contract* – "a written agreement, under which the parties who concluded it have mutual obligations" [1, IV, p. 269]. The processed factual material makes it possible to formulate the interpretation of the indicated lexeme: the *contractor* is "a person who has entered into a contract regarding the relevant obligations". As a representative of the analyzed thematic subgroup, the specified noun serves as a synonymous correlate of the word *mercenary*, cf.: "*Russian* **contractors** *and mercenaries who were in the front told the media that nothing good awaits the mobilized in Ukraine*" (https://www.pravda.com.ua, September 28, 2022); "*Russian* **contractors** *about their mobilized in Ukraine: To be honest, they will all die there – mass media*" (https://www.pravda.com.ua, 09/28/2023).

The lexeme "*ухилянь*" (*dodger*), which has not yet been recorded in the "Dictionary of the Ukrainian Language", needs a separate comment. In the indicated lexicographical work, its cognate verb to evade is given – "1. To retreat, deviate, bounce, etc. back or to the side from someone, something. 2. figurative. To try not to do something, not to participate in something, to stay away from something; avoid" [1, I, p. 18]. In the language of media platforms, the nomination is a *dodger,* with the meaning "a person who tries not to do something, not to participate in something, to distance himself from something; to avoid something", structures a group of common nouns. Unlike most of the previously analyzed linguistic units in the language of media platforms, it is usually used in contexts about Ukrainians and to a lesser extent applies to Russian men, e.g.: "*the SBU reported that it had uncovered 3 more schemes for* **dodgers** *(heading)*" (https://www. pravda.com.ua, November 21, 2023); "*Fake operations for "dodgers": a scheme was exposed in Zaporizhzhia, the ex-military commission is suspected (heading)*" (https://www.pravda.com.ua, September 27, 2023); "*The capital's "volunteer" helped the* **dodgers** *to leave Ukraine – law enforcement officers (heading)*" (https://www.pravda.com .ua, August 14, 2023). In the heading complexes of journalistic materials, the analyzed lexeme is often part of complex derivatives, the formation of which is aimed at economical expression of information. The substantive, which, together with the noun *dodger*, participates in the formation of juxtaposite, marks people by field of activity: *dodger blogger, dodger fisherman*, e.g.: "**Dodger blogger**, *who urges men to hide from the draft, received suspicion (heading)*" (https://www.pravda.co m.ua, November 22, 2023); "*Professional* **fisherman-dodger***. Ukrainian athlete fled from competitions in Italy due to summons (heading)*" (https://www.nta.ua, November 14, 2023). Sometimes, a complex derivative has a distinct emotional and expressive color thanks to evaluative nouns or nouns chosen on the basis of associative connections: for example, *dodger-gatecrasher*, e.g.: "**Dodger-gatecrasher** *wandered through the forest for a day, and then called the rescuers (heading)*" (https://www.pravda.com.ua, August 14, 2023); "*Thanks to the drone, border guards caught 14 "**dodging gatecrashers**" per day (total)*" (https://www.pravda.com.ua, October 28, 2023).

The second subgroup of "nomens to designate enemies and traitors" is the most numerous. Although lexemes give the materials a clear negative evaluation, they are used with direct meanings, do not have additional variants of meanings, and do not contrast with the general social vocabulary. Some words used to refer to persons in some places give journalistic texts colloquialism; mostly, this function is implemented by univerbations such as *refuser, contractor, dodger*, etc.

In modern Ukrainian journalism, a quantitatively limited functional manifestation is inherent in the linguistic units of the third subgroup of "nomens for designating victims", among which we register several names, in particular *refugee, displaced person, victim*, etc.:

▪ *refugees* – "people who leave their place of residence during a war or natural disaster" [1, I, p. 179], cf.: "*Research by the British Red Cross revealed that* **refugees** *from Ukraine in Great Britain have an increased risk of becoming homeless and thousands of their families may be evicted already in winter*" (https://www.pravda.com.ua, November 21, 2023); "*Every third Ukrainian* **refugee** *feels part of the society in the host country - but the same number would like to return home*" (https://www.pravda.co m.ua, February 28, 2023). The locative indicator of the analyzed nomination serves as the prepositional case form *from Ukraine* or the adjective *Ukrainian*;

▪ *migrator* – "one who has moved, moves to a new place of residence or is resettled somewhere" [1, VI, p. 273], cf.: "*The government will create a coordination headquarters to help* **migrators** *(heading)*" (https://www.pravda.com.ua, March 20, 2023); "*In Vinnytsia,* **migrators** *from Kharkiv region collected information for the Russians*" (https://www.pravda.com.ua, march 22, 2023). The nouns *refugee* and *migrator* are stylistically neutral, but informative. In Ukrainian mass media, they usually function in contexts about military actions in Ukraine.

The lexemes that make up the third subgroup "nomens for the designation of victims" are well-known words, which at the present stage have been activated due to the action of non-linguistic factors, in particular, war. Their formal representation is usually associated with nouns, which are characterized by a categorical meaning of objectivity, designed with the help of expressive means attached to this group of words. In addition to this part-language class, in Ukrainian journalistic texts, there are substantivized units that have undergone transpositional changes. I.R. Vyhovanets divides transposition into: 1) incomplete, or syntactic, in which only the syntactic position of the original unit changes without changing its morphological affiliation to the corresponding part of the language; 2) full, or morphological, by which a word of another part of the language is formed [Vyhovanets, UM, enc, p. 692]. Based on the part of speech the word is transferred to, substantivization (transition into a noun), adjectivization (transition into an adjective), verbalization (transition into a verb), adverbialization (transition into an adverb), etc. are distinguished. Currently, the issue of part-language transitions, although it has a long tradition of research both in Ukrainian and non-Ukrainian linguistics works, is one of the complex, ambiguously interpreted and those that have not received a final solution and full interpretation. We consider the study of substantivized linguistic units as a means of verbalizing nouns to designate persons as an important addition to the theoretical positions of scientists, which will make it possible not only to characterize them in terms of lexical originality, but also to identify grammatical signs of adjectival syntactic derivatives. A detailed analysis of mass media texts made it possible to single out two subgroups of lexemes, the formation of which is connected with syntactic transposition: 1) nouns to designate persons who take (potentially can take) part in military operations; 2) nouns to designate persons who suffered from military operations.

Less numerous is the first subgroup "substantives denoting persons taking (potentially able to) take part in military operations", structured by syntactic derivatives, the creative basis for which are adjectives and adverbs attached to the attributive sphere, in particular:

▪ *military* – "4. in the meaning of military. The same as a military serviceman" [1, I, p. 670], cf.: "*Ukrainian* **military** *man shot down an enemy MANPADS missile in the Mykolayiv region (heading)*" (https://lb.ua, January 13, 2024);

▪ *motivated* – "adverb. pass. to motivate. Give reasons that explain, justify certain actions, deeds, etc." [1, IV, p. 810], see: "*At the same time, priority is given to* **motivated** *citizens with high moral and business qualities and appropriate training*" (https://news.dtkt.ua, January 24, 2024); "*...the Ministry of Defense wants* **motivated**

individuals to update their personal data in the military commissions" (https://www.bbc.com, August 23, 2023);

▪ *mobilized* – "adverb. pass. to mobilize // in the meaning "mobilized". Conscript, conscripted to serve in the active army" [1, IV, p. 767], e.g.: "*What problems do the* **mobilized** *face?*" (https://www.pravda.com.ua, May 2, 2023); "***Mobilized** and volunteers of the armed forces: personnel record (heading)*" (https://ips.ligazakon.net, January 24, 2024); "*How financial support for vacation time is calculated for* **mobilized** *in the event of dismissal (heading)*" (https://armyinform.com.ua, January 24, 2024); "*What is known about the salaries of those* **mobilized** *in Ukraine (heading)*" (https://fakty.com.ua, January 15, 2024).

The second subgroup, "substantives for persons affected by military actions", which is structured by substantivized linguistic units, is much more extensive and larger in volume:

▪ *evacuated* – "1. adverb. pass. to evacuate. // Those who are being evacuated or have been evacuated somewhere. 2. in the meaning of adjective: Removed from a dangerous area" [1, II, p. 452], cf.: "*Those* **evacuated** *from the border of Sumy Oblast received financial assistance from an international organization*" (https://minre.gov.ua, January 24, 2024); "*Shelter for those evacuated from flooded regions: where to find temporary housing (heading)*" (https://life.pravda.com.ua, June 8, 2023);

▪ *displaced* – "adverb. pass. to displace. A displaced person is a person forcibly removed from the temporarily occupied territory to a foreign country" [1, I, p. 18], cf.: "*How do* **displaced** *people overcome problems in Ukraine?" (heading)*" (https://www.epravda.com.ua, January 2, 2024); "*Are there any advantages to registration in kindergartens for* **displaced** *children?*" (https://www.radiosvoboda.org, February 10, 2023);

▪ *victim* – cf.: "*on March 15, the government presented a new unified online platform for assistance to war* **victims**" (https://suspilne.media, March 15, 2023); "*How to correctly cover information about war* **victims**" (https://cedem.org.ua, March 18, 2022);

▪ *missing* – "adverb. act. to miss" [1, III, p. 663]; disappear; "1. To cease to exist, to be available. Disappear without news 1. News, message. To perish (disappear) without a trace (about a person)" [SUM, I, p. 685], cf.: "*Information on more than 24,000 persons was added to the register of* **missing** *- authorized officer (heading)*" (https://www.pravda.com.ua, July 12, 2023); "*The register of* **missing** *persons has become operational in Ukraine (heading)*" (https://www.pravda.com.ua, May 2, 2023);

▪ captive – "1. adverb. pass. to capture 2. in the meaning of adjective. Taken as prisoner; who is in captivity. // One who was taken prisoner (in 1 meaning)" [1, VII, p. 94], cf.: "*Shooting of Ukrainian captives near Zaporizhzhia: the dead were soldiers of the 82nd Brigade of the Russian Armed Forces. Shooting of* **captives** *is a war crime according to international law (heading)*" (https://lb.ua, December 12, 2023);

▪ *wounded* – "1. Adverb. pass. to wound. 2. He who received a wound (wounds). // A person who was wounded, has a wound (wounds)" [1, VII, p. 247], e.g.: "*Russians shelled Kurakhove from Grady: there is a dead and* **wounded**" (https://www.pravda.com.ua, January 22, 2024); "*The Russians hit Kupyansk with artillery: there is a victim and* **wounded** *person*" (https://www.pravda.com.ua, January 22, 2024); "*Russians hit a residential building in Beryslav: there is* **wounded** *person*" (https://www.pravda.com.ua, August 21, 2023); "*The Russians hit Selidovo and its surroundings: 2 dead, 8* **wounded**" (https://www.pravda.com.ua, November 21, 2023).

The following subgroups were analyzed: 1) nouns to designate persons who take (potentially can take) part in military operations; 2) nouns used to refer to persons affected by military operations, testify to a wide functional capacity. It is worth noting that some nominations have signs of both subgroups - we

are talking about transposes such as captive, prisoner of war, killed, wounded, missing, as they denote persons directly involved in military actions. Their inclusion in the second subgroup is motivated by the fact that the semantics outlined in it are more clearly presented from the analyzed nominations. The compiled corpus of factual material proves that the first subgroup is quantitatively inferior to the second one. At the same time, their commonality lies in the modification of categorical specificity compared to creative lexemes. As it is known, the grammatical features of attributive units are their ability to agree with base words in gender, number, and case. Instead, falling into the sphere of the noun, the specified categories acquire the status of independent ones, in the category of the genus – also a classification categorical value. In the language of modern journalism, substantivized lexemes to denote persons perform a nominative function and prevail in texts of informational genres.

4 Conclusion

Thus, as our research shows, in the texts of the most widely circulated Ukrainian mass media resources (2022 – early 2024), nomens are actively used to denote persons that were actualized as a result of extraneous factors, in particular, the war and the negative consequences it caused. The analyzed language units reveal lexical-grammatical and functional originality and are evidenced not only in mass media texts, but also in heading complexes of information resources. Nominations, expressed by nouns, structure three subgroups: 1) nomen to designate persons who protect the country; 2) nomen to designate enemies; 3) nomen to designate the affected persons. To name persons, journalists actively use syntactic derivatives, which include: 1) nouns to designate persons who take (potentially can take) part in military operations; 2) nouns to designate persons who suffered from military operations.

Noun lexicon for designating persons in texts on military topics performs a nominative function and has a low evaluative load. The analyzed nouns do not contrast with neutral vocabulary, often do not have expressive and descriptive shades. In some places, nominations give persons pejorative characteristics, but purely because of the negative meanings of tokens. Only certain formations-univerbations serve as means of linguistic economy and occasionally make Ukrainian mass media texts more 'colloquial'. Nomens to designate persons prevail in information genres of journalism and refute a special feature of the journalistic style - the constant presence of emotional and expressive coloring. This gave grounds for asserting that the journalistic materials of the period of the full-scale war are dominated by commonly used vocabulary with minor stylistic nuances.

We consider the consideration of other thematic groups of lexemes in the language of the mass media, which denote persons (new appearances of the names of professions during the war, nominations of politicians, etc.), as well as fixed and transposed expressive means, to be a perspective of the research.

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PERFORMANCE POETICS AS AN IMALOGICAL VISION OF A CONTEMPORARY MUSICAL WORK

[a]BOHDAN KYSLIAK, [b]LIUDMYLA SHAPOVALOVA, [c]RUSLANA VAVRYK, [d]DMYTRO HUB'YAK, [e]SERHII DAVYDOV

[a]Ivan Bobersky Lviv State University of Physical Culture, 11, Kostyushka Str., 79000, Lviv, Ukraine
[b,e]Kharkiv I. P. Kotlyarevsky National University of Arts, 11/13, Maidan Konstytutsii, 61003, Kharkiv, Ukraine
[c]National Academy of Ground Forces named after Hetman Petro Sahaidachnyi, 32, Heroiv Maidanu Str., 79012, Lviv, Ukraine
[d]Ternopil Volodymyr Hnatiuk National Pedagogical University, 2, Maxyma Kryvonosa Str., 46027, Ternopil, Ukraine
email: [a]bogdankuslyak@gmail.com, [b]refleksiaua@gmail.com, [c]ruslana_vavrik @ukr.net, [d]hubjakdmytro@gmail.com, [e]davydovjazz@gmail.com

Abstract: The article considers features of musical performance in the context of imalogical vision. It is emphasized that in the process of performance, musical work can acquire extensively new meanings and functions. On the basis of contemporary examples, it is shown how imalogical vision of a musical work, shaped within performance poetics can become a tool of cultural diplomacy and soft power. The study employs interdisciplinary approach, combining vectors of musicology, philosophy, and political science.

Keywords: musical performance; performance poetics; interpretation; post-structuralism; cultural diplomacy.

1 Introduction

In the modern situation, it is impossible to overestimate the importance of understanding "*our*" and "*strangers*", which from the moment of the "beginning of globalization" ("the explosion of globalism") suddenly had to become "equal to each other". The idea of equality and equivalence of all people, who must collectively adapt to the limitations of "their" planet, calls into question the images of various cultural communities in their originality and difference from other communities. This idea challenges the very concept of cultural identity, which has hitherto served as the basis for the unity of certain groups. The fundamental condition for the coexistence of more than seven billion people in an increasingly crowded world seems to be recognition and respect for the value of the "other," which is best implemented in art, and especially in music, and is described within the framework of imalogy.

It should be noted that the concept of "imalogy" relatively recently entered the circulation of the humanities. This is a scientific discipline whose subject of study is the images of "others", "alien" nations, countries, cultures that are foreign to the perceiving subject. The image of the "stranger" is studied in imalogy as a stereotype of national consciousness, i.e., as a stable, emotionally rich, generalized figurative idea of the "alien", formed in a specific socio-historical environment [15]. It follows from this that imalogy not only reveals the image of the "stranger", but also, in connection with the processes of reception and evaluation, characterizes the perceiving subject himself, i.e., reflects national identity and own value system.

Imalogy is interdisciplinary in nature: its sources are language, culture (both mass and elite), various types of art, literature, folklore, data from semiotics, ethnolinguistics, ethnopsychology, ethnography, ethnology, cultural studies, history, political science, etc. By studying the data obtained from these sources of materials, imalogy strives to generalize them and develop a certain general paradigm for the reception of "strangers" in the space of one or another national consciousness. Imalogy has its own specific features in music, where performing poetics has an incomparably greater space for interpretation and experimentation than it is possible, for example, in literature.

The general conceptual task of imalogy is to create an objective image of a perceived object. At the same time, imalogy strongly depends on the personality of the perceiver, on his subjective view, and existing stereotypes. In turn, the professional competence of a performer of modern musical works presupposes the ability to form such performance poetics in the process of performing any musical work that it will be able to convey the artistic image of the original as closely as possible, refracting it through the lens of the cultural "matrix" of the audience. The imalogical vision, in essence, involves carrying out of a kind of PESTLE analysis [2] of the audience, in order to select the appropriate style and vector of interpretation, subtle features of performance poetics.

In this context, studies devoted to postmodern artistic communication in music are of interest. In them, the features of the relationship between the artist and the viewer are derived from the specifics of the postmodern subject, and the possibilities of mutual understanding between the performer and the listener are considered in the intersemiotic, multilinguistic space of postmodern musical works, which include the stylistic features of many different cultural texts. Structuralism, according to Barthes, is looking for not just a subject, but a new, highly intelligent *homo significans*, a signifying person, a producer of meanings - meanings in the specific understanding of poststructuralists, that is, those that are secondary in relation to form and are not expressed, but rather produced [19].

The simultaneous existence of such a multitude of cultural texts in a work cannot but affect its form. The specificity of postmodern music is determined by special spatio-temporal relations: the line between the individual and the whole is blurred, each moment of musical time contains both a disappearing past and an advancing present-future. Therefore, it is difficult to determine whether a given time moment belongs to the past or the future. It is in a state of timelessness, eternity. The classical musical form, which embodied completely different ideas about space and time, where there is always a dramatic clash of contrasting themes, development, climax, reprise, becomes unacceptable. The horizontal deployment of thematic material in postmodern music does not make sense, because here every moment is the main one. The form turns into an open structure [22]. The main thing about open form is that it gives complete freedom of co-creation to the listener. It is not complete, is open to many interpretations and readings, its existence is an endless expansion and renewal. The thesis about the "death of the author" expressed by Barthes is confirmed very convincingly by postmodern music by the very fact of the presence of polystylistics in it.

Understanding performance technique in a broad sense as art, it is logical to recognize its involvement in new forms of modern thinking of composers, especially their worldview and way of embodying new content. About this connection of art with the socio-historical and spiritual context of the era, experts write the following: "The second half of the 20th century brought a lot of new things to musical culture, both in terms of content and form. The cataclysms of wars, major social and revolutionary changes, profound changes in social relations, an unprecedented leap in science and technology, the development of outer space were reflected in the works of literature, painting, music... The new era caused the emergence of new images and means of their embodiment in art" [16].

Musical matter, embodied in works of art, acquires a real sound through the performer. Art, and, in particular, musical art, makes it possible to analyze, understand, and feel the deep foundations of culture, and, thereby, comprehend the ongoing processes at a new level. Musical performance, which embodies new phenomena of general cultural development, is interpreted as a creative process in culture [19]. The performing musician, as a creative person, is a direct participant in the cultural creative process. Understanding the interaction within musical communication (composer, performer, listener) through a musical work provides the possibility of a new look at the

internal mechanisms of the development of modern culture and cross-cultural interaction.

The imalogical aspect of national self-determination, from which the basic distinction "I – Other" follows, is comprehended in a historical context in the work of J. Lierssen "*Poetics and Anthropology of National Character (1500-2000)*". However, as evidenced by the developments of comparative scientists, imalogical categories are not limited to the framework of such a dichotomy. J.-M. Mura identified two types of the category "The Other," which he designated as "stranger" and "foreigner". Other researchers prefer the terms "alter" and "alius", where "alter" is an artistic image constructed on the basis of positive or negative ethnic or national stereotypes, while "alius" is located outside the framework of a particular group, nation or culture and is represented as an artistic image with symbolic or metaphorical functions [17].

For a long time, the topic of interaction between musical cultures and civilizational communities remained on the periphery of theoretical understanding. Attention was focused mainly on questions about the essential nature of music as a type of artistic and aesthetic activity. But today, the poetics of musical performance has become one of the elements of soft power, the formation of a national image, and this cannot be ignored. In turn, the study of this phenomenon on a scientific basis is possible precisely on the basis of imalogy.

2 Method

Understanding the current situation in culture as a synthesis or dialogue of cultures determines the need to turn to the idea of dialogue and polyphony, as well as the theory of interaction of cultures. Sociological aspects of musical culture and intercultural communication are studied from the perspective of the sociology of music. Within the framework of an interdisciplinary approach, the provisions of the theory of nonlinearity are used. Research from the standpoint of the science of music involves the use of approaches of reintegrated musicogy, which arises at the intersection of ethnomusicology, classical musicology, and anthropology.

The study used the method of philosophical comparative studies, the method of categorical analysis, the hermeneutic method, as well as axiological and anthropological approaches. The work is based on the general scientific principles of historicism and objectivity, the unity of the historical and logical, the ascent from the concrete to the abstract and from the abstract to the concrete.

3 Results and Discussion

Giving his understanding of the image, Baudrillard identified its four main functions: the image reflects reality; the image masks and distorts reality; the image masks the absence of reality; the image has no relation to reality, being pure fiction [5; 6]. Commenting on the interpretation of the image proposed by J. Baudrillard, R. Barnett expresses a conceptual position: both the creator and the perceiver of the image can put their own idea into it, use it in relation to their own goals [4, p. 331]. The second conceptual position of Baudrillard and Barnett is the assertion that "the image generates its own reality" [4, p. 332].

Thus, we come to the following conclusions: the system of images shapes a person's views; the author's creation of an image introduces the creator's own goals and attitudes into its content; a person perceives the world through images, and the perception of this world often depends on the content of the image; imalogy, due to its universality, has become an independent discipline. This is noticeable in the example of the author's vision of the cities of the world: E. Hemingway's Paris is fundamentally different from G. Miller's Paris, P. Ackroyd's London - from Charles Dickens' London.

At the same time, "an alien musical culture, with close interaction, always reveals itself more fully and deeply in the eyes of the "other" culture. For one meaning, as a rule, having

met and exchanged with another meaning, through dialogue and interpenetration, can comprehend its depth and learn the hidden sides of the "other" culture. The dialogical nature of cultures (in our case, musical ones) gives rise to searches in the field of art history and philosophical methods. From here, opportunities arise for a variety of comparative, hermeneutic studies to identify the contexts of "eternal themes" and problems in art, to deepen historical excursions, and comprehend pressing social and philosophical problems" [11].

Musical performance is one of the ways of intercultural communication that most fully reveals the "spiritual axiomatics" of a particular culture, the originality of its "cultural code". Acting as an element of "soft power," musical performance in different contexts experiences the effects of this contradictory phenomenon, which includes both the spontaneity and openness of culturally specific self-expression and the vector of political and ideological manipulative influence.

For the modern theory of "soft power", as well as for the earlier theory of the "cultural revolution", the fact that music is one of the broadest "platforms" of cultural influence is especially important: to understand it, no other language is needed except the language of the music itself. "Soft power" from a "naive" and "manipulative" perspective uses the resource of musical performance for political purposes, promoting a positive perception of the image of its country by a wide foreign audience [18].

When interpreting a musical composition, the performer not only reproduces the composer's intention in sounds, but also continues to develop the dramaturgy of the work. Reproducing the author's content, the musician simultaneously rethinks it in accordance with his subjective worldview and individual experience, thereby "finishing" what was not said by the author, explaining equally important aspects of the plot that are hidden from the naked eye. And as a result, in each performance a performance content arises, which is new each time (there is no identical reading of the text) [7]. The mystery of the performer's creative process lies in this unique, individual vision and understanding of the plot at a given specific moment. In confirmation of this, one can cite the statement of the world famous cellist, conductor, composer P. Casals: "The performer, whether he wants it or not, is an interpreter and reproduces the composition in his interpretation" [15]. Despite the fact that interpretation represents different versions of the author's content, the role of the performer, as a creator of music, is no less significant. Some scholars stress that understanding through the interpretation of "cultural essences" not only of the past, but also of the present is, to one degree or another, creation, construction [16].

Achievements of scientific and technological progress contributed to the emergence of new technical means, which opened up enormous opportunities for the performer to individually perform a work. Namely through understanding the work, the subjects of musical communication meet each other halfway: the performer and the listener (composer and listener, composer and performer).

Communication in musical dialogue is an integral synthetic phenomenon located on the edge of a number of scientific disciplines (history, philosophy, cultural studies, aesthetics, art history). Naturally, the difficulties in the study of musical dialogue are indicative of the pattern of their one-sided art historical consideration, when the priority of "music for the sake of music itself" is intensified and focused, the elevation of the individualistic and personal principle extremely narrows the space of dialogue and puts forward the principle of monologue to the main role [9].

The process of musical semiosis reveals, firstly, the sequence of deployment of structural layers of perception and experience of musical consciousness, secondly, the stages of interpretation and understanding of specific musical signs, thirdly, awareness and comprehension of the existential-personal meaning-values of music and, fourthly, assimilation of general cultural symbols and

values of music. The search for pure musical meaning and analysis of aesthetic experience in the process of perception, performance, and understanding becomes the main goal of musical semiosis as a process of interpreting musical significance. Consequently, the hermeneutic-axiological methodology for analyzing music as a cultural phenomenon allows identifying two significant levels of musical semiosis. Firstly, it is the level of author's interpretation, which provides for the general cultural opposition "epoch - author", containing specifically the artistic conditions of musical creativity, the author's meaning and value guidelines, the "ethos" and "logos" of culture in general. Secondly, it is the level of performing interpretation, on the one hand, accurately conveying the author's idea of a musical work, and on the other, re-creating the author's idea, painting it in new colors or creating a new meaning for a well-known work. Often a new interpretation of an already known piece of music became an independent musical event, which is very typical for modern musical works.

The main goal of any interpretation is to understand the meaning. The problem of understanding in the light of philosophical ontological hermeneutics acts as the initial existential characteristic of human existence, namely understanding is the basic task and goal of philosophical hermeneutics as interpretation. That is, understanding becomes an inexhaustible procedure of interpretation when the Text is Genesis [16]. The "interpretive era" began when the author disappeared from the concert stage. The performer (performers) can (in some cases must) freely interpret musical texts, and as a result - a boundless semiotic field of play with the meanings and values of culture is formed.

In the conditions of the formation of new political realities in recent years, as well as the rapid development of technology and mass media, the attention of scientists and practitioners is increasingly being drawn to the issues of developing new and improving old, well-tested tools for establishing a positive image of the country in the space of intercultural interaction. It can be assumed, following P. Bourdieu, that such a reflexive production of symbolic "cultural capital" that legitimizes power practices is a characteristic feature of our time [17].

One of the tasks of intercultural interaction is, as it is known, the mutual adaptation of value systems of national cultures [8]. It does not always require integration, but is "doomed" to dialogue. Art, and musical art in particular, has the property of synchronizing value systems through a high degree of empathy, based on the synchronization of sensory experiences of a group of listeners.

The idea of "generative poetics" of a performing text is of interest [13]. The need to turn to a concept unusual for musical art is dictated by "a shift in research interest from the concept of a work as a structure to the theory of the text as a generation of meaning" [4]. Generative poetics is the use of certain aesthetic means and the poetic manner that underlies the generation of the performing text of a musical work.

The concept of generative poetics is borrowed from linguistics, and it is based not on a description of the text, but on modeling the process of its generation. The basis of the theory of generative poetics is based on the fact that a literary text can be represented as the sum of a theme and expressive techniques, with the help of which the theme is transformed into a real text [16]. The transfer of this theory to the field of performing arts makes it possible to "see" the mechanism of figurative and semantic growth of the composer's heritage in the work of outstanding performers [4]. The main emphasis of generative poetics, in this aspect, is associated with the study, understanding, and analysis of the principles of the birth of a performing text.

At the same time, musical dialogue acts as a cultural breakthrough in three different dimensions of the musical-historical process: a) individual-personal, b) dialogical, and c) artistic-systemic. The combination of these components allows

to more accurately identify subject-substantive connections in them, as well as unique artistic features.

Today, glocality is becoming a factor in the formation of a new civilizational reality. The modern world represents a coexistence of different cultures with their own values and rhythm of life. The very term "coexistence" implies close interaction between these cultures and people belonging to a particular culture. At the same time, today, in an era of global crises, the forces of self-determination inherent in local culture are growing, and its powerful potential, realized in the processes of social transformations, is being revealed.

In the context of the globalization of human existence, the fact is revealed that the multidimensionality and originality of the existence of people and things has not only a social scale. The identity of people, existing as a process, makes it possible to keep in unity moments of activity that are stratified in time and disintegrating in space, relying not only on the polyphonic complexity of the social process, but also on the anthropological depth of the individual's existence. The internal basis for the formation of anthropogenic relations in society is the emancipation of culture, the transition from the reproduction of cultural patterns to culture creation at the level of the individual [10].

Ukrainian researcher Stepan Solanskii notes that "the artistic-interpretive discourse of a glocalized space is a set of interpretive versions of an artistic (in particular musical) work, which is marked by a hierarchy of priorities formed by a certain local environment, selectivity of both the genres themselves (specific works) of one or another composer or style, as well as models of performance of this work, the specifics of their social representation, consonant with the spiritual needs and values that crystallized in the process of historical development of this community" [20, p. 146].

The imalogical vision of performance poetics becomes the "atmosphere" of such a landscape. In particular, it should be noted that there has been a noticeably increased interest in the work of Ukrainian composers and performers. Since the beginning of the 2000s, the performing poetics of Ukrainian musicians performing modern works and folklore works in modern adaptation has been part of the imalogical "mission" of Ukrainian music, and since the beginning of the full-scale invasion of the Russian Federation it has become an important element of soft power and "public diplomacy".

Ukraine exercises "soft power" through the Eurovision music competition and cultural events that are held both domestically and abroad.

In June 2023, for the first time in Ukrainian history, the Ministry of Foreign Affairs held a classical music concert "Night Serenades" dedicated to Nadiya Savchenko, Oleg Sentsov, and all other Ukrainians who are illegally detained in Russia. Not only compatriots were invited, but also foreigners - foreign diplomats, journalists, expats. In such acts of public diplomacy (it already has a fully formed name - "musical diplomacy"), performing poetics is inseparable from the imalogical vision. Such poetics work with emotions and feelings, expanding the country's loyal audience in the world.

Expanding its space, musical performance gradually secured its status as an autonomous creativity. Researchers note that in the romantic philosophy of art, which raised the importance of the composer-creator and the work he created, a seemingly passive role was left to the performer. However, at the same time, emphasizing the importance of the emotional principle and fantasy in art, romantic aesthetics allows considering the performer, who is also an artistic individual, as a creative person and has the right to free expression of his "Self", the world of his feelings and experiences, the right to creative initiative [17].

In December 2023, the conductor of the National Opera of Ukraine and the artistic director of the Kyiv-Classic orchestra, German Makarenko, was awarded the title "UNESCO Artist for

Peace". Let us remember that this prestigious international award is given to those who, through their activity, draw attention to the problems of peace, justice, tolerance, mutual understanding between people, and deep commitment to the ideals and priorities of the United Nations.

German Makarenko became the first Ukrainian artist to be awarded the title "Artist for Peace." Since the existence of this prestigious UNESCO award, no more than 60 people have won it in the world, including British singer Sarah Brightman, Brazilian ethnic music performer Gilberto Gil, Chinese actress Gunn Li, Portuguese actress and director Maria de Medeiros, Japanese musician Eijin Nimuro, Canadian singer Celine Dion, etc. However, Makarenko's musical repertoire covers not only national works, but also folk and classical musical traditions of North and Latin America, the Asia-Pacific region, as well as Europe and Ukrainian music, in particular, the music of conductor's native region - Lviv. Thus, his performing poetics is capable of presenting to listeners an imalogical vision in musical works of completely different genres and "geographies".

Modern Ukrainian composers - V. Antonyuk, O. Bilash, Ya. Bobalik, E. Brilin, Yu. Dibrova, Yu. Korzhenko, M. Lastovetskyi, R. Panchuk, O. Serova, V. Sylvestrov, M. Skoryk, B. Filts, O. Shimko, M. Shorenkov, and others - in the piano miniature genre skillfully fill a small artistic work with significant content, without violating the requirements of a one-part, two- or three-part form.

It is interesting to note the piano piece which has the program name "Zabavka" (by Ruslana Vavryk). It is small in volume - 45 bars. The coverage of a colorful range of sensations opens up wide opportunities for the manifestation of the performer's creative imagination and the use of the piano sound in the embodiment of the image. The piece has a simple, intonation-rich transparent texture and requires the performer to read carefully the author's text, working out various strokes, clarity of articulation in the bass presentation and appropriate reproduction on the instrument. The composition is dominated by the rational-constructive principle in relation to the repetition of thematic material, squareness, symmetry, etc. The musical and performing experience of working on the piece encourages the use of associative techniques thinking, ambiguous worldview.

Also interesting in the context of our research are the characteristic features of the multifaceted work of another Ukrainian musician, Runchak. The unifying component of his music is the unconditional conformity to the linguistic and stylistic features of modern music in the widest possible dimension of its innovative ideas. A significant sign of this is, in particular, the consonant phenomena of postmodernism with its inherent synthesis and reinterpretation of many genre-style systems of different musical eras. Such a synthesis of the ethnic and the avant-garde is contained in the "Ukrainian Suite"; polystylistic mixes - the suite "Portraits", where the revival of the stylistics of past eras produces impulses for new meanings of the composer due to the duality of the semantic content of the music.

Genuine pianistic mastery, reaching a supersensible level, has the ability to capture the subtlest vibrations, moods of the sociocultural background and influence these social moods [14]. This is the difference between the cultural influence of "high pianism" and the influence of other methods of musical expression.

The application of philosophical and axiological analysis to the study of the dynamics of the life of the country' "cultural face" allows to more fully study such an aspect of cultural creativity as the communicative existence of music in the sphere of intercultural interaction. Musical art, including piano performance, acquires special significance in this regard. Revealing the soul of the people in a complex emotional-intellectual synthesis, it at the same time represents one of the ways of transmitting the semantic axiomatics and value foundations of culture, it contributes to the search for ways of

mutual understanding while respecting the characteristics of each side of the dialogue.

With a similar goal, but in a slightly different way, Chinese performers carry out the imalogical "mission" of forming an image of Sino-Americanness in recipients. An artistically constructed and imalogically complex system of mutual reflections of hetero- and auto-images, diverse, complexly interacting "strangers", "others", and "us" reveals the innovation of Sino-American musical performers in the representation of the transcultural imalogical model of Sino-Americanness.

In the United States, Nowruz "isn't complete without music", says Jalal Kimia, an Iranian-born percussionist based in Washington. Originating in ancient Persia (modern Iran), Nowruz has also been celebrated in Central, Western and South Asia, the Caucasus, the Balkans and the Black Sea basin for more than 3 thousand years. The holiday, whose name means "new day" in Persian, coincides with the spring equinox, when the sun moves along the earth's equator, evenly dividing day and night hours. Playing the daf, a frame drum used in popular and classical music, Kimia has performed with Iranian traditional and folk groups at numerous Nowruz events. He also teaches and leads daf playing groups. Today, Kimia plays in the Rumi Daf ensemble, which recreates the dynamic rhythms and melodies of his ancestral home. "Music is my tool that I use to show our culture to the world," he says. Lily Afshar, an Iranian-born classical guitarist and professor of guitar at the University of Memphis who also performs at Nowruz concerts, collaborates with the Pacific Symphony Orchestra as a soloist. Afshar performs Vivaldi's concerto "due to its lightness and spring mood", through performing improvisation and creative performing poetics, giving it "shades" of Nowruz and thus forming an imalogical vision [12].

A musical text functions, is transmitted, and acquires actual existence only in the form of performance. In music, performance is not just a translation of musical notation into sound form, but it is always a re-creation of the temporary form of music, its way of socio-cultural existence. Performance is essentially interpretation. Numerous authors emphasize the decisive importance of the performing interpretation of the musical text, insisting on its relative autonomy and creative nature [1].

Rereading and interpretation of the author's text arises as an intramusical procedure, but the conditionality of this process is determined by the "conditions of the context", that is, the reality of culture [21]. The new interpretation is an event in the exact etymological sense of the word: as a co-existence, the joint existence of various individuals within one whole - an author's work as a cultural text. Interpretation from the point of view of the philosophy of music is considered as a co-existence, a dialogue, and the musical text - as a space of endless and relevant possibilities.

At the same time, imalogy allows one to address not only the psychological and aesthetic "Self" of the listener, but also his social, ethnic and civic "Self". In this case, the musician conducts a kind of PESTLE analysis, identifying the characteristics and values of the audience and its landscape, and building the performing poetics accordingly - thus, this poetics is invariably generative in nature.

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Primary Paper Section: A

Secondary Paper Section: AL

PROSPECTS FOR ESTABLISHING REQUIREMENTS FOR FIXED COMPRESSED FOAM FIRE-FIGHTING SYSTEMS BY EUROPEAN STANDARDS

[a]VOLODYMYR BOROVYKOV, [b]VADYM NIZHNYK, [c]OKSANA SLUTSKA, [d]TARAS SKOROBAHATKO, [e]VIKTOR MYKHAILOV, [f]DMYTRO VOYTOVYCH, [g]ROMAN SUKACH, [h]YAREMA VELYKYI, [i]VOLODYMYR-PETRO PARKHOMENKO, [j]NAZAR SHTANGRET

[a-e]*Institute of Public Administration and Scientific Research in Civil Protection, 21, Vyshhorodska Str., 04074, Kyiv, Ukraine*
[f-j]*Lviv State Univesity of Life Safety, 35, Kleparivska Str., 79000, Lviv, Ukraine*
email: [a]foam2000@gmail.com, [b]nignyk@ukr.net, [c]sl_oksi@ukr.net, [d]tarasskorobagatko@gmail.com, [e]mvn2006@ukr.net, [f]voytovych.dmt@gmail.com, [g]sukach.r@gmail.com, [h]yaremavelikiy@gmail.com, [i]pvpo2016@gmail.com, [j]shtangretnazar1993@gmail.com

Abstract: The purpose of the work was substantiation of the requirements for foam concentrates, compressed foam fire-fighting systems and their components which could currently be included in the European standards for foam fire-fighting systems, as well as spheres for further research. For this, appropriate information available in literary sources and regulations was analyzed. It was established that the currently existing portable compressed foam fire-fighting systems were intended primarily for fighting fires at manned facilities. Statistical materials on the abundance of fixed compressed foam fire-fighting systems in the world, despite their proven suitability for fighting fires at many types of facilities, in particular, in the presence of combustible liquids, have not been found. At the same time, a tentative list of facilities that could be protected by compressed foam fire-fighting systems was outlined and approximate restrictions on the use of such systems were indicated. It was established that there were no direct correlation between expansion ratio, stability and fire-extinguishing efficiency of compressed foam. The possibility of amending appropriate European norms with the information on the applicability and conditions of use for the protection of facilities with compressed air foam sprinkler and deluge fire-fighting systems was substantiated. In particular, the types of foam concentrates allowed for this were named, as well as the proposed values of the application rate and duration of application of their foam solutions. Opinions were expressed regarding promising spheres for further research aimed at improving European standards for foam fire-fighting systems.

Keywords: burning; combustible liquid; compressed foam; expansion ratio; fire; fire hazard; fire-fighting system; foam concentrate; foam stability

1 Introduction

As it is known, the most common fire extinguishing agent is water. Most often, it is delivered with the help of branch pipes in the form of compact, less often sprayed jets from mobile fire-fighting equipment, primarily fire engines. For the formation and application of compact jets of water with the purpose of fighting fires, fire hose reels are also used which are provided in buildings and structures in accordance with building codes. Fixed water fire-fighting systems (mostly sprinkler systems) which protect manned facilities have also become widely used; these include residential, office, commercial, and industrial buildings.

The advantages of water as a fire extinguishing agent are its cheapness and availability, safety for people and the environment, and its suitability for extinguishing most solid combustible materials. In addition, the high specific heat capacity and specific heat of vaporization of water contribute to intensive cooling of the fire place and cessation of combustion. At the same time, it is characterized by such disadvantages as low viscosity, due to which there is an intensive emergence of water from the surfaces of burning materials, and high surface tension, due to which wetting of hydrophobic solids and materials with a developed surface (wool, paper in bundles, peat, etc.) with water is complicated. Moreover, water is unsuitable for extinguishing the absolute majority of combustible and flammable liquids, and it is also characterized by high electrical conductivity which complicates or makes it impossible to extinguish fires involving live electrical equipment with it. Its use is also unacceptable or ineffective for extinguishing combustible metals as well as substances that enter into a chemical interaction with water or release oxygen or other oxidants during their destruction. One way or another, the rate of water use during fire-fighting usually does not exceed 3-5 %, while the rest of it is wasted, often causing additional damage.

These disadvantages of water as a fire extinguishing agent forced researchers to look for alternatives to it. One of the main trends of this became the use of functional additives to water (surfactants, mineral salts, water-soluble polymers or their combinations), and another was the development of fundamentally new types of fire extinguishing agents (powder, gas, aerosol ones). The "hybrid" trend became development of foam concentrates for extinguishing fires, which could also be considered as functional additives to water. At the same time, the use of foam solutions is principally different in that it is not branch pipes that are mostly used for the formation of solid or sprayed jets, but ejection foam generators or spray nozzles with or without air aspiration. Accordingly, not aqueous solution of chemical substance(s), but air-mechanical foam is used for fighting fires. Having lower density than water, foam can be kept on the surface of hydrocarbons and other flammable liquids, spread across it, form a foam "cushion" and provide extinguishing. Thanks to the use of soap-like (those that form colloidal micelles) surfactants as the basis of foam concentrates, their aqueous solutions have high wetting capacity. Namely for this reason, foam concentrates are sometimes used for the preparation of wetting solutions for extinguishing solid combustibles. In addition, the release of aqueous solutions containing such substances during the destruction of the foam also contributes to the wetting of hydrophobic combustible materials, accelerates their extinguishing and prevents re-ignition. Finally, the high content of the gas phase causes the electrical conductivity of the foam to be lower than that of water, and with an increase in its content, the electrical conductivity decreases. Accordingly, under certain conditions foam can be suitable for extinguishing live electrical equipment.

The first attempts to fight fires with foam in a number of countries took place 120 to 150 years ago; however, according to available data, about a century has passed since the first foam concentrates as such appeared. During this time, a large number of types, sorts, and brands of foam concentrates have been developed, which differ in the raw materials used for their manufacture, purpose, suitability for use with various fire-fighting equipment, sensitivity to the quality of water used to prepare their foam solutions, etc. Currently, there are four standards in force in Europe regarding foam concentrates for fire-fighting, combined into the EN 1568 series [7-10].

As can be seen from the names of these standards, foam concentrates are divided into categories based on two features – expansion ratio of foam generated from foam solutions and the primary purpose. However, this division is actually quite arbitrary, and the first reason is that the same foam concentrate can meet more than one standard. For example, it can provide the possibility of generating low, medium, or high expansion foam with proper fire-extinguishing efficiency. It should be noted that the expansion ratio of foam is the ratio of its volume to the volume of the aqueous solution from which this foam is obtained, but different types of equipment are used to generate foam of these three types, which differ fundamentally in their design. Low expansion foam is foam for which this ratio does not exceed 20, medium expansion foam is the one whose expansion ratio is in the range of 20 to 200, and high expansion foam is the one with expansion ratio of more than 200. Suitability of foam for extinguishing combustible (flammable) water-soluble liquids is mainly achieved by using water-soluble polymers with thixotropic properties, and namely their presence in the formulation distinguishes the vast majority of foam concentrates which meet the requirements of EN 1568-4:2018 Fire extinguishing media – Foam concentrates, in its Part 4: "Specification for low expansion foam concentrates for surface application to water-miscible liquids" [10].

The second reason for calling the above-mentioned division "quite conventional" is that the scope of application of air-mechanical foam (and, accordingly, foam concentrates) in fire-fighting is much wider than it can be imagined considering the names of the regulations. For example, many foam concentrates are suitable for extinguishing non-polar combustible liquids stored in tanks by delivering low expansion foam not only to the surface of the liquid, but also to the lower part of its layer ("subsurface" method) through technological pipelines. At the same time, neither European [9] nor relevant International [19] standards set requirements for them. They only recognize the possible suitability of foam concentrates that meet their requirements for "subsurface" fire-fighting, but the responsibility for providing such information rests with the manufacturer. At one time, the corresponding standard has been being developed, but the work was suspended back in 1986 at the ISO/DIS stage (draft international standard), and we unable to find even the mention of the document previously available on the Internet at the time of preparation of this paper.

Similarly, despite the widespread use of foam concentrates for extinguishing solid combustibles, special requirements for them are not established by European standards. At the same time, it is quite reasonable to assume that by making special formulations, it is possible to achieve a significant increase in the effectiveness of foam concentrates in the case of extinguishing solid combustibles. This is confirmed both by the availability of a wide range of "class A foam concentrates" on the market and by the regulations regarding their use for extinguishing wild land fires [24].

A fairly complete idea of the areas of application of fixed foam fire-fighting systems (and, accordingly, foam concentrates for fire-fighting) can be obtained by analyzing provisions of [11]. Table 1 contains information taken from the mentioned standard.

To generate low and medium expansion foam and its application for extinguishing, ejection foam generators are traditionally used, expansion ratio of foam obtained with their help depends on a number of factors and is difficult to adjust. In the case of fixed fire-fighting systems, foam generation depending on the features of the protected facility can be ensured by the use of both fixed foam generators and spray nozzles of special designs that can function both with air ejection (aspiration) and without it. Low and medium expansion foam is used for extinguishing fires by surface application, i.e., by applying foam to the burning surface (in some cases – also by subsurface application). High expansion foam is obtained by forced mixing of foam solutions with air or another gaseous substance and is used to extinguish fires by flooding, i.e., by filling the spaces protected by it.

At the same time, a technology of forced generation of low expansion foam used for fire-fighting was also developed at one time (one of its varieties is known as "One Seven", that is, it involves mixing 1 part of the foam solution with 7 parts of air), and in the recent years it has been becoming increasingly applicable. However, until now there are no unified requirements either for foam concentrates intended for use in such systems, for the corresponding fire-fighting systems, or for their components.

Table 1: Applicability of fixed fire-fighting systems for fire protection of facilities as per [11]

Fire hazards	Low expansion foam systems	Medium expansion foam systems	Medium expansion foam systems (indoors)
Flammable liquid storage tanks	Yes	No	No
Tank bunds/collecting areas	Yes	Yes	Yes (+ LNG/ LPG)
Process areas	Yes	Yes	Yes
Aircraft hangers	Yes	< 1 400 m² only	Yes
Fuel transfer areas	Yes	Yes	Yes
Plastic packaging and storage	Yes	No	Yes
Plastic recycling	Yes	No	No
Refuse handling and storage	Yes	No	No
Liquefied Natural Gas	No	No	Yes (and outdoors)
Tyre storage	Yes	No	Yes
Rolled paper	No	No	Yes
Marine jetties	Yes	Yes	No
Oil filled transformers and switchgear	Yes	No	Yes
Cable tunnels	No	No	Yes
LPG (Liquefied Petroleum Gas)	No	Yes	Yes (and outdoors)
Warehouses – Class A and B fuels	Yes	No	Yes

Note. These examples are not prescriptive and do not preclude other uses, providing there is a fire engineering basis.

The purpose of the work was substantiation of the requirements for foam concentrates, compressed foam fire-fighting systems and their components which can currently be included in the European standards for foam fire-fighting systems, as well as spheres for further research.

2 Method

In order to achieve the pre-set purpose, analysis of information available in open literary sources and regulations regarding foam concentrates for fire-fighting, fixed fire-fighting systems and their components, as well as their use in fire protection of facilities was conducted.

3 Results and Discussion

First of all, it should be noted that the suitability of foam concentrates of various chemical nature, which have different properties and different purposes, for foam generation is known from the literature. The type of generated foam (low, medium, or high expansion) depends on them as well as on the equipment used. Currently, the classification of foam concentrates depending on the chemical nature of the surface-active base and partly on the types of functional additives is established by the above-mentioned standards [7-10]. According to them, they distinguish:

- Protein foam concentrates (P): these are liquids derived from hydrolysed protein materials;
- Fluoroprotein foam concentrates (FP): these are protein concentrates with added fluorinated surface active agents;
- Synthetic foam concentrates (S): these are based upon mixtures of hydrocarbon surface-active agents and do not contain fluoroorganic compounds;
- Alcohol resistant foam concentrates (AR): these can be suitable for use on hydrocarbon fuels, and additionally are resistant to breakdown when applied to the surface of water-miscible liquid fuels. Some alcohol resistant foam concentrates can precipitate a polymeric membrane on the surface of alcohol;
- Aqueous film-forming foam concentrates (AFFF): these are generally based on mixtures of hydrocarbon surfactants and fluorinated surface active agents and have the ability to form an aqueous film on the surface of some hydrocarbon fuels;
- Film-forming fluoroprotein foam concentrates (FFFP): these are fluoroprotein foam concentrates which have the ability to form an aqueous film on the surface of some hydrocarbon fuels;

- Fluorine free foam concentrates (F3): these foam concentrates are dedicated to meet fire performance ratings and are targeting applications similar to AFFF and/or AR-foams without using fluoroorganic compounds. These foam concentrates are based upon mixtures of hydrocarbon surface-active agents and non-fluorine containing stabilizers.

Low expansion foam generated by forced mixing of foam solution and gas (air in most cases), is usually called compressed foam. The principle of its preparation consists in mixing these substances in special chambers with the aid of appropriate means. Unlike ejection foam, compressed foam can be supplied in a "ready" state by fire hoses (in the case of mobile fire-fighting equipment) or pipelines (in the case of stationary and portable fire-fighting systems).

Systematic mentions of this method of fire-fighting go back to the 90-ies of the last century (see, for instance, [4; 31]), although, according to the available data, it was first proposed about 60 years before that and even was implemented on some warships of the US Navy. Subsequently, a number of varieties of such systems of several brands appeared on the market, the possibilities and advantages of this technology were explained ([1], [5], [29], etc.); a rather detailed description of a number of them is given, in particular, in paper [21]. The compressed foam fire-fighting systems themselves can be both fixed and portable (those transported by fire engines and connected to the dry pipes of the building where the fire occurred).

The authors [21] mention such advantages of compressed foam as less time spent on extinguishing a fire, lower consumption of water and foam concentrate (by 2 to 5 times) and foam (by 5 to 15 times), the possibility of applying foam over a long distance, and possibility of extinguishing live electrical equipment. It is also stated that the compressed foam is much lighter (than water), which increases the maneuverability of the branch pipe operator and allows for a faster change of his position. Also, in the case of using this foam, due to the low content of the liquid phase, indirect material damage during fighting fires in residential buildings is reduced. In the same paper, a hypothesis was put forward about the possibility of using compressed foam for fighting fires in tanks by "sub-surface" application, and it was stated that this hypothesis requires mandatory experimental verification.

An attempt to implement the idea presented in paper [21] was made in the study [15]. For this purpose, some experiments were conducted with the injection of certain amount of foam under a layer of hydrocarbon combustible liquids (diesel fuel, petrol) poured into vessels with a capacity of 5 liters. This paper does not take into account the intensive absorption of oil products by foam generated from aqueous solutions of synthetic foam concentrates containing no fluorosurfactants due to which successful extinguishing of fires by the "subsurface" method in the case of their use is unlikely to be achieved. EN 13565-2 [11] standard does not provide for the use of the "subsurface" fire-fighting method for hydrocarbon liquids with a flash point lower than 25°C and a boiling point lower than 40°C.

The suitability of foam for fire-fighting by the "subsurface" method during the study conducted by the authors of [35] was evaluated using exclusively the time interval of the existence of a layer of foam on the surface of a cold liquid without applying any quantitative criteria. In their opinion, the obtained results "showed the possibility of using compressed foam for "subsurface" fire-fighting". At the same time, the authors admit that "in order to determine the effectiveness of fire-fighting with compressed foam in fire conditions, it is necessary to conduct a study on fighting fires in tanks with oil products by the "subsurface" method and to determine the main fire-extinguishing properties of the foam".

Development of compressed foam fire-fighting systems continues in a number of countries of the world, including Ukraine. For example, in paper [37] technical requirements for a portable compressed foam fire-fighting module for fire and rescue divisions are substantiated. Certain developments aimed at studying the properties of compressed foam and creating domestic prototypes of compressed foam fire-fighting systems are also described in papers [28; 32; 33]. Papers [32; 36] contain even declarations about the applicability of compressed foam for extinguishing class D fires (burning metals) without mentioning any source of such information.

The authors of all these publications simulated the processes of generating compressed foam and also investigated the dependence of its properties on the designs of the corresponding equipment, working pressure, the ratio between the amounts of the foam solutions and air used, the nature of the combustible liquid, and even on the concentration of the foam concentrate in its aqueous solution which is not usually subject to variation. During the study, mainly synthetic foam concentrates and prototypes were used, all of which were intended primarily for generating medium expansion foam with the help of ejection foam generators and limitedly suitable for extinguishing large quantities of combustible liquids [11].

This approach can be explained primarily by the outdated practice of using relatively cheap and in some cases ineffective synthetic ("general purpose") foam concentrates in fire-fighting, which has developed since Soviet times due to the lack of more effective fire extinguishing agents. The predominant field of application of such foam concentrates is fighting fires of a relatively small area, mostly with relatively small amounts of combustible liquids [6]. However, even their use has shown the possibility (at least, in principle) of use, and in some cases also the effectiveness of compressed foam fire-fighting systems in the case of their use for extinguishing both solid combustibles and combustible (flammable) liquids. They also confirmed the conclusions made earlier by foreign researchers that the adhesive properties of the foam played an important role.

At the same time, for extinguishing combustible (flammable) liquids, numerous formulations of foam concentrates have been developed, the molecules of the surface-active bases of which were characterized by a lower chemical affinity with hydrocarbon molecules, which was achieved by replacing part or all of the hydrogen atoms with fluorine ones. The foam generated from the foam solutions of such "fluorine-containing" foam concentrates is poorly "wetted" by hydrocarbons and is more slowly destroyed by non-polar combustible liquids. Moreover, the adsorption layers formed by molecules of fluorine-containing surfactants are more resistant to high temperatures and thermal radiation. These foam concentrates can be fluorosynthetic or fluoroprotein and shall be film-forming (belonging to the "AFFF" or "FFFP" type). The possibility of the formation of an aqueous film on the surface of the liquid means that extinguishing and resistance to re-ignition under the influence of heat sources can be achieved after the formation of a relatively thin layer of foam on the surface of the liquid (unlike the case of using synthetic foam concentrates). It is worth noting that namely the nature (type and chemical composition) of the foam concentrate is the primary factor affecting the properties of the foam formed from its foam solutions, but the features of the used equipment affect them to a lesser extent.

It is for these reasons that in the case of extinguishing "large-scale" fires in Europe and the USA, preference is given to foam concentrates designed for extinguishing flammable liquids with low expansion foam, and to the greatest extent – to those belonging to the "AFFF" or "FFFP" types. According to [9], they are usually characterized by the highest fire-extinguishing efficiency and resistance to re-ignition. In the case of using just such foam concentrates, the normative application rate of foam solutions for extinguishing is the lowest other conditions being equal (see EN 13565-2 [11]).

Some recommendations or even requirements for the use of exclusively film-forming foam concentrates in some cases are contained not only in European [11], but also in American [25] standards for foam fire-fighting systems. If it is necessary to use foam concentrates as additives to water in the case of sprinkler fire-fighting systems (for example, for extinguishing plastics),

European standard (EN 12845 [12]) provide for the use exclusively of the ones belonging to the "AFFF" type (fluorosynthetic film-forming foam concentrates). The same provides for American standard for low expansion foam sprinkler and deluge fire-fighting systems NFPA 16 [26], but standard for fire protection of extraction enterprises NFPA 36 [27] allows the use of film-forming foam concentrates of "AFFF" and "FFFP" types.

Considering these facts, it should not be surprising that the work aimed at researching the properties of compressed foam and development of appropriate equipment is carried out in the world mainly with the use of foam concentrates of "AFFF" and "FFFP" types, and a lot of attention is paid to the study of the processes of mixing their solutions with a gas phase during the generation of compressed foam. Thus, it was established in work [15] that the three factors determining the structure of the mixing chamber were the regime of mixing gas and liquid, their contact area during it and design of the turbulator. Three more factors that were determined by the operating parameters were the ratio of gas and liquid flow rate, the pressure at which they are mixed, and the velocity of the process. As a result of the research, some recommendations were developed for the optimization of the relevant devices.

Paper [16] considers the mechanism of mass loss by compressed foam obtained from the foam solutions of a foam concentrate of "AFFF" type due to the evaporation and release of the liquid from it as well as its cooling effect on the surface of the combustible liquid at different temperatures. The authors obtained a number of very interesting results. In particular, it was revealed that for the same mass of foam, the rate of liquid release from it increased with an increase in the initial temperature of the surface of the combustible liquid. In addition, in the case of foam with expansion ratio of 5.5, the temperature of the surface of the combustible liquid had a smaller effect on the rate of release and evaporation of the liquid than in the case of foam with expansion ratio of 10. At a liquid surface temperature of more than 60°C, foam with expansion ratio of 10 was intensively destroying in the initial stages, while foam with expansion of 5.5 was slowly destroying under the same conditions. The very process of changing the temperature of the liquid surface after foam application is divided into stages of rapid decrease, relative stabilization, and gradual increase. The last two stages can be caused by dehydration of the foam, and increasing expansion of the foam accelerates the onset of the third of them.

As a result of varying the impact of initial temperature of the surface on the liquid and expansion ratio of the foam, it was established that at values of the first indicator not higher than 60°C, the intensity of liquid release from the foam depended relatively little on its expansion ratio (5.5 or 10.0), while a further increase temperature led to the acceleration of foam dehydration with the lower expansion ratio value. On the other hand, the loss of liquid due to evaporation was greater for foam with expansion ratio of 10. The same was true for the rate of decrease of the height of the foam layer with time at liquid surface temperatures higher than 70°C. In general, it was established that foam with expansion ratio of 5.5 provided more effective cooling of the surface of the combustible liquid than foam with expansion ratio of 10.

The authors of paper [23], while conducting desk and experimental studies, compared the characteristics of dehydration of foam obtained from foam solutions of "AFFF" and "FFFP" type foam concentrates. It was found that they differed to a great extent despite the similarity of the physical and chemical properties of the foam solutions. This phenomenon was explained by differences in the rheological characteristics of the surface layers. It was also revealed that the conventionally used method of determining the stability of air-mechanical foam did not reflect the comparative characteristics of the stability of compressed foam, and a more adequate method was proposed. Although, according to the authors' experience, there is no direct correlation between the stability of the foam and its fire-extinguishing efficiency, an increase in the first of these indicators usually contributes to an increase in the fire-extinguishing efficiency of the foam. Accordingly, the application of the new methodology can be a step towards standardizing the requirements for foam concentrates intended for fighting fires with compressed foam.

The data described in the available sources regarding the use of compressed foam for extinguishing fires by types of facilities can be conventionally divided into four groups. The first one includes the already mentioned works [32; 33], in which the possibility of using compressed foam for fighting wild land fires is established. Given the lack of combustible liquids in them, it can be assumed that conventional synthetic foam concentrates are effective enough when used for this purpose. Determining and standardizing the procedure for their use with portable fire-fighting equipment requires further research, but they are not the subject of this work. As for fire-fighting systems, the first group of protection facilities includes those that are high-rise (in particular, residential and office) buildings, but the second one contains facilities protected with sprinkler or deluge systems, and the third one consists of storage tanks for combustible (flammable) liquids.

Fire protection of high-rise buildings is associated with a number of problems. One of them is that water sprinkler fire-fighting systems commonly used for their protection require high water consumption, which in turn necessitates the installation of appropriate pipelines. Considerable weight of pipelines, especially after they are filled with water, means a high load on the load-bearing building structures, i.e., the need for their proper strengthening. Finally, as a result of a long-term fire, the load-bearing capacity and fire resistance of structures can decrease, and in the event of simultaneous interruptions in water supply (as happens despite the provision of precautionary measures) the consequences can be extremely severe.

It is the use of compressed foam fire-fighting systems is almost the best alternative to equipping high-rise buildings (and not only them) with water fire-fighting systems. The relatively small weight of dry pipes and the low density of foam compared to water mean a reduction in the requirements for the load-bearing capacity of building elements, and the proper design of the foam distribution system in combination with proper properties of the latter (stability, adhesion, spreading ability, fire-fighting efficiency) can be a guarantee of the effectiveness of fire fighting.

As already mentioned, compressed foam fire-fighting systems manufactured by various manufacturers and intended for the protection of buildings and structures are described in detail in the relevant documentation and systematized in separate papers (for example, [21]). Some scientific publications, including [38; 39], are devoted to the issue of their application. Moreover, a standard for such systems has been adopted in Europe (EN 16327 [13]). Since such systems are transportable and there is a European standard for them, they are not the object of standardization in the future regulations for compressed foam fixed systems. The requirements for dry pipes to which such systems are connected after the arrival of the fire and rescue division on a vehicle for the transportation of the compressed foam fire-fighting system are subject to building codes.

At the same time, the issue of fixed compressed foam fire-fighting systems for the protection of other facilities remains open. Taking into account the provisions of the existing European standards for fixed foam fire-fighting systems EN 13565-2 [11] and the fact that expansion ratio of compressed foam is usually lower than 20 (it is a low expansion foam), it can be stated that such fire-fighting systems can be suitable for the protection of the same facilities as conventional fixed low expansion foam fire-fighting systems, i.e. (see Table 1):

- Flammable liquid storage tanks;
- Tank bunds/collecting areas;
- Process areas;
- Aircraft hangers;

- Fuel transfer areas;
- Plastic packaging and storage;
- Plastic recycling;
- Refuse handling and storage;
- Liquefied Natural Gas;
- Tyre storage;
- Rolled paper;
- Marine jetties;
- Oil filled transformers and switchgear;
- Cable tunnels;
- LPG (Liquefied Petroleum Gas);
- Warehouses – Class A and B fuels.

As a rule, fighting fires at facilities with the presence of large quantities of combustible liquids is the most difficult; to a lesser extent it is complicated in the presence of solid combustible materials. Therefore, it can be assumed that the successful application of foam fire-fighting systems of conventional designs to protect facilities with the possibility of spills of combustible (flammable) liquids, tanks for their storage, etc. means the possible success of protecting these facilities with fixed compressed foam fire-fighting systems while applying the same requirements (the relevant issue is discussed in more detail below). Such requirements can turn out overstated, but such an overstatement will not be a critical problem. This is all the more true because the choice of different types of fire protection systems in accordance with European practice is usually entrusted to engineering workers in the sphere of fire protection and designers of such systems.

Accordingly, the primary task for the development of a separate European standard for fixed compressed foam fire-fighting systems or the inclusion of relevant requirements in the standard [11] is to substantiate the requirements for systems for the protection of spills of flammable liquids and for the protection of tanks for their storage.

In paper [3], a study of the influence of the conditions of compressed foam formation on its characteristics was carried out and the division of such foam into types was proposed depending on its stability, assessed by the rate of liquid release from the foam. For this purpose, various nozzles were used and different values of the working pressure and the ratio between the quantities of the foam solution and air being mixed with it were provided. The combination of parameters for which the foam has the highest stability was also established, and fire tests were conducted to extinguish petrol. The authors proposed a list of spheres and typical types of application of compressed foam for the protection of facilities (Table 2) and indicated the need for further research in order to determine the standardized parameters of foam application by such systems depending on the features of fire protection facilities.

Table 2: Proposals for the application of fixed compressed air foam fire-fighting systems for fire protection of facilities [3]

Application fields	Typical application place
Information technology	Emergency generator and diesel storage areas
Pharmacy	Chemical processing, storage areas, laboratory
Communication and transportation	Gas stations, garage, hangar, heliport
Power generation and poser transmission	Transformers, turbines, nuclear facilities
Petroleum and gas production	Oil depot, oil pump room, oil refineries, offshore drilling platform
Construction	Wood processing machines, solvent storage and processing areas Residence, underground construction, tunnels, ancient architectural structures, high rise building, etc.
Agriculture and forestry	Garden, stacking storage and processing areas
Mining industry	Well, flammable liquid storage area

In work [2], full-scale fire experiments were carried out in order to evaluate the influence of the application rate of foam solution of an "AFFF" type foam concentrate, as well as expansion ratio of the foam, on the efficiency of extinguishing petrol spills with compressed foam sprinkler fire-fighting systems. It was established that the volume of the formed foam significantly affected both its fire-extinguishing efficiency and resistance to re-ignition. It was revealed that maximum fire-extinguishing efficiency and resistance to re-ignition as well as economic efficiency were achieved with foam with expansion ratio of 10. As the application rate of foam solution provided by the sprinkler system increased, the specified characteristics of the compressed foam improved, and the lowest consumption of extinguishing agent during the extinguishing of petrol spills was achieved at the application rate of foam solution of 3.48 l/(min m2). The specific consumption of the foam solution for localizing the burning on 90 % of the area was 0.99 l/m2, and that for complete extinguishing was equal to 2.38 l/m2.

The authors of [2] established the impossibility of localizing and extinguishing petrol spills at the application rate of foam solution of 1 l/(min m2), but already at its application rate of 1.32 l/(min m2) extinguishing was achieved for approx. 5 min. At the application rate of the foam solution of an "AFFF" type foam concentrate of 1.79 l/(min m2), the localization of the fire was achieved in about 1 minute, and its complete extinguishing lasted for about 2 minutes. At this, as well as higher values of application rate, rapid extinguishing of flare combustion cells occurred and the results completely satisfied the test success criteria established by the UL 162 test method standard [34]. It is also stated that the normative application rate of foam solutions by foam sprinkler fire-fighting systems of conventional designs was 6.5 l/(min m2), i.e., it was almost four times higher than the value of 1.79 l/(min m2).

The document to specify this normative application rate is not indicated (probably it is NFPA 11 [25]), but it is worth noting that the given value almost coincides with the application rate of foam solutions provided for extinguishing spills of flammable liquids with sprinklers and deluge foam fire-fighting systems according to EN 13565-2 [11]. According to this standard, in the case of use of foam concentrates with classes of fire-extinguishing efficiency and insulating capacity typical for the "AFFF" type, it is equal to 6.0 l/(min m2).

Despite obtaining a solid set of data, the authors of work [2] note the need to conduct further field experiments in order to verify the possibility of successful fire-fighting in the presence of different types of combustible materials and different combustible loads. However, taking into account the fact that such a highly dangerous flammable liquid as petrol was used for the tests, we believe that the so-called "optimal" [2] application rate of foam solutions of "AFFF" type foam concentrates of 1.79 l/(min m2) could be taken as a basic value for the drafting of relevant standard.

In paper [40], a number of aspects related to extinguishing combustible liquids in tanks with foam were considered. Based on the results of previously conducted research, the authors came to the conclusion not only about the suitability of compressed foam fire-fighting systems with for this purpose, but also the higher efficiency of such systems in comparison with systems of conventional designs. The obvious dependence of the extinguishing result on the fire extinguishing agent used and the need for experimental studies and modeling to solve the optimization problem are also indicated.

In paper [38] published relatively recently, a comparison of the fire-extinguishing efficiency of compressed foam obtained using air with that of compressed foam obtained using nitrogen when fighting fire in a n-heptane storage tank was carried out for the first time. The foam concentrate used belonged to the "AFFF" type. The authors found that the use of nitrogen instead of air accelerated the spread of foam across the surface of the combustible liquid and increased the thickness of the foam layer; they explained this primarily by increasing the stability of the foam and reducing the amount of water evaporating from it. The

general conclusion drawn by the researchers was that foam obtained using nitrogen was slightly more effective in extinguishing tank fires.

The latest (dated 2021) published edition of the US standard for foam fire-fighting systems NFPA 11 [25] contains a separate section on compressed foam fire-fighting systems. According to the requirements of the standard, the components of such systems and the foam concentrate shall be allowed listed for this purpose, the quality of the water is to ensure the possibility of generating foam with the appropriate characteristics, and it is allowed to use air or nitrogen as a gas. Such a "generalized" approach is characteristic of NFPA standards; therefore, it is unlikely to be expected to be substantially specified in future editions of NFPA 11 [25].

At the same time, the mentioned standard provides for the possibility of using fixed compressed foam sprinkler and deluge fire-fighting systems as well as fire-fighting systems equipped with foam pourers of traditional designs. There are no specified requirements for the foam generation and application devices themselves (see the previous paragraph). At the same time, the minimum values of application rate of foam solutions are specified and the need to fulfill the requirements established for facilities of the corresponding type and the recommendations of the foam concentrate manufacturer are indicated. For non-polar combustible liquids (hydrocarbons), the standardized minimum value is 1.63 l/(min m2), but for polar combustible liquids it should be at least 2.3 l/(min m2). If the area of the fire is "three-dimensional", then the location of spray nozzles for applying foam shall ensure its arrival on all burning surfaces. The minimum duration of foam application according to NFPA 11 [25] is set equal to 5 min for sprinkler and 10 min for deluge compressed foam systems.

As can be seen, the minimum application rate of foam solution during the extinguishing of non-polar combustible liquids regulated by NFPA 11 [25] standard is quite close to the value recommended by the authors of study [2]. At the same time, for extinguishing non-polar flammable liquids with foam sprinkler fire-fighting systems of conventional designs this standard recommends a minimum application rate of 6.5 l/(min m2), i.e., there is also a match with the conclusions of the authors [2] on the possibility of fourfold reducing the application rate of foam solution at such a "transition". If these values are accepted during the future amendment of the European standard for foam fire-fighting systems [11], the future version of the standard for components of such systems [14] should be supplemented with appropriate requirements for components intended for use in compressed foam fire-fighting systems.

NFPA 11 [25] standard does not contain recommendations for fighting fires with compressed foam in tanks for storing flammable liquids, which can be explained both by the lack of a sufficient amount of reliable experimental data and by the possible lack of compressed foam generators of adequate capacity. Indirect confirmation of at least the first of these assumptions is the fact that the authors of this work did not find relevant information in the literature.

Taking this into account, in the case of a decision to protect tanks or other hazards where non-polar combustible liquids are stored or circulated using compressed foam generators and foam pourers of conventional designs, the design of such systems before the approval of reasonable standards should be carried out with the provision of the same values that for foam fire-fighting systems of conventional designs.

Such a statement can be made on the basis of the conclusions of the authors of papers [38; 40] on the principal suitability of compressed foam fire-fighting systems with such facilities and their higher efficiency, as well as the fact that compressed foam is the same low expansion foam the structure of which is characterized by greater uniformity. Compressed foam is obviously also suitable for extinguishing by the "subsurface" method, but in this case, instead of high-pressure foam generators one needs to use devices for generating compressed

foam and special compressors for introducing it into the layer of combustible liquid. At the same time, for this purpose, it is necessary to use foam concentrates being suitable/intended for "subsurface" extinguishing, the mandatory requirement for which is the availability of film-forming properties.

As for the use of systems equipped with compressed foam generators and foam pourers of conventional designs at any facilities with the presence of polar combustible liquids, to date, in our opinion, there are no data that could be reasonably accepted for design. In particular, comprehensive studies of the fire-extinguishing efficiency of foam during the extinguishing of ethyl alcohol conducted in Sweden [30] showed that in case of provision of the parameters of applying foam solution of an "alcohol-resistant" foam concentrate for extinguishing a polar combustible liquid regulated by European standard for foam fire-fighting systems EN 13565-2 [11], the success of extinguishing is not guaranteed in any way. The researchers concluded that it was necessary to carry out field tests in order to make justified amendments to this standard.

There is certainly reason to believe that the efficiency of fighting fires involving polar liquids increases when moving from conventional low expansion air-mechanical foam to compressed foam. However, an attempt to use the existing requirements as a starting point for the design of compressed foam fire-fighting systems for the protection of tanks for the storage of polar flammable liquids may also not ensure the success of their application. Accordingly, attempting to apply compressed foam fire-fighting systems to the protection of such tanks prior to the development of reasonable requirements can discredit this undoubtedly progressive fire-fighting technology.

4 Conclusion

1. As a result of analyzing of appropriate literary sources, it was established that the currently existing portable compressed foam fire-fighting systems were primarily intended for fighting fires at manned facilities (residential, office, and public buildings), including buildings with increased number of floors and high-rise buildings. In the case of taking measures to quickly commence application of foam for extinguishing, the implementation of this fire-fighting technology can be an alternative to the provision of fixed water fire-fighting systems and contribute to reducing the requirements for the load-bearing capacity of building elements. Currently, the requirements for such systems are regulated by the European standard EN 16327:2014, and there is no urgent need to develop any new standards.

2. Studying of the materials of previously conducted research gives reason to assert that, to date, the suitability of compressed foam for fighting fires has been theoretically confirmed and experimentally verified not only in buildings for the stay of people, but also in wild lands as well as at facilities with the presence of combustible liquids, where the formation of their relatively shallow spills or where they are stored in tanks with a layer thickness of several meters is possible.

3. The data available in open literary sources regarding the dependence of the stability of compressed foam on the surface of flammable liquids from its expansion ratio have no any direct correlation with the fire-extinguishing efficiency of such foam. This can be easily explained based on the authors' experience in the field of foam fire extinguishing, which indicates that the primary factors influencing the fire-fighting effectiveness of foam are the chemical nature and quality of the foam concentrate, not the features of the devices used to generate it. Moreover, the relatively fast dehydration of the foam is not only a factor of its destruction, but also a phenomenon that intensifies the cooling of the surface of the liquid or solid combustible material, contributing to the cessation of burning. At the same time, if the foam concentrate has film-forming properties, the sufficient speed of liquid release from the foam guarantees the proper course of the

processes of formation and renewal of the film on the surface of the combustible (flammable) liquid, its reliable isolation from the oxygen of the air and, accordingly, acceleration of extinguishing and the increase of resistance to re-ignition of this liquid under the influence of red-hot building elements.

4. The results of the research described in the papers and the provisions of the current standards of the National Fire Protection Association (USA) regarding fire-fighting with foam make it possible to state that compressed foam fire-fighting systems are fundamentally suitable for extinguishing fires at least at all those facilities where effective use of air-mechanical foam generated by conventional methods is possible. The authors see no reason to predict any decrease in the effectiveness of fighting fires in the event of a transition from "conventional" foam to compressed one.

5. The potential limitations for the use of compressed foam fire-fighting systems are the same as for foam fire-fighting systems of conventional design. These include the presence of any substances that release significant amounts of oxygen or other oxidants capable of sustaining combustion, substances capable of entering into a chemical interaction with water (alkaline, alkaline earth and certain chemically active metals, phosphorus (V) oxide, triethylaluminum, etc.). The probable suitability and conditions of use of compressed foam fire-fighting systems for extinguishing live electrical equipment is the subject of separate studies.

6. To date, there are quantitatively substantiated and regulated by the US standard NFPA 11 requirements regarding the parameters of fire extinguishing agent application by compressed foam sprinkler and deluge fire-fighting systems for the protection of facilities with the possible formation of spills of combustible (flammable) liquids. The requirements for the application rate of foam solutions are essentially lower than in the case of foam fire-fighting systems of conventional designs, and are also fundamentally applicable to the protection of facilities with the presence of solid combustible materials, which are characterized by a lower fire hazard. The substantiation of similar requirements for the protection of tanks for the storage of combustible (flammable) liquids requires special research and full-scale experiments.

7. The currently existing European standard for foam fire-fighting systems (EN 13565-2:2018+AC:2019) can be reasonably supplemented with provisions on the protection of facilities with compressed foam sprinkler and deluge fire-fighting systems. Based on the information presented in appropriate scientific publications and NFPA 11 standard, it is proposed to establish (taking into account rounding) the minimum application rate for such systems of 1.8 mm/min (1.8 l/(m2 min)) in the presence of non-polar and 2.3 mm/min (2.3 l/(m2 min)) in the presence of polar combustible liquids. We think it necessary to preserve the value of the duration of foam application as regulated by EN 13565-2:2018+AC:2019 depending on the type and specifics of the fire protection facility.

8. In compressed foam sprinkler and deluge fire-fighting systems which provide fire protection of facilities with the presence of combustible (flammable) liquids, only fluorosynthetic ("AFFF") or fluoroprotein ("FFFP") film-forming foam concentrates should be used until the relevant data are obtained. The issue of the possibility and conditions of using "F3" foam concentrates for this purpose (the serial production of which was established relatively recently) is subject to separate research. To determine the effectiveness of foam concentrates of various types in the case of extinguishing solid combustible materials with such systems, separate studies are required. To determine the effectiveness of foam concentrates of various types in the case of extinguishing solid combustibles with such systems, separate studies are needed as well.

9. At the same time as amendments are made to the European requirements for foam fire-fighting systems (standardized by EN 13565-2:2018+AC:2019), it is necessary to make

amendments to the standard that regulates the requirements for the components of such systems (EN 13565-1:2019). For this purpose, at the first stage, it is sufficient to standardize the need to conduct tests of devices for generating and applying compressed foam in combination with specific foam concentrates in an order similar to the requirements of UL 162:2022 standard which regulates the procedure for testing foam concentrates and components of foam fire-fighting systems.

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SOCIAL ALIENATION UNDER RUSSIAN OCCUPATION

[a]OLEXANDER ZUBCHENKO, [b]ALONA STADNYK,
[c]OLENA KHODUS, [d]NATALIA DIEVOCHKINA, [e]OKSANA
SEMENTSOVA, [f]OLHA ZAITSEV

[a,b]*Mariupol State University, 6, Preobrazhenska Str., 03037,
Kyiv, Ukraine*
[c]*Oles Honchar Dnipropetrovsk National University, 72, Gagarin
Ave., 49010, Dnipro, Ukraine*
[d,e,f]*National University «Zaporizhzhia Polytecnic», 64,
Zhukovsky Str., 69063, Zaporizhzhia, Ukraine*
email: [a]*zubchenko20l6@online.ua,* [b]*ag.stadnyk@gmail.com,*
[c]*hodus.2@ukr.net,* [d]*n_dev@ukr.ne,* [e]*sementsovaok@gmail.com,*
[f]*o1z_ufks@ukr.net*

Abstract: The article is devoted to the study of social alienation during foreign occupation, which has theoretical (formation of a new theoretical view on the nature of this social process) and practical (development of the state policy of de-occupation and reintegration of the South of Ukraine) prerequisites. The purpose of the article was to determine and empirically verify the main directions of social exclusion under enemy rule. Based on the methodological principles of existential philosophy, neo-Marxism, psychological theories of alienation and anomie is determined; an in-depth interview with residents of the right-bank Kherson region who were under Russian occupation in March - November 2022 was determined by the method of empirical research. In the course of the study, four forms of social alienation were distinguished - existential, spatial, praxeological and group, each of which characterizes a certain aspect of social relations in the occupation; the general trend towards the growth of social marginalization and anomie is determined; the transformation of public space into a territory of danger and its further ghettoization was ascertained; active use of fear and terror by the occupying power as tools of social coercion has been proven. The researcher emphasizes that under the enemy government, the main factor of social alienation is the hostile attitude towards the person on the part of the state, which is represented by the occupiers, and the social institutions captured by them, the imposition of unwanted and unacceptable values and models of social role behavior on our compatriots. The authors come to a conclusion about the formation of a special form of social alienation in the occupation - moral homelessness, which is characterized by the loss of social subjectivity and the minimization of social activity due to an all-encompassing feeling of fear. At the same time, there is an artificial narrowing and deformation of the structure of social space, the destruction of the boundaries between public and private against the background of the arbitrariness of the authorities and the absolute insecurity of the population. People feel like strangers in their own homes, and the main source of fear is not military actions, but the occupation order.

Keywords: moral homelessness; occupation; social alienation; social space; social fear.

1 Introduction

From the first days of the full-scale Russian invasion of Ukraine in February 2022, the Kherson and Zaporizhzhia regions were at the epicenter of the offensive of enemy troops. Due to the repeated superiority of the Russians in personnel, weapons and military equipment, the situation in the Southern direction developed especially tragically. Already by the beginning of March, the occupying units had covered more than 180 km and stopped near the village of Kamianske is 35 km from Zaporizhzhia, and on the Right Bank they reached the borders of Dnipropetrovsk region and created a serious threat to Kryvbas.

As of the end of 2023, after a series of successful counteroffensive operations by the Ukrainian army, there remain several hundred thousand Ukrainians under the control of the enemy. Unfortunately, amidst the chaotic events of the ongoing Russian-Ukrainian war, the fate of these individuals is mentioned less frequently. The most tragic thing is that our compatriots under occupation are gradually becoming strangers in their native land. After the establishment of the occupation regime, they first lose all civil and social rights, then in the course of active colonization, displacement of the population and Russification - the symbolic space where their social identity was formed, and during forced passportization - and the rest of the basic rights (in particular, the right to life). As a result, social alienation arises - a social phenomenon that characterizes an internal gap between interests, aspirations, expectations, motives of human activity and social roles and functions that are actually performed by him in a specific socio-historical environment. During the occupation, it turns into a group phenomenon on the basis of belonging to a certain social (repression against ATO participants and pro-Ukrainian activists) or national (persecution against Roma) community, the presence of Russian documents

(people without a Russian passport are refused an ambulance call, hemodialysis and the sale of insulin), place of residence (ban on entry to certain settlements without local registration), etc.

Thus, the theoretical prerequisites of the study are the formation of a new view on the nature of social alienation in the occupation, not as a natural result of socio-economic and socio-political processes (as understood by world philosophical thought from Hobbes and Hegel to Baudrillard and Buber), but as a consequence of a purposeful activities of the aggressor state to destroy the existing system of social norms and institutions, destroy or change the composition of social communities, level national cultural values (which is worth only the "favor" of changing the Ukrainian surname to Russian when receiving occupation documents) and instilling social practices of loyalty to the enemy. The practical relevance of this topic is due to the need to develop a comprehensive state policy of de-occupation and reintegration of the South, overcoming social divisions that will arise after liberation, effective resolution of intergroup conflicts, and the fastest possible normalization of life.

2 Materials and Methods

Among the variety of concepts of social alienation, which have been developed in recent decades as a development or denial of the Hegelian-Marxist heritage, a special place is occupied by M. Heidegger's existential principle "Homelessness becomes the fate of the world" [10]. Due to the Russian occupation, more than 500,000 residents of the South of Zaporizhzhia region left their native homes, up to 300,000 of whom left their homes abroad, and 200,000 - to other regions of Ukraine [21]. It is obvious that the longer the enemy reigns on our lands, the less favorable it is for them to return to the Motherland.

People who remain under occupation do not immediately lose their homes and property. Over time, the rashists can confiscate housing, place military equipment in the yard, and equip their positions in residential areas. At first glance, life does not change much, but every day the orders established by the occupiers penetrate deeper into everyday interactions and force people to modify their social behavior. In this context, Jean-Paul Sartre's thoughts acquire an unexpected significance. Sartre about our perception of a new reality: "the other for me is both the thief of my existence and the one through whom the existence that now becomes mine arises" [18]. The invaders deprive people of freedom, confidence in the future, ties with free Ukraine, instead they bring the existence of the "Russian world" - terror, repression, kidnapping and robbery of peaceful people, racketeering, unprincipledness and immorality as new social norms. A similar situation is described by L. Althusser in his reflections on the alienation of power, when the dominant social communities and institutions become openly hostile to people's interests [1]. However, now they are no longer limited to assigning the results of work, as in the middle of the 19th century, but aim to destroy the social and national identity of Ukrainians.

Another reason for social alienation in the occupation is the loss of individual subjectivity, the transformation of a person into a means of achieving a certain goal, the bearer of one or another function [4]. It is worth mentioning only the staged queues to receive Russian humanitarian stuff under the muzzles of machine guns, new "holidays" where people are forcibly driven to create a good picture, or the use of schoolchildren as human shields from Ukrainian artillery. Also, alienation can be considered as a person's loss of subjectivity in communication with significant others. First of all, we are talking about collaborators and Russian "bystanders", who, under the conditions of military-police terror, have such power that during Ukrainian times it was never concentrated in one hand. The consequences of alienation can be feelings of powerlessness, loss

of control over one's destiny, feelings of loneliness, and loss of one's own "I" [3].

In addition, D. Malchykova and I. Pylypenko note that in the occupation there is a review of priorities, the formation of new strategies for daily behavior and changes in social practices in everyday life, family and professional activities. New adaptive practices are emerging: carefully choosing words when communicating with strangers, stocking up on products, supplementing established roles with additional "military" functionality, looking for trading establishments with the possibility of payment in hryvnias [15].

The study of the spatial component of life in the occupation deserves special attention. Under hostile power, due to total militarization, the living space available to people is reduced to their own street, neighborhood, and sometimes even an apartment or yard. The maximum complication of the use of public space is a typical technology of occupation regimes and is aimed at weakening social ties in order to prevent popular resistance and create a general atmosphere of fear and terror. M. Auger's remark about the birth of "non-places" - spaces where life was raging during Ukraine, and ambrosia blossomed after the arrival of the "Russian world" (a railway station from which there is nowhere to go, the ruins of a bus station, a shopping center destroyed by an airstrike) [2]. M. Castells's theory of parallel social spaces within the boundaries of one city, village or town, whose residents live nearby, but have their own, completely different lives, is also of considerable interest [6]. Someone abandons a luxurious house, a prestigious job and flees the world before the eyes of the Rashists, while someone happily receives a Russian passport, hangs the tricolor and occupies vacant social status positions.

Based on the above, we singled out four directions of empirical verification of the concept of "social alienation" - existential (emotional perception of life in the occupation, its comparison with pre-war times, chronology and content of everyday social interactions), spatial (feeling of homelessness within native walls, transformation of routine social actions on a dangerous quest, a sharp narrowing of the boundaries of the available space, filling it with difficulties and dangers), praxeological (production of new social practices of survival) and social-group (attitude towards others, towards countrymen who have gone over to the side of the enemy, a general vision of how to build social relations in the community after de-occupation).

The empirical basis of the research is the materials of a series of in-depth interviews (general methodology - O.S. Zubchenko, field stage - T.M. Popova), which were conducted in August 2023 with residents of the village Kostyrka of the Novorai community of the Beryslav district of the Kherson region, which was under Russian control from April to November 2022. Among the respondents - 2 men and 7 women, six of them stayed in the occupation the whole time, and three - left for free territory before liberation.

The results. The Russian invasion brings with it a radical change in the way of life, the horizons of life planning, individual and group perspectives. On the one hand, as noted by V. Frankl, a person is free to find and realize the meaning of life, to take responsibility for his destiny, even if his freedom is objectively limited by circumstances [9], and on the other hand, occupation appears to us as absolutely unique and the extreme situation that the Ukrainian people last faced during the World War II. "Before the occupation, we lived peacefully, there were people who were starving, but you know we are thrifty, we had everything we had yeast, sugar, we were not afraid of hunger, we had everything. We lived, we were not afraid of anything, everyone had their own income, everyone did something, we slept at night and were not afraid to sleep, I let the children go... to walk and that nothing like this would happen to them" (Alona, 30 years old, a fireman in a kindergarten). But with the appearance of the enemy, the integrity, co-existence, complicity and demand of the individual, vividly described by the respondent, give way to a set of randomly arising dispositions, which the human

consciousness tries time and again to somehow combine, based on previous experience, but fails. "Everything in life changed in one minute... as soon as the war started, I started writing to my children - leave the country, they took everything from me, including my children and grandchildren, the country... my life was taken away... it's like we live and we don't live" (Valentyna, 60 years old, a private entrepreneur). This type of alienation between being and non-being, which is reinforced by informational isolation, fear and total uncertainty, F. Jamison called schizophragmentation [13]. At the same time, there is an idealization of the pre-war past, which is separated from the state of occupation with the help of characteristic markers: "But we used to live in a fairy tale... Lord, bring back those times and we don't want anything else, and the main thing is that everyone is alive and healthy. I say that the dogs are still barking and I'm shaking all over" (Olena, 55 years old, a cook at a kindergarten).
In fact, hundreds of thousands of people find themselves in a marginal situation - a set of certain circumstances under which new relationships and connections arise, the main elements of the social system are restructured and they acquire new social qualities [5]. Under such conditions, the growing social anomie is especially keenly felt ("The system was broken, and many people changed their appearance at once"), the instinct of self-preservation is weakened ("I was not afraid of death, but there was a different kind of sadness in my soul" (Mykola, 64 years old, a vet), the sense of time is lost ("We didn't count the days and didn't remember what the number was, it didn't matter to us... we lived in some kind of cinema, how does this happen to us" (Tetyana, 56 years old, a janitor), there is a sense of existential anxiety ("There was no peace, there was no peace... there was fear. There was fear, simply fear. And there was fear that they were sitting on our brains, that ours would not come, that we are already Russia" (Oksana, 52 years old, an artistic director of the village club).

G. Simmel believed that space becomes social to the extent that it is mastered by a person, included in his subject-practical activity. Its boundaries are determined by the spread of influence, social connections and socio-professional activity of a person, and its content is formed in the process of social interactions. Everything changes with the arrival of the invaders [19]. From a well-known place of all socially important interactions, public space turns into a territory of danger and unpredictability. "We can leave and not come. We can go somewhere and not return. It is possible... they started talking that people who are leaving are being shot by cars with people with children (Oksana, 52 years old). Going into the unknown, trying to do anything to leave one's home, just to avoid living under the rule of the Rashists. In particular, there were three mass emigration routes from the occupied Kherson region, which people took at their own peril and risk, often under enemy fire: through the villages of Stanislav and Oleksandrivka to Mykolaiv along the coast of the Dnipro-Buzka estuary (March 2022); along the right bank of the River Ingulets through the town of Snigurivka and further to the town of Bashtanka, Mykolaiv Region, and later along the left bank of the Ingulets through the village of David's Breed in the city of Kryvyi Rih (April - May 2022); through Vasylivka, Zaporizhzhia region (May - October 2022) [15].

The occupiers also make it artificially difficult to move through the interior of the occupied territories: "When we went to Kakhovka - we left the village by bus, documents were checked in Novoraisk, then we went to Mayak - they checked us there, they checked us in Pyatochki (Kozatske village - author) and asked where are your children, how many children, if you just get stuck - they can turn the whole bus back, take you under control. At Hesi (Kakhovskaya HPS - author), everyone was dropped off, checked, and so the road was back. Those who were not assigned were not allowed into the village" (Tetyana, 60 years old). This sprawling narrative suggests that the occupiers are repeating the repressive practices of the communist totalitarian regime of the 1930s, creating artificial obstacles for peasants to move to the city.

At the same time, the internal space of the Ukrainian village is being ghettoized: "It feels like we are in a concentration camp or some kind of prison, like in a free settlement, there was a convoy all around, and you just walk around and are afraid. They didn't let you into the stadium, there were streamers... it was scary to pick up garbage or leaves and you have to take them out of the garden... you'll suddenly blow up on something... It was scary to go outside the yard" (Alyona, 30 years old). Because of this, a feeling of all-encompassing danger and hopelessness is formed: "It was disturbing to walk on the streets, it felt like people walking with automatic weapons, it was still scary, they were stopped on the roads, the passport regime, and you don't know where they will take you or not" (Alexander, 55 years old, a person with disabilities). The enemy also imposes new social norms and rules "It was impossible to go outside the village, we were not allowed to turn on the light in the house" (Tetyana, 56 years old) and the boundaries of public and private space are leveled "It was scary at home - they entered without knocking yards, there were constant checks, they were afraid to turn everything on, the windows were closed" (Valya, 60 years old). The sad realities of everyday life are complemented by new symbols ("We hung white ribbons on the gate, that peaceful people live here" (Oksana, 52 years old) and rituals ("for the night to spend the night at Aunt Natasha's, for the day to go home so that no one gets stronger" (Olena, 55 years old, a cook in a kindergarten).

People are possessed by a total fear for themselves and their loved ones, which is not related to military actions, artillery strikes and rocket fire, but to the presence of foreigners: "When the occupation began, it was scary to let children out of the yard and house, I was most afraid for Vika (eldest daughter, 15 years old - author). It was scary to walk around the village, it was scary to go to the store, to wait for bread to be brought, then I was afraid to take that humanitarian stuff, then we got shit for not taking it" (Alyona, 30 years old). The invaders create such an oppressive atmosphere quite consciously, because the feeling of fear acts as a powerful regulator of individual and group behavior and generates a conscious and seemingly voluntary perception of social coercion [8].

The problem of alienation of man from man, formulated by K. Marx in "Economic and Philosophical Manuscripts of 1844" [16], acquires a new sound when studying the occupation regime. E. Suimenko noted that "societal alienation refers to the hostile attitude towards an individual, their social environment, detachment from social institutions and organizations, as well as the imposition of unwanted norms and values that are unacceptable to the individual." [20].

Respondents talk about the deep socio-psychological rifts that arise after the liberation, the destruction of the powerful capital of social ties, which was traditionally inherent in the Ukrainian village: "People have changed, opinions, attitudes have changed, it's not the right time, people are under occupation... it takes time ... many are happy, many have become withdrawn... people are sitting at home (Valentina, 60 years old). The social atomization of today contrasts strongly with the consolidation and self-organization of the first days of the war: "when there was no occupation, the village came together, it was one whole - people baked bread, distributed half a loaf per person, distributed cereals, caught fish. The Russians were not there, and when they came, everything stopped... there were discords, not a very healthy situation" (Tetyana, 60 years old).

Against this background, the question of relations with persons who collaborated with the enemy in one form or another during the occupation arises. In the village Kostyrka, collaborationism manifested itself in various forms: administrative and technical ("Natasha Kharchenko was appointed head (of the club - author), old Pidlypna was an accountant, Lena Kamineva became a technician, Anya Fedchyshina also became a technician, and then after some time she resigned... It reached her (Oksana, 52 years old); economic ("The Zyuzkins...Lyuba and Serhii...when the war started, there were only roadblocks on the highway, they fed the invaders every day, brought potatoes, eggs, milk, cakes" (Valya, 60 years old) and domestic ("Natashka Kharchenko amazed - she swooped that humanitarian stuff, went to the referendum, scared people that if you don't vote, then wait for the guests in the evening" (Alyona, 30 years old).

Household collaborationism has a complex nature, acting, on the one hand, as a protective resocialization reaction to a change in the socio-economic system, and on the other, as a tool for legitimizing the occupation regime, in particular, through obtaining a Russian passport and working at the enterprises, institutions and organizations of the aggressor [22].

The authorities of collaborators, represented in the village of Kostyrka by the former controller of the local communal enterprise Valentyna, was not enjoyed among the population: "It's a horror, we did not recognize this authority" (Olena, 55 years old). The enemy's collaborators relied solely on fear and Russian bayonets: "I once encountered Valya, the village head. When I came from the Security Service and they said 2 days to leave or a bullet to the forehead... Valya always walked with security. Inspections were rough... Soldiers, Valya, Lyuba, and Serhiy Zyuzkin always gathered near the store in the morning... They always advocated for russia. They conducted strong propaganda" (Valentyna, 60 years old). By the way, the planned reprisal against this respondent (from which she was saved only by an urgent departure to free Ukraine) illustrates the systematic policy of the rashists in neutralizing the most socially active part of the population, as Mrs. Valentyna owned a store, was elected as a deputy of the village council multiple times, and had respect among fellow villagers.

Another direction of the "activity" of the self-styled "authority" was the imposition of Russian humanitarianism on the population under the conditions of a complete blockade of trade with free Ukraine: "Seryoga (man - author) begins to be taken by the scruff of the neck, they push him with a machine gun and say - I told you, go get it" (Alyona, 30 years old). According to the observations of the villagers, this procedure is very humiliating: "The sugar was weighed in circles, according to how many people live in the house. They gave only a little flour, not much. I felt only humiliation" (Oksana, 52 years old). Almost immediately, people understand the ostentatiousness of such "charity": "twice in the club... they gave us lists, they went and took pictures. We started with them - give us back our work - and we won't take anything from you, we don't need anything from you" (Olena, 55 years old).

However, the consequences of the occupation will make themselves known for a long time due to the emergence of new social divisions: "many werewolves who stayed and changed their colors again. The attitude towards them is negative, the impression is that if I took this, I would hit him on the head so that his eyes would pop out... we hope that the authorities will deal with them" (Mykola, 64 years old). At the same time, a certain part of the former assistants of the enemy still hopes for the return of the Russians: "Some are waiting for a Russian world, some with the hope that the children of collaborators will return and the katsaps will return" (Valentyna, 60 years old).

Under hostile rule, alienation from the usual way of life arises, in particular, a trip to the city for groceries becomes a dangerous quest with archaic practices from the times of early feudalism: "What are we carrying?" I say - sugar, carrots, onions, sausage... and he is like "A coffee"? I say no... there is tea, but how much tea did you take? 2 packs and one time - he messed up one, and so with everything where there were 2-3 packs, they took one for themselves" (Alyona, 30 years old). In parallel with this, under the conditions of the information blockade and the total dominance of rashists' propaganda, communication technologies with relatives are being improved. The mobile phone, from a means of earning, entertainment and leisure, turns into a single window to the free world and at the same time becomes a source of constant danger for its owner: "There was no connection, then it started appearing near the water tower, we all went there" (Lyubov, 60 years old). With the approach of the Ukrainian troops, the occupiers sharply increase the filtering measures:

"The phones were buzzing, if they find the flag of Ukraine or somewhere written Glory to Ukraine - then you will get such pussies that you will vomit your kidneys" (Alyona, 30 years old). The practice of having two phones is becoming widespread: a touch phone is carefully hidden at home, and a push-button one is taken outside: "We had one phone, a push-button one. Which we did not hide, but they looked at him with such a smirk. And the phone, Artyom's, I hid in the books" (Oksana, 52 years old). As a defensive reaction to the persecution, an almost Orwellian "newcomer" is born: "We called the Russians "neighbors", "color beetles", "orcs", we did not talk about them at all" (Tetyana, 60 years old), "We called them "guests", like whether the guests have arrived, whether the guests have left, or how long they will be there. And what do they hear about your guests?" (Oksana, 56 years old). Along with this, strict self-censorship of telephone conversations with free Ukraine is forming: "Topics about where the occupiers are, how many there are, it was forbidden, we knew that they were eavesdropping... they could come at any moment" (Tetyana, 56 years old); "We didn't leave the yard, we talked a little with the neighbors and that's all... we tried not to talk on the phone, we thought there was a wiretapping... I'm calling my sister in Kharkiv - are you alive?? And that's all... we were afraid to speak" (Valya, 60 years old). Along with this, it should not be forgotten that the mobile phone was a powerful weapon, with the help of which hundreds of patriots from the right-bank Kherson region transmitted the coordinates of the enemy to the Defense Forces of Ukraine, recorded the crimes of the rashists in the temporarily occupied territories and brought the liberation of their native land closer.

Thus, the empirical results obtained by us testify to the complexity and depth of social exclusion both at the individual and group levels, but at the same time require further discussion and theoretical conceptualization.

3 Results and Discussion

The periodization of the occupation of the Kherson Region, proposed by O. Cheremisin and H. Mykhailenko, opens up good heuristic prospects for the study of mass attitudes of the population. At the first stage (March - the end of May 2022). there is a sharp transition to a "non-Ukrainian" reality, where passenger and cargo connections with Ukraine are blocked, our electronic media are turned off, the living space for people is reduced, a large number of enemy checkpoints are set up, and a strict curfew is introduced. Sources of social exclusion at this stage are described by one of our respondents: "There was anxiety, they surrounded us at the edges of the village, somewhere after a month they started to come." (Alexander, 55 years old). The situation in many respects still remains uncertain, a sense of shock, a desire to flee the world before the eyes of the enemy ("I leave the store and see the TIGER driving down the street, and I don't know what to do: and Siriozhyk (son - author) must be taken away and will I make it, I will suddenly run to Siriozhyk, and they will shoot me here together with him" (Alyona, 30 years old) is combined with hopes that everything will end "in two or three weeks" and on the mountain "somehow it will be decided". However, soon, when the first roundups, detentions and torture began, people saw the real face of the occupiers: "Our Vovka was taken to the hall, I am sitting on the street..., Uncle Kolka was taken to the barn, garage, barrels, cellar, everything was dug up there, everything is being searched around. I hear that our Vovka is being beaten" (Tetyana, 56 years old).

In the second stage (end of May - September 2022), the enemy is trying to more actively penetrate social relations at the group and interpersonal levels, actively introducing rubles, banning Ukrainian banking, importing Russian goods in masse. However, the people of Kostyrka didn't like the occupation currency: "We didn't take Russian money, so we didn't need it. We did not know how to change them, how to use them. And we used hryvnias more anyway. We asked if we were paid in hryvnias, if we sold, then for hryvnias" (Oksana, 52 years old). A de facto bi-currency zone was operating: "the pharmacy had both the ruble and the hryvnia, those who were for Ukraine took the

hryvnia, and the pharmacies - purely rubles. If you want to exchange hryvnias for Russian - 1 ruble - 3 hryvnias, then it was already 1 ruble - 6 hryvnias." (Alyona, 30 years old). At the same time, the occupiers sharply increase the informational and psychological pressure: "they sat on our brains that ours will not come, that we are already Russia, that it has been already done with us... it was very difficult" (Oksana, 52 years old).

In the third stage (end of September - beginning of November 2022), the Russian occupation regime begins to crumble. The population loyal to Russia is forcibly evacuated from Kherson and its surroundings, the local infrastructure is destroyed, and occupation institutions are closed [7]. At the same time, a mass robbery of the region continues: "the kindergarten was robbed, everything was taken, not a knife, nothing, what remained were beds, a couple of mattresses, lockers, a blanket, a pillow and one gas stove - everything was destroyed, everything was spoiled" (Olena, 55 years old). At the same time, the oppressive silence gives way to a powerful rumble from the northwest: "cannonade was going on, strong protracted battles were going on in the region, helicopters, fighter jets were flying, before my eyes a canteen was destroyed in Novoraisk... the noise was great... the Ukrainians are close... ours are advancing... They are chasing them!» (Mykola, 64 years old). An important factor in overcoming social alienation after the long-awaited liberation is the awareness of individual ("We hope that everything will be fine, we will restore everything slowly... well, hope for the best. We will restore everything and live as we used to live" (Olena, 55 years old) and group ("One wish is that they help us with more weapons and planes, so that the guys can make a decent counterattack and repel them" (Tetyana, 56 years old) prospects. Another problem that needs detailed discussion is the genesis of fear in the occupation. S. Kataev and M. Khrustaliova note that the manifestations of social fears are related to historical reality, customs, traditions of society and the status of the person himself, and the main social function of fear is to force compliance with norms [14]. It is obvious that the brutal beatings and abductions of young men committed by the rashists in the first days of their stay in the village were primarily aimed at intimidating the local population, suppressing any potential attempts at popular resistance, and creating a pro-Ukrainian underground.

According to the theory of social insanity by E. Holovakha and N. Panina, fear is considered as a mass reaction of people to the destruction (spontaneous or purposeful) of the value-normative foundations of society, a disorder of psychological mechanisms of adaptation [11]. The highest form of manifestation of this kind of fear is panic, which quickly spread in the first days of the war: "people in the store began to sweep up everything, buy everything, and everyone screamed... and there were such impressions as that they were crazy. You don't realize what is being done, what happened to you, what it is at all" (Oksana, 52 years old). We are dealing with one of the most dangerous mental phenomena, the damage from the spread of which greatly increases during wartime, when sudden movements of large masses of people can lead to extremely serious consequences, block logistics and make it extremely difficult for Ukrainian defenders to perform their tasks.

Another type of fear is existential, which, on the one hand, is characteristic of us as the most important orienting experience, and on the other hand, as a manifestation of immanent human contradiction, envelops everyday life with many invisible, but very strong tenets: "It was not possible to leave the yard, we went to district, if you go out to chop firewood or practice... they immediately look at you. And you are afraid to sit in the house, or something will suddenly fly. You couldn't walk through the stadium, there were tanks under the fences with the letter Π" (Alyona, 30 years old). Under such conditions, there is an extreme sharpening of self-consciousness, defensive reactions arise, in particular, in the field of everyday speech, which can be of great interest from the standpoint of ethnomethodology: "They asked how health was and everything... guests, swallows, birds flew in - there were encryptions, the eavesdropping was constant ... the guests have left, the swallows are already flying,

the starlings have started to fly, in short, helicopters, planes and rockets" (Olena, 55 years old).

At the same time, war is a time not only of terrible experiences of the present, but also of fear for the future. L. Horokhova notes that as a threat of non-existence, fear contributes to a person's awareness of the true meaning of his purpose, the value of social existence and every day of free life [12]. Many people on the right bank of the Kherson region perceived the long-awaited arrival of the Armed Forces in the millenarian spirit - as the final end of the war, the end of all suffering and a return to peaceful times: "They thought there would be peace, they would not shoot, but it turned out differently" (Valentina, 60 years old). Along with unjustified expectations, we also see a clear understanding that the struggle continues: "The war is not over, we are still on the brink, it's a pity for the village and the city" (Mykola, 64 years old), as well as an awareness of the inevitability of changes in the ordinary world, from the macro to the micro level, the emergence of social divisions where friendship and harmony used to prevail: "We don't want to leave the yard, we don't want to communicate with those people who... betrayed you during the occupation... you don't want to not hear, not see" (Oksana, 52 years).

Along with studying the features of social exclusion in rural areas, we should not forget about the urban dimension of this phenomenon. Kostiantyn and Oleksiy Mezentsev identify several directions of the destruction of the city as a space of social interactions (urbicide): direct (physical destruction by the Russians of symbolic and everyday ordinary places through airstrikes and artillery shelling in the cities and villages of the liberated Right Bank of Kherson Oblast); indirect (loss of urban identity, spread of patron-client ties and loyalty to the enemy at the household level, a striking sign of which is a new "service" in occupied Melitopol - replacing a Ukrainian surname with a Russian one along with obtaining a new passport); delayed (non-return of local residents to the occupied territories and the disappearance of the collective human experience of the place) [17]. We hope that an empirical study of these processes will become possible in the near future after the liberation of Berdyansk, Melitopol, Henichesk, Nova Kakhovka and other cities in Southern Ukraine.

4 Conclusion

In the course of our research, we came to the following conclusions. Firstly, social alienation in temporarily occupied territories acquires a general character and manifests itself in social-group, spatial, praxeological and existential spheres. Without leaving their settlement and without changing their way of life, people become strangers in their home, deprived of the right to public space and forced to radically modify their social practices in various spheres under the influence of fear and uncertainty. In turn, fear is transformed from the situational panic of the first hours and days of the war into an oppressive, all-encompassing feeling that blocks everyday social activity and usual forms of social interaction. Due to social alienation, life in the occupation turns into moral homelessness.

Secondly, one of the important factors of social alienation in the temporarily occupied Ukrainian lands is the artificial narrowing of the available social space, both through the introduction of curfews, restrictions on movement, the closure of a large number of territories for civilian visits, and through the leveling of the border between private and public, round-the-clock violation of the right to inviolability of housing and private property, absolute insecurity from arbitrary detention, kidnapping and robbery.

Thirdly, a significant place in the formation of social alienation is occupied by fear, the initial causes of which are military actions, explosions, and the work of enemy aircraft. At the same time gradually, with the distance from the front, the main source of fear is the "new order" itself, the arbitrariness of enemy soldiers and local collaborators, the ghettoization of life and the loss of connection with free Ukraine, rapid impoverishment

against the background of economic colonization of the region, and gloomy prospects for the future. However, with the arrival of Ukrainian soldiers, the nature of fear is transformed again - Russian bombs and shells fall from the sky again, but the nearest social space becomes freer, safer and more predictable.

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SOCIAL AND PSYCHOLOGICAL PREVENTION OF PROFESSIONAL BURNOUT OF SOCIAL SPHERE EMPLOYEES UNDER THE CONDITIONS OF THE MARTIAL LAW

[a]OLENA VANIUSHYNA, [b]TAISIIA GAIVORONSKA, [c]LARISA DUNAYEVA, [d]SVITLANA LANSKA, [e]MARIIA KUZMINA, [f]ULIANA VARNAVA

[a]*State University of Trade and Economics, 19, Kyoto Str., 02156, Kyiv, Ukraine*
[b,e]*National University «Zaporizhzhia Polytecnic», 64, Zhukovsky Str. 69063, Zaporizhzhia, Ukraine*
[c,f]*Odesa I.I. Mechnikov National University, 2, Dvoryans'ka Str., 65000, Odesa, Ukraine*
[d]*Mariupol State University, 6, Preobrazhenska Str., 03037, Kyiv, Ukraine*
email: [a]olena.vaniushyna@gmail.com,
[b]t.gayvoronska@gmail.com, [c]larisa-dunayeva@onu.edu.ua,
[d]s.lanska@mu.edu.ua4, [e]mari.gorodko@gmail.com,
[f]u.varnava@onu.edu.ua

Abstract: The purpose of the article was to analyze the theoretical basis for the issue of social and psychological prevention of professional burnout of a social worker in the conditions of martial law and to single out effective preventive measures to minimize professional burnout in view of the martial law. The following general scientific methods of learning social phenomena and processes are used, namely: logical-historical, structural-functional and comparative - to analyze the terms "work stress", "professional stress", "organizational stress"; analysis and synthesis - to highlight the content and specifics of professional burnout of a social worker in the conditions of martial law; classifications - to typologize the types of professional burnout of a social worker in the conditions of martial law; structural and functional analysis - to find out the main directions of prevention of professional burnout of social workers, which requires studying and rethinking the most effective means in view of the martial law. As a result it was included the following terms in the terminological basis of the study: "work stress" (occurs on the basis of events that are directly related to the physical workplace), "occupational stress" (occurs due to reasons related to the specifics of work), "organizational stress" (occurs against the background of a negative impact on a person due to the specifics of a certain organization in which he is involved). The concept of professional burnout is analyzed, it is interpreted as a certain result of the process of adaptation to professional stress and represents the features of the dissatisfied adaptation of a social worker to stressful working conditions. In the course of the research, the concept of "professional burnout", its main causes, stages and manifestations were identified. It was found out that professional burnout of social workers significantly affects their productivity in the work process, mental and physical health. The steps proposed by authors will minimize the risks of professional burnout of young professionals.

Keywords: professional burnout; social and psychological prevention; social worker; stress.

1 Introduction

Modern Ukrainian society today is in rather difficult socio-psychological conditions, which are primarily related to the course of the Russian-Ukrainian war. This directly makes it difficult for any person to be in a stressful state, which greatly affects changes in a person's worldview and revision of their value orientations. The corresponding professional stress leads to the emergence of the syndrome of professional burnout, psychological exhaustion, a decrease in professional self-esteem, sometimes a negative attitude towards one's professional duties and misunderstandings among colleagues and clients.

The main reason for the appearance of professional burnout, scientists single out, is psychological tension in the conditions of martial law, which became a catalyst for the appearance of many psychological problems among the entire population of Ukraine, and in particular, among social workers. In such cases, in order to work with psychological health, attention is focused on comprehensive work to exclude emotions from traumatic factors. In the course of the research, we singled out three approaches to the definition of professional burnout (ecological, transactional, regulatory), which are the theoretical basis of our article.

A rather long stay of a person in the conditions of martial law causes the emergence of new requirements for the physical and psychological resources of social workers. An increased number of stress factors, constant work in conditions of air alarms, difficulty in communicating with loved ones, making emergency decisions, observing professional ethics, as well as safety rules - all this has a rather strong effect on the psychological state of

every specialist in the social sphere. A peculiar characteristic of a social specialist is the direct ability to communicate with people who find themselves in difficult life circumstances, the ability to react quickly in crisis situations and, accordingly, to build mutual positive communication with clients.

We emphasize that stress is a complex process that includes both physiological and psychological components (A. Ababkov, S. Auerbach, O. Baranov, D. Bright, F. Jones, V. Yevdokimov, V. Maryschuk, V. Perre, A. Rean, H. Selye). The main manifestations and phases of stress (according to H. Selye): anxiety, resistance, exhaustion. Based on J. Greenberg's model, the main components of stress were analyzed: a) life situation; b) perception of the life situation as stressful; c) emotional excitement; d) physiological excitement; e) consequences. The need for stress management through purposeful intervention in the course of events to prevent negative consequences that stress can cause is emphasized [10].

In particular, in the scientific literature, purposeful social behavior is singled out, which enables a specialist to withstand a difficult situation or stress through the prism of perceiving an action strategy. Corresponding, this intentional behavior occurs at any change in the situation to which the specialist can adapt and control it. Styles and strategies are chosen in accordance with individual components of a specialist's social behavior, as a result of which he is able to cope with difficult situations without a threat to his social and psychological state.

Therefore, the syndrome of professional burnout of specialists in the social sphere acts as a certain destructive factor that significantly reduces the fruitful activity of employees, indicates professional regression, acts as a destruction not only of psychological health, but also of physical health, and accordingly is a danger for the very clients seeking assistance from such a specialist in the social sphere. That is why there is a need not only for a theoretical analysis of the specified research topic, but also for the development of preventive steps to prevent professional burnout of social workers.

2 Materials and Methods

To solve the purpose of the article, the following general scientific methods of learning social phenomena and processes are used, namely: *logical-historical, structural-functional* and *comparative* - to analyze the terms "work stress", "professional stress", "organizational stress"; *analysis and synthesis* - to highlight the content and specifics of professional burnout of a social worker in the conditions of martial law; *classifications* - to typologize the types of professional burnout of a social worker in the conditions of martial law; *structural and functional analysis* - to find out the main directions of prevention of professional burnout of social workers, which requires studying and rethinking the most effective means in view of the martial law.

The theoretical basis of our study was the fundamental scientific positions of foreign scientists on the issue of professional burnout of a social worker, namely: L. Armstrong, A. Bradsky, S. Brown, M. Gunn, B. Perlman, and others. The problem of the syndrome of "professional burnout" was reflected in the works of foreign and domestic scientists devoted to the content and structure of this syndrome (M. Burysh, H. Dion, L. Karamushka, N. Levytska, G. Lozhkin, M. Leiter, S. Maksymenko, L. Malets, E. Maher, V. Orel, M. Smulson, T. Formaniuk, H. Freudenberger, U. Shufeli, and others), as well as methods of its diagnosis (V. Boiko, N. Vodopianova, S. Jackson, K. Maslach, T. Ronginska, O. Starchenkova, etc.).

However, in view of the latest challenges and threats facing social workers, namely, the martial law, which has lasted for two years in the entire territory of Ukraine, requires additional theoretical and practical study of the mentioned subject. Since

the researchers' theoretical work does not cover the entire range of problems faced by workers in the social sphere of modern Ukrainian society starting from February 24, 2022, this prompted the choice of this research topic.

3 Results

Professional burnout is most clearly manifested in the group of professions that belong to the "person-person" system. The relevant specialists of this system must constantly enter into communication with a large number of people. Daily emotional stress, accordingly, carries a certain danger of difficult experiences, which are directly related to a person's professional activity. And being in the process of martial law plunges a person into a stressful state even more.

In the course of our research, we consider the term "stress" as a certain reaction of the human body, which manifests itself in a state of tension, a certain depression and is manifested in a person under the influence of an extreme situation (in particular, the research is about the Russian-Ukrainian war).

For a more detailed understanding of the stress associated with a person's professional activity, which is the main cause of professional burnout from a terminological point of view, scientists have distinguished such concepts as: "work stress", "professional stress" and "organizational stress".

As for work stress, it arises on the basis of events that are directly related to the physical workplace (conditions or place of work). In turn, professional stress can appear due to reasons related to the specifics of work. Organizational stress, in turn, arises against the background of a negative impact on a person due to the specifics of a certain organization in which he is involved. And it is worth emphasizing that these terms are not synonymous, rather they are close in meaning. Their use depends on which factors are involved in stressful situations.

The question arises, how to distinguish the factors that cause different types of stress (work, professional or organizational). Let's dwell on them in more detail:

- work stress - specialists can be adversely affected by unsatisfactory working conditions (poor technical component, uncomfortable workplace, inappropriate work schedule, heavy workload, etc.). Accordingly, these factors can occur not only due to the imperfection of a certain organization, but also due to objective conditions that are not influenced by the employer (lack of certain technical points, climatic conditions, unstructured demand for this type of work, etc.);
- professional stress - quite a lot of professions are associated with stressful situations, especially when it comes to "person-to-person" professions, to which the social sphere belongs. In this regard, it has been rightly pointed out by many scientists that the profession itself, in this case, is stressful;
- organizational stress - it can be attributed to a negative psychological climate in the team, incompetent or abusive management, inaccuracy in job duties, irrational or insufficient distribution of work responsibilities, poor communication along the vertical and horizontal hierarchy of the company, inaccurate goals of the company's activities and other.

Based on the topic of our research, we will dwell in more detail on the concept of "professional stress", which is defined as a multidimensional phenomenon that is expressed in physiological and psychological reactions to a difficult professional situation. Three main approaches to the study of professional stress are distinguished - ecological, transactional, regulatory [10].

By its structure, professional stress is a combination of stressor and stress reactivity. Stressors are factors that can potentially cause a stress reaction. Stress reactivity is a change in the physiological state of the body (increased muscle tension,

increased heart rate, increased blood pressure, increased sweating, increased cholesterol in the blood, hydrochloric acid in the stomach, etc.). At the same time, the professional stress model consists of the following main components: a professional situation (which consistently or unexpectedly brings a person out of a state of equilibrium); perception of the professional situation as stressful (one that causes concern); emotional arousal (fear, anger, sense of threat, state of shock, etc.) as a reaction to events that cause suffering; physiological excitement (increased blood pressure, muscle tension, decreased efficiency of the immune system, etc.); consequences (diseases; decrease in labor productivity; interpersonal conflicts, etc.) [4].

Based on the analysis of approaches to the study of the "professional burnout" syndrome (A. Vydai, S. Jackson, L. Karamushka, N. Levytska, H. Lozhkin, K. Maslach, L. Malets, V. Orel, M. Smulson, T. Formaniuk, H. Freudenberger) this syndrome was defined as a stress reaction that occurs as a result of long-term professional stress of medium intensity. From the point of view of the definition of the stress process according to H. Selye (that is, the stages of anxiety, resistance and exhaustion), the syndrome of "professional burnout" is classified as the third stage, which is preceded by a persistent and uncontrollable level of excitement. The definition of the content of this phenomenon is based on the approach of H. Freudenberger, who in 1974 characterized the syndrome of "professional burnout" as a special mental state of healthy people who are in intensive communication with clients, patients, in an emotionally charged atmosphere when providing professional assistance [10].

American researchers K. Maslach and S. Jackson note that professional burnout is a syndrome of emotional exhaustion, depersonalization and reduction of personal achievements. Emotional exhaustion is the main component of professional burnout: the feeling of emotional devastation, fatigue is generated by one's own work. Emotional exhaustion manifests itself as an emotional background, indifference or emotional oversaturation [6].

As noted by O. Hlavatska, the syndrome of professional burnout is characteristic of employees of "communicative" professions that make high demands on psychological stability in situations of business communication. It is the profession of a social worker that is most prone to burnout due to the specifics of their activity. The main groups of factors that contribute to the formation of the syndrome of professional burnout of social workers include: individual characteristics of the personality (characteristic, self-esteem, level of education, etc.); organizational (work content, work overload, working conditions); peculiarities of professional activity. It is worth noting that the profession of a social worker does not have a high social status today in our society. In fact, low evaluation of his work can also be an additional source of professional burnout [3].

Quite interesting is the position of the scientist N. Perkhail, who believes that the syndrome of professional burnout of specialists in the social sphere is a destructive factor that not only reduces the productivity of employees, it indicates professional regression, dissatisfaction with self-realization, destroys their physical and psychological health, and is a danger for clients who seek assistance from social services [7].

Professional burnout (burnout syndrome) in Ukraine was officially recognized by WHO in 2001 as a psychological problem. In the International Classification of Diseases of the 10th revision, "burnout syndrome" is allocated to a separate diagnostic taxon - Z73 Problems related to life-management difficulty, coded as Z73.0 - Burn-out [6].

The syndrome of professional burnout negatively affects the professional and personal life of social workers and leads to the following consequences:

- social: loss of satisfaction with the quality of relations with clients, colleagues or management; loss of benevolence, care and friendliness in situations of business communication; loss of interest in customers; dissatisfaction with social and administrative support, feelings of alienation;
- spiritual: dissatisfaction with self-realization; despair in the implementation of life plans; loss of faith in one's own abilities and potential; lowering the bar of personal growth; loss of identity;
- physiological: loss of physical strength and exhaustion; psychosomatic illness; insomnia, appetite disturbances, etc.;
- material: loss of enthusiasm and motivation for financial earnings, loss or abandonment of clients;
- psychological: loss of positive mood and emotional elation; decrease in self-esteem related to work; feeling empty; loss of positive energy, dissatisfaction with one's mood and lack of cheerfulness, loss of mental balance (irritability, incontinence, fatigue, feelings of guilt, addiction, etc.); violation of the motivational and instructional sphere in professional behavior [3].

So, summarizing the analyzed terms, we can come to the conclusion that professional burnout is interpreted as a certain result of the process of adaptation to professional stress and is a feature of the dissatisfied adaptation of a social worker to stressful working conditions. Accordingly, the phenomenon of professional burnout itself takes on the features of a reactive-adaptive psychological content with a certain definition of its place in the system of interpretation of the psychological theory of stress.

The analysis of scientific research shows us that the professional burnout of social workers is devoted to a sufficient number of theoretical works by authors, both domestic and foreign. The essence and specifics of professional burnout, its origin and main components are comprehensively investigated in these works. However, today the issue of the influence of the martial law on professional burnout remains unsolved, and the system for the prevention of professional burnout remains undeveloped.

Important thing in stress management is the formation of an adequate attitude to the main stressor, which is the military aggression of the Russian Federation against Ukraine: the perception of war as an objective reality; the need to mobilize resources to overcome this situation; the ability to take responsibility for one's life and the lives of loved ones; active involvement in various types of activity related to the defense of Ukraine; understanding the phasic course of the war and one's emotional reactions; mastering the rules of regulating one's behavior, etc. It is also essential to identify additional stressors that operate during war. These, for example, can be the following stressors: inability to engage in active activities to support the population and military personnel; conflicts with relatives; impossibility of constant communication with loved ones who have gone abroad; communication with "toxic" people, etc. [11]. The professional activity of a social worker consists in timely help to the client through support, resocialization or rehabilitation. That is, the basic point of professional activity with the client is interaction and high-quality communication. The presence of a high-quality reaction of a social worker to a stressful situation determines the possibility of falling into the category of persons with the syndrome of professional burnout.

Professional burnout in the modern world is studied as a fairly long-term stressful situation that appears as a result of the effects of constant (sometimes chronic) professional stress on a person. In this regard, the syndrome of professional burnout in a certain way deforms a person from the point of view of his professional characteristics.

The syndrome of professional burnout is one of the dangerous psychological diseases, especially for specialists in the social sphere. Interestingly, a certain group of scientists correlates professional burnout with increased human empathy. It is no coincidence that K. Maslach, the first researcher of this phenomenon, called her book "Emotional burnout - the price of compassion." K. Maslach claims that professional burnout is not a loss of creative potential, not a reaction to boredom, but, most likely, emotional exhaustion arising against the background of stress caused by interpersonal communication [5].

Factors causing professional burnout are divided into external and internal. The first include: work organization (overload, undefined job duties, role conflict, professional non-recognition); the nature of the activity, which requires constant concentration and dedication; lack of professional motivation and financial interest. Internal factors that lead to burnout of a specialist are excessive care for clients, insufficient professional and communicative competence, excessive anxiety, nervous tension, personal ambitions, workaholism, mental imbalance, internal conflict, etc. Role factors of professional burnout include: role conflict, role uncertainty, dissatisfaction with professional and personal growth, low social status, rejection by the reference group. Separately, it should be said about another factor that causes burnout of specialists - the presence of a psychologically difficult contingent with whom they have to work and communicate in the social sphere [7].

In particular, it is possible to make a certain division of persons who are most often prone to professional burnout and are at risk: 1) introverts who are unable to conduct constant active communication due to their individual and psychological characteristics; 2) people who have a certain internal conflict in connection with the specifics of work; 3) women who are in conflict between the balance of work and family, as well as due to the need to prove their professional suitability against the background of the male gender (a certain oppression from the gender aspect); 4) persons working under conditions of chronic stress (constant threat of job loss, independent search for a client base, etc.).

Data from various studies prove that young, inexperienced workers in the social sphere are more prone to burnout, because they have unrealistic expectations about the profession, organization, and professional success. The source of burnout can be inflated and unsatisfied expectations. In general, the greater the discrepancy between expectations and reality, the more negative the consequences will be for each individual employee and for the organization as a whole. In addition, low wages and relatively low social status are also factors contributing to the emergence of professional burnout syndrome [3].

Professional burnout has certain dynamics and includes 4 stages: *the first stage* is characterized by a mild form of self-care (for example, organizing frequent breaks at work, mini-vacations, etc.), a person may begin to forget some small work moments. Most often, few people pay attention to this stage. The duration of the first stage is from three to five years. *The second stage* is characterized by a certain decrease in interest in work processes, a decrease in the need for communication (both business and intimate), the appearance of apathy towards work, the appearance of chronic headaches, the appearance of frequent colds, increased irritability. The duration of this stage can be from five to fifteen years. *The third stage* has all the signs of burnout and is chronic. Chronic diseases may appear (for example, depression, stomach problems, etc.), there is a loss of the value of one's professional activity and complete indifference to work processes. At this stage, a person strives for seclusion by all methods, the duration is up to ten years. And *the fourth (final) stage* is characterized by complete combustion. The duration can reach up to twenty years [2].

In connection with the high probability of the development of professional burnout syndrome among representatives of social professions, the issue of preventive measures to prevent and overcome this phenomenon is gaining relevance. There are two main directions of preventive and rehabilitation work: measures to prevent the syndrome of professional burnout:

- teaching social (communicative) skills, self-governance and self-control skills, mastering constructive models of behavior; rehabilitation of persons with professional burnout syndrome: recovery;
- psycho-energetic potential and meaning of professional activity and life, actualization of personal resources, increase of self-esteem [8].

In particular, scientists single out a group of certain warnings of professional burnout, which contributes to the improvement of their psychological well-being, namely: a clear understanding of work goals (both long-term and short-term); regular rest from work (regular working day, weekends and vacations according to the schedule); constant professional development and improvement of one's competence; the possibility of professional growth; avoiding comparing oneself with other specialists in the relevant field; leading a healthy lifestyle and regular sports. Also, on the part of the management, the following will contribute to the prevention of professional burnout: opportunities for the professional growth of a specialist, a salary increase or a permanent bonus (certain motivational stimulation); providing specialists with the necessary technical equipment; positive psychological climate in the team and others.

Also, it is necessary to take into account the points of digitalization of the work of social workers to simplify work processes, because the digital revolution has been going on for more than seventy years in the world, which is a multifactorial transition from analog to digital methods of data processing, storage, and transmission, and, accordingly, rapid development of hardware and software that serves these processes. These changes originate from the scientific research of those innovations that, with a successful coincidence of socio-economic circumstances, reach industrial development and mass implementation [1].

Based on the above analysis, the prevention of professional burnout requires a comprehensive approach and the correct formation of rules for the general training of specialists in the social sphere.

Prevention of professional burnout of specialists in the social sphere should be based on the very initial stages of entry into professional activity, namely: firstly, preparing future specialists in the social sphere for stressful factors and providing tools to counteract them; secondly, the formation of personal resources of young professionals to effectively overcome stressful situations.

Since it was found that professional burnout is most likely to be experienced by young specialists who have just entered the labor market, we have highlighted the key steps of primary preventive measures for social workers:

1) High-quality training of future specialists in the social sphere in institutions of higher education (hereinafter, higher education institutions), which is aimed at acquiring skills that form the students' mastery of methods for working with stress and adaptation to it;

2) Formation of communication skills as a key indicator of the effective work of a social worker, since this process itself acts as a stressogenic factor for a specialist. This will allow specialists in the course of work: effective self-realization, will provide an opportunity for productive communication, counter manipulation (both on the part of management and on the part of clients), readiness for business negotiations;

3) In the process of professional training of future specialists in the social sphere, it is necessary for future specialists in the social sphere to master rehabilitation techniques aimed at reducing the effects of stressors: removing work stress, increasing professional motivation, equalizing the balance between the efforts expended and the result, mastering the skills and abilities of self-regulation (relaxation, ideomotor acts, positive motivation), drug-free relaxation methods -

meditation, yoga, self-training, progressive relaxation, etc. [9].

4 Conclusion

Therefore, our analysis of the specifics of professional burnout of social workers, its causes, stages and manifestations makes it possible to assert that its destructive role in the development and formation of social workers reduces the productivity of workers and violates the quality of communication between the worker and the client (which is dangerous as for the specialist himself and for the client).

The proposed steps of early preventive measures for workers in the social sphere will make it possible to prevent and minimize the possible challenges of professional burnout. You will also learn skills that will help you identify and counter the effects of professional burnout.

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Primary Paper Section: A

Secondary Paper Section: AE, AN

PECULIARITIES OF "UNIFIED NEWS" TELEVISION BROADCASTING: (NON)ADHERENCE TO PROFESSIONAL STANDARDS, LANGUAGE AND ETHICAL NORMS

[a]NATALIIA SHULSKA, [b]NATALIIA KOSTUSIAK, [c]NATALIIA BUKINA, [d]OLHA KYRYLIUK, [e]RUSLANA ZINCHUK, [f]OLENA AFANASIEVA, [g]TETIANA LEVCHENKO, [h]VOLODYMYR SADIVNYCHYI, [i]SVITLANA BARANOVA, [j]OLENA MEDVID

[a,b,e]Lesya Ukrainka Volyn National University, 13, Voli Ave, 43025, Lutsk, Ukraine, [c]National Aviational University, 1, Liubomyra Huzara ave, 03058, Kyiv, Ukraine
[d]Volodymyr Vynnychenko Central Ukrainian State University, 1 Shevchenka Str., 25006, Kropyvnytskyi, Ukraine
[f]S. Kuznets Kharkiv National University of Economics, 9a, Nauky Ave., 61166, Kharkiv, Ukraine
[g]State Hryhorii Skovoroda University in Pereiaslav, 30, Sukhomlynskyi Str., 08401, Ukraine, Kyiv Reg., Pereiaslav,
[k,i,j]Sumy State University, 116, Kharkivska Str., 40007, Sumy, Ukraine
email: [a]chulskanatalia@vnu.edu.ua,
[b]kostusyaknataliia@vnu.edu.ua,
[c]nataliiabukina@npp.nau.edu.ua, [d]kyry1uk@ukr.net,
[e]ZinchukRuslana@vnu.edu.ua,
[f]en.afanasieva@gmail.com, [g]tanyalevchenko2010@ukr.net,
[h]vsadiv@journ.sumdu.edu.ua, [i]sbaranova@gf.sumdu.edu.ua,
[j]omedvid@gf.sumdu.edu.ua.

Abstract: The article monitors the broadcasts of the joint telethon "United News" (1+1, Rada, STB and ICTV, Inter, My – Ukraina, and Suspilne) in terms of compliance with professional standards, language and ethical norms. The research material included news, live broadcasts, and guest studios. The analysis takes into account the specifics of wartime and its impact on compliance with standards. It was found that media professionals violate a standard on average every minute. Among the deviations from the standard of credibility, the following phenomena were recorded: generalized pseudo-references to sources of factual material, authorship of subjective opinions, quoting unverified information from the Internet, including social networks. The use of overly emotional and figurative statements, unauthorized subjective opinions, and vague quotes on the air indicate non-compliance with the standard of separating facts from opinions. It was established that the violations of the information accuracy standard are the discrepancy between the picture and text in the stories, as well as inadequate illustration of live broadcasts. The lack of answers to the main questions of the news, unclear designation of the archive in the background, incomplete introduction of studio guests or speakers in the synchronized newscasts indicate errors in the standard of completeness of information. Various types of violations of the standard of accessibility of information presentation include the use of lexemes that are not clear to the general public, difficult terms, jargon, abbreviations, borrowings, infographics, etc. Such anomalies occur when journalists mention concepts that are incomprehensible to the general audience without the appropriate background. It has been found that the standards of efficiency and balance of opinions and points of view are hardly violated in the telethon. The monitoring has shown that media professionals are prone to ethical anomalies. In the news, we come across non-compliance with the Code of Ethics of Ukrainian journalists, in particular, the dissemination of biased information or unfounded accusations. Violations of ethical norms are also evidenced by disparaging statements or foul language used on the air.

Keywords: journalistic standards; ethics; language norms; media; telethon "United News".

1 Introduction

Today, journalism is entrusted with the mission of shaping public opinion, and this, accordingly, requires media professionals to take great responsibility for adhering to professional standards and ethical norms. In a time of war, it is important not only to present an objective picture of events, guided by the standards of reliability, accuracy, completeness, and accessibility of information, but also to maintain a balance of opinions and points of view, to avoid subjective statements, i.e., to separate facts from opinions, to use moral and ethical standards, and to use the correct set of vocabulary. After all, the rhetoric of hatred that Russia is trying to "push" into the Ukrainian information space under the guise of hostile narratives often finds its way into the domestic media through journalistic oversight.

Negative statements used by the modern media for clickbait have a significant impact on the formation of the information space and radicalization of the mood in society. Instead of promoting cohesion, which is so necessary in times of war, they often lead to a split in society, conflicts between certain groups of citizens, demoralization of Ukrainians, discrediting some in the eyes of others, etc.

National TV channels, which have the largest audience and thus a significant influence on public opinion, should be conscious of adhering to professional standards and the Code of Ethics for Journalists, as well as language norms. Media professionals must take precautions to ensure that news content is of high quality, especially in times of war.

The "United News" telethon is a joint project of the channels "UA: Pershyi", Rada, 1+1, ICTV, Inter, and Ukraine 24. It was launched on February 24, 2022, the day of Russia's full-scale invasion of Ukraine. This TV project broadcasts news, interviews, expert commentaries, and other journalistic materials related to the war in Ukraine around the clock. The telethon has a number of advantages. First, it allows reaching a wide audience, as it is broadcast on the three largest TV channels in Ukraine. Second, it provides timely and reliable information about the events of the war. Thirdly, "United News" contributes to the consolidation of Ukrainian society in times of war.

However, this journalistic format currently demonstrates distinct disadvantages. Firstly, it can lead to information overload for the audience. Secondly, it is likely to be used to spread disinformation. Thirdly, it can be subject to censorship, as the channels participating in the telethon may be restricted in covering certain topics.

Studying the professional communication of journalists and hosts of the telethon, media expert I. Kulyas notes that "the total number of violations of standards on the air is constantly growing" [8]. We observe that the quality of the TV programs of "United News" is deteriorating every month, which indicates a negative trend. In view of this, it can be argued that the listening audience does not always receive a reliable and adequate information picture of what is happening in the Ukrainian and global media field.

The professional standards of modern news journalism are studied by Ukrainian media experts I. Kulyas and O. Makarenko [7], L. Suprun [13], M. Tymoshyk [16], and others. M. Tymoshyk [16] carried out a conceptual analysis, a study of the genesis and content of professional standards. The topic of standards and ethical norms in the guidebook for professional journalists "Media Compass" was studied in more detail by O. Holub [2]. Reflections on whether standards are the basis of professional activity or an outdated framework are presented by O. Zakharchenko [18]. O. Vasina [17], M. Dorosh [1], N. Kuryata [8], Y. Syvakivskyi [15], N. Steblyna [12] write about the relevance of journalistic standards during the war. The issue of a detailed description of a particular journalistic standard and its features is the subject of a study by V. Kozak (the issue of balance of opinions and points of view) [4], as well as O. Jolos (competence and identification of experts in the context of compliance with the standards of balance and reliability of information) [3]. The research by O. Sushkova and O. Medvid [14] on the pragmalinguistic potential of news is also related to this area. Violations of ethical norms and hate speech in the media are covered in the scientific works of N. Shulska, N. Kostusiak, and other researchers [10; 11]. The general monitoring of the professional standards of the "United News" telethon in 2022–2023 was carried out by I. Kulyas [5; 6].

Despite the existence of publications of various thematic and genre ranges that relate to journalistic standards and ethics, in particular in times of war, there is currently a lack of scholarly works devoted to a comprehensive study and monitoring of compliance with professional standards and ethical norms during the Russian-Ukrainian war. We consider this issue to be relevant, as it leads the researchers to the most important

problems of our time, including the formation of respect for professional standards and ethical norms.

Thus, the purpose of the article is to analyze television broadcasting on the example of the United News marathon in terms of compliance/non-compliance with professional standards, language and ethical norms, in particular, to identify typical violations of the standards of reliability, accuracy, completeness, accessibility of information, separation of facts from opinions, promptness of presentation, balance of opinions and points of view, and to characterize examples of non-compliance with language norms and ethical principles.

2 Materials and Methods

In the course of the study, we monitored the broadcasts of the joint telethon "United News" (1+1, Rada, STB and ICTV, Inter, My – Ukraina, and Suspilne) for compliance with professional standards, language and ethical norms, recording typical violations and mistakes of media professionals. The research material included news, live broadcasts, and guest studios. In our analysis, we took into account the specifics of wartime and its impact on compliance with standards. The objectivity and comprehensiveness of the study was ensured by the use of a number of methods: descriptive, which allowed systematizing and characterizing language units that are outside the scope of ethical norms and journalistic tolerance, as well as professional standards; contextual analysis, used to identify and clarify the role of professional standards within the analyzed materials; communicative and pragmatic analysis, which aims to identify the impact of sensitive content on recipients, including vulnerable groups; monitoring, which is aimed at systematizing data on compliance with journalistic standards in the "United News" telethon.

3 Results and Discussion

The monitoring data of the telethon broadcasts indicate that the media violate a standard every minute on average. The most numerous mistakes were recorded in the news of the 1+1 TV channel. ICTV, STB, and Inter TV channels also demonstrate non-compliance with the principles of professional journalism. Their news content accounts for almost a third of all violations of the telethon standards. "Rada" and "My – Ukraina" channels pay more attention to standards, ethical and linguistic norms. The fewest violations were found in the broadcasts of "Suspilne", although as a public broadcaster, such inaccuracies should not have occurred at all.

Information reliability standard

When we studied the TV coverage of the United News telethon in 2023, we recorded frequent violations of this standard. Media expert I. Kulyas notes the disappointing trend: "The amount of inaccurate information continues to grow steadily, both in absolute terms and in relative quantities" [6].

We note that this standard, which is key one to quality journalism, is violated by media outlets every three minutes. This standard is most often neglected in the news of 1+1 TV channel, where it is violated on average 24 times per hour. On other TV channels, the number of violations is relatively lower: "Rada" (20 times), "STB" and "ISTV" (19 times), "Inter" (18 times), "Suspilne" (14 times), "My – Ukraina" (19 times) [5].

On all TV channels, except for Suspilne, one of the most common violations of the credibility standard in the "United News" continues to be generalized pseudo-references to sources of factual material. Media outlets refer to various organizations and institutions, experts or specialists without specifying them. Large groups of people based on a particular profession, affiliation, social or territorial factor are repeatedly cited as sources of facts. Occasionally, we see generalized references to unnamed media, again without specifying a particular resource or expert.

Another drawback of the telethon is unverified information from the Internet, in particular, social networks such as Facebook, Twitter, and Instagram. Journalists often take messages from unknown websites or Telegram channels, YouTube. We observe that telegram channels are one of the popular sources of information for "United News", which puts this content under obvious doubt, because we understand that such information cannot always be trusted. The second place is occupied by unspecified resources, which is also a matter of concern. Social networks such as Facebook and Twitter are no less popular. The news quotes information from YouTube and Instagram less often.

Also among the unreliable sources of "United News", there are quotes of subjective opinions. Most of the references are to anonymous representatives of various professions. On the other hand, we observe generalized references to the opinions of dubious "experts" and "analysts" presented without specifying the person concerned. Occasionally, we come across testimonies of so-called "generalized people". It is a gross violation of professionalism that in some quotes journalists refer to the authorship of unknown Russians.

The main mistakes were caused by the fact that the media workers referred to social media (in particular, the main page of the State Emergency Service on social media, not the official website). However, if the official website's social media page is verified, it can be a reliable source of information. Let us look at examples of violations. In order to prove the authenticity of the message, videos were shown from the anonymous telegram channels "Realnyi Kyiv", "aeronavtv", "H...evaya Odesa", "@ukrbavovna" and "@ukrwarzone", as well as Russian telegram channels "Shot", "Donbass Operativnyi", "Krymskiy veter", which clearly indicates the doubtful veracity of this information. This is evidenced by the following syntactic hyperbolic pointers to the sources of messages: "*shared on social media", "the Internet is full of videos", "all portals and telegram channels are full of them", "social media users have dubbed it", "the video was posted by dazed drivers", "social media actively discussed the video*". Also unreliable are references such as "*the video is being shared online*" and "*the footage is being shared online*".

In the broadcast on October 10, 2023, journalists even quoted the "Trukha" telegram channel, which repeatedly spreads disinformation.

Often, television broadcasters use generalized references, for example: "local telegram channels report". In the news of October 10 on "Inter" TV channel, the media used the phrase "a message from terrorists appeared on the network", which indicates that information was transmitted from an unreliable source – a social network, without specifying which one. The most inappropriate is the indication of the source of information conveyed in the construction "I saw a video online" ("Suspilne", October 10, 2023).

Another violation is that the broadcasts showed videos from Russian social networks and TikTok. Analyzing the television content for November 11–13, 2023, we observe that the standard of credibility was violated by media workers most often, which is categorically unacceptable for a public broadcaster.

Another variation of this standard violation is generalized pseudo-references to the authorship of subjective opinions. Often, media outlets unjustifiably refer to anonymous representatives of various groups of people by their professional characteristics. This accounts for the majority of all quotes in the news. The second place goes to the opinions of unnamed representatives of certain structures and organizations, generalized "experts" without specification, unknown analysts, etc.

Erroneous in journalistic materials were generalized references to sources of facts, for example: General Staff, Ministry of Internal Affairs, SBU, DBR, SES, Lviv City Council, Ukrenergo, Energoatom, Kherson, Luhansk, Zaporizhzhya

Regional Military Authorities, Kyiv City Military Authorities, Kherson Regional Prosecutor's Office, National Recovery Agency, Red Cross, Zaporizhzhiaoblenergo, etc.

It is incorrect that media outlets use pseudo-specifics when indicating the source of a message: *"rescuers reported"*, *"foresters say"*, *"city authorities and rescuers call"*, *"doctors admit"*, *"commenting on the law in the relevant committee"*, *"sappers say"*, *"according to the regional council"*, *"some experts predict"*, *"some political scientists predict"*, *"according to law enforcement officials"*, *"according to Ukrainian economic experts"*, *"some Ukrainian and Western military experts see it"*, *'the police say'*, *"the military fighting near Bakhmut report it"*, *"dog handlers emphasize it"*, *"local journalists note it"*. Journalists often resort to generalizations: *"this is what the regional military administration says"* or *"this is what the regional council reports"* without specifying the source of information. We observe that news reports repeatedly resort to abstract references, using the verb "*noted*" without specifying who made it.

In the media content studied, we found the unlawful use of authors with subjective opinions as experts: *"we talked to people and they say"*, *"analysts say"*, *"according to experts"*, *"military are convinced"*, *"guys are talking about it"*, *"military experts say"*, *"experienced specialists say"*, *"according to many intelligence officers"*, *'neighbors and volunteers say"*, *"villagers are sure"*. Such constructions are incorrect for journalistic broadcasting, as they cast doubt on the credibility of the material.

The news often contains abstract references without identifying the person who reported it. For example: *"it was reported"*, *"we have just been told"*, *"proven"*, *"reported"*, *'known"*, *"said"*, *"heard"*, *"as far as I know"*, *"some even predict"*, *"seen on the news"*.

We also come across materials in which factual information is presented without reference to any sources.

A standard for separating facts from opinions

Among the violations of this standard, emotional assessments are the most numerous. We observe that news outlets use figurative emotional expressions when covering the topic of war, in particular, when reporting on combat operations, the consequences of enemy shelling, etc. It is also inappropriate to use pretentious vocabulary when depicting realistic pictures at the front. We often observe the substitution of opinions for facts in journalistic materials. Among the significant violations of the standard under study is the fact that the news does not always give the right to speak to real experts. We note that journalists often resort to the method of giving out "instructions" and "useful tips". They repeatedly use unjustified authorization of opinions, personal emotions about the events depicted, and expressive lexemes to attract attention.

Journalists also use unauthorized subjective opinions in their own materials and in talk shows. The use of unfounded generalizations and vague quotes in the news is relatively less common. Other examples of violations of this standard are the use of emotionally loaded verbs such as "admits", "noted", "emphasized", "called", "convinced", etc. The news also contains subjective journalistic assessments conveyed through such syntaxes:

TV channel "Rada": *"bad weather caused disasters"*, *"inspiring story"*, *"he was incredibly lucky"*, *"new drones confused the Russians"*, *"the work of sappers is extremely difficult and very dangerous"*, *"the most acute situation"*, *"yesterday it was much worse"*, *"they conducted successful operations"*;

TV channel "1+1": *"in snowy captivity"*, *"prepared very seriously"*, *"actively collecting gifts"*, *"work is in full swing"*, *"blizzard is raging"*, *"so cold that one can't just tell"*; *"Russians hit us"*, *"speaks with great pain"*, *"mutilated body"*, *"those areas are the hottest"*;

TV channels "STB" and "ICTV": *"bombed every day"*, *"covered with snow, blizzard, wind, demolished and destroyed"*, *"catastrophically lacking"*, *"this is a story about something incredible"*, *"simple steps make wonders"*, *"so that life does not seem like sugar"*, *"miraculously survived"*, *"sluggish coverage"*, *"it is unrealistic to do this"*, *"the most difficult situation"*, *"this is a complex and responsible profession"*, *"much-needed equipment"*, *"these are the main challenges"*, *"more relevant than ever"*;

TV channel "Inter": *"to the hottest spots"*, *"total ruin"*, *"made a mess"*, *"unfortunately, two people were killed"*, *"sadly admits"*, *"enthusiastically tested"*, *"volunteer in despair"*, *"fortunately, enemy artillery is silent"*, *"mercilessly knock out the occupiers"*, *"its quality is terrible"*;

TV channel "My – Ukraina": *"very frightened"*, *"terrible events of that day"*, *"it shocked the relatives of the victims"*, *"unfortunately"*, *"shocking information"*, *"very frightened"*, *"a few days before the tragedy"*, *"destroyed to the ground"*, *"fierce fighting"*;

TV channel "Suspilne": *"these days are quite busy"*, *"it's basic"*, *"the damage is quite significant"*, *"what problems we may have encountered"*, *"the main thing worth noting"*, *"good news"*.

Despite the fact that journalists often resort to subjective insertions such as "fortunately", "surprisingly", and "unfortunately", such syntaxes are justified in war stories because they reinforce the context with a call-to-action and add to the belief in victory over the enemy.

On the other hand, it is unjustified that in television broadcasting journalists use their own assessments on any occasion: *"a very common practice"*, *"disagreed for quite a long time"*, *"listens to the coaches attentively"*, *"significantly delayed"*, *"experienced politician"*, *"a real holiday"*, *"huge traffic jams"*, *"huge queues"*, *"the situation is relatively calm"*, *"the situation was even more difficult"* (TV Channel "Inter").

A notable feature of the studied broadcasts is the dynamics of the process of objectification of the *ENEMY* concept in news reports. Our observations show that a significant factor in these changes was the beginning of the full-scale invasion on February 24, 2022. Before that date, news anchors, in particular of the "ICTV" TV channel, mostly used the words and constructions used in the daily reports of the Joint Forces Operation headquarters and defined by the Law of Ukraine "On Peculiarities of the State Policy on Ensuring the State Sovereignty of Ukraine in the Temporarily Occupied Territories in Donetsk and Luhansk Regions" (2018) to refer to the enemy. These are the following labels: *armed formations of the Russian Federation, the occupying state, Russian occupiers, Russian occupation troops, Russian mercenaries;* also, in some places, people used the lexicon *militants*, since Russia did not officially recognize its participation in the armed conflict at that time. For example: *"**Russian occupants** fired at Ukrainian New York with grenade launchers... The day before, **Russian armed forces** attacked Ukrainian positions 8 times"* ("ICTV Facts", November 30, 2021); *"This week, **Russian occupation forces** attacked Stanytsia Luhanska again"* ("ICTV Facts", December 11, 2021); *"Positions of our soldiers came under fire from **militants**"* ("ICTV Facts", October 26, 2021).

However, after February 24, 2022, we recorded the use of emotionally colored words with a pejorative connotation in the news broadcasts. The phrase *"rashist aggression"* was used to refer to the war itself, and stylistically marked vocabulary such as *rashists, barbarians, invaders,* as well as dehumanizing language units (*non-humans*), including those with zoomorphic semantics (*orcs*), were used to refer to the enemy. Also, the adjective **Putin's** is often used next to such words. For example: *"The **rashists** call it 'liberation' and the entire sane world – 'genocide'"* ("ICTV Facts", March 13, 2022); *"**Putin's barbaric troops** carry out missile and bomb attacks on populated areas"* ("ICTV Facts", March 13, 2022); *"In the Kyiv region, **Putin's**

inhumans shot a convoy with women and children" ("ICTV Facts", March 13, 2022); *"We want this nightmare to end as soon as possible, so we seem to be ready to beat the orcs with our bare hands"* ("ICTV Facts", March 13, 2022).

Although contrary to journalistic standards, such language was still in line with the general public demand at the time, caused by the shock of the first period of the Great War. However, in 2023, the number of such linguistic units in news reports has significantly decreased. Nowadays, words that mostly comply with ethical standards and guidelines dominate the designation of the enemy on the air: stylistically neutral (*Russians, enemy, adversary*) and emotionally colored (*invaders, occupiers*).

Personal opinions during live broadcasts, such as in the news of TV channel "Rada", are also inappropriate in journalistic texts: *"We advise Kyiv residents to dress warmer and really use public transport", "So we hope that people will be helped and the roads will be cleared more efficiently"*. Some TV channels, in addition to expert assessments and opinions of journalists and anchors, feature "figurative statements", "instructions to viewers", etc: *"The first frosts and snowstorms showed that we have to prepare for power outages, and even if they are not large-scale and long, they will happen, so we should first of all take care of saving resources"; "Many men would rather stay at home and take breaks than change their pre-war managerial suit for an electric welder's overalls, because it is not prestigious"; "This is exactly the approach that needs to be changed, and many people will have to do this in order to survive, because post-war reconstruction will require not managers, but workers who will be worth their weight in gold"* ("STB" and "ICTV" TV channels); *"However, bad weather can only affect the launching of missiles from the sea, but Russia can use aircraft for missile strikes in such weather conditions"; "In such weather conditions, Russian ships are unlikely to be able to go to sea and launch deadly weapons at the territory of Ukraine"* (TV channel "My – Ukraina").

We come across common attention-getting markers that are unnecessary in news content. For example, in the news of the "Rada" channel: *"I can add more", "I want to say", "I also want to note"* ("Rada" channel); *"I'll tell you", "I can note that", "but we're not relaxing", "so we hope"* (TV channel "1+1"); *"by the way", "moreover", "I see it on the video", "I remember"* ("STB" and "ICTV" TV channels); *"worth reminding", "interesting", "by the way", "imagine", "I'll add"* (TV channel "My – Ukraina").

An example of a violation of the analyzed standard is groundless generalizations by journalists, often hyperbolic: *"most people still followed the advice of the Kyiv City Military Administration", "because everyone is freezing", "all public transport is overcrowded, but it works properly and it arrives on time"* (TV channel "Rada"); *"those who were admired by the whole of Ukraine", "everyone understands this", "many Kyiv residents decided to leave their cars at home"* (TV channel "1+1"); sometimes they are too categorical, as in the following fragments: *"there is no one to work in Ukraine"; "but Ukrainians expected more understanding from their neighbors, partners, friends"* ("STB" and "ICTV" TV channels); *"the explosions were so powerful that the whole city heard them"* (TV channel "My – Ukraina").

During guest studios, hosts should resort to authorizing opinions, which they do not always do, thus violating the standard. Also, media professionals do not substantiate their statements when acting as experts. For example, the following are fragments from TV news broadcasts: *"Indeed, the second question arises here, another one that concerns the readiness of NATO itself, the North Atlantic Alliance, and these countries"* (TV channel "Rada");

A violation of the standard is when news anchors quote experts' opinions in the news, which indicates incorrect quoting. For example, the "ICTV" news anchors, when quoting the opinion of the spokesperson Yuriy Ihnat, incorrectly used citation markers. As a result, the last point made by the spokesperson sounded like the anchors' own opinion. A similar incident occurred in the news of the TV channel "My – Ukraina", when the host of the guest studio incorrectly marked the boundaries of the quote of the invited guest, so the last thought sounded like the opinion of the host herself.

Standard of accuracy of information presentation

The monitoring shows that the frequency of violations of the information accuracy standard is increasing with each issue. The worst dynamics is demonstrated by the news of the "1+1" TV channel (from 6 to 9 violations per hour). Fewer inaccuracies are made by "STB" and "ICTV" (from 5 to 8 violations), "Inter" (from 4 to 6 violations). On TV channels "Rada" and "Suspilne", the number of violations of this standard increased, but not in a large number. Only the news of TV Channel "My – Ukraina" showed a positive trend, with relatively fewer violations of the accuracy standard (from 7 to 6 violations).

Among the types of non-compliance with this standard, we record a mismatch between the picture and the text in the stories. For example, on November 27, 2023, on the TV channel "Rada", journalists talked about the snowy weather in different regions of Ukraine, but showed videos only from Odesa region. Speaking about the road accident in Odesa region, the TV channel showed pedestrians in Kyiv during the live broadcast. Another violation of this standard is the factual errors made by "United News".

Journalists also resort to inappropriate illustrations of live broadcasts of their correspondents. The highest number of such violations was recorded on TV Channels "1+1" (0.8 per hour) and "Rada" (0.7), the lowest number was observed on "My – Ukraina" (0.2) and "ICTV" with "STB" (0.3), since these channels do not have a lot of live broadcasts. Here are examples of violations recorded on the air of TV Channel "Rada". A correspondent from Poltava was talking about the consequences of bad weather, while a video of a fireplace with firewood was shown in the background. The photo was also inappropriate during another story about the situation on the capital's roads, as the reporter was in a pedestrian zone during the live broadcast and could not see the road. This happened in other stories as well. For example, a correspondent from Odesa was commenting on the situation on the roads, while a video of the street was shown on the air. On November 27, 2023, the statement of the correspondent from Kropyvnytskyi did not correspond to what was illustrated in the news. The journalist claimed that *"roads in the region are being cleared according to priority, with primary work being done on roads of international and national importance"*. At the same time, they were showing two municipal workers shoveling snow from the sidewalk in Kropyvnytskyi.

Standard of completeness of information

Recently, the average number of examples of non-compliance with this standard has almost doubled. The biggest increase was on "Rada" channel (from 1.2 to 6.6), "1+1" (from 1 violation per hour to 2.9), and "My – Ukraina" (from 1.8 to 3.1).

The number of such violations as failure to indicate the archive in the background has increased from 0.3 to 0.8 per hour of broadcasting. The highest number of such inaccuracies was made on "1+1" and "Rada" (both of them had 1.4 violations per hour on average). The telethon's media outlets did not always answer the key questions of the news in their stories.

Occasionally, we find incomplete presentation of studio guests or speakers in synchronization. There are also cases when there are no backgrounds or interjections in the video. While monitoring the stories of TV channel "Rada", where we recorded the most violations of this standard, we came across the following journalistic inaccuracies. When introducing expert Petro Chernyk to the audience, the hosts called him "colonel", forgetting to add that he was a "retired colonel", so the message was incomplete. In another case, the host introduced MP Serhiy Nagornyak as "a member of the Committee on Energy and

Utilities", forgetting to specify that this is a committee of the Verkhovna Rada.

In a story about the blocking of the Polish border, they aired an archive video from a week ago without labeling it as an archive. Also, in several cases of news, the video did not have an upsound.

On the "1+1" TV channel, examples of violations of this standard were the absence of captions on the synchronized videos. In other stories, journalists did not provide dates for the background archival video.

In the news of "STB" and "ICTV" TV channels, we recorded the following inaccuracies. In the story about the new shelter, the host's quote contained an unclear lexeme that needed to be explained: "*a sports ground for workout*". In the news, it is not enough to present Serhiy Hrabskyi as a "military expert" and Vadym Denysenko and Mykola Davydiuk as "*political scientists*".

The "Inter"' TV channel also violated this standard. In a story about a polyclinic in Trostianets, journalists did not caption some of the synchronized footage. It is not enough to present the invited persons in a generalized way, without specifying their position or place of work – for example, like in stories featuring Taras Zahorodnyi or Volodymyr Fesenko.

It is a violation that TV journalists do not always provide dates for background archival videos. This was recorded in a story about a polyclinic in Trostianets, as well as in a material about an accident in Brovary. In the broadcasts about the water quality in Marhanets and about the heating stations in Mykolaiv, instead of intertitles, they played music that did not match the context.

Failure to comply with the standard is also evident in the news about the head of the Presidential Office, Andriy Yermak, being included in the list of "most influential" people in the Politico publication on the "My – Ukraina" TV channel, as there is no relevant background on the official powers of the head of the Presidential Office. In one story about the founder of the organization 'Reactivna Poshta" Pavlo Narozhnyi, the journalists did not provide information about the organization represented by the speaker, so that the viewers could understand the competence of the expert. It was not enough to present the guest Ihor Reiterovych only as a "political scientist" and "political consultant", and in another story, to speak about Petro Chernyk only as a "military expert".

On the air of "Suspilne" on November 27–28, 2023, 5 examples of violations of this standard were recorded. In a piece about changes to mobilization, which was aired twice, there was a quote with an indication of the source: "David Arakhamia said", "Arakhamia summed up", but the journalists forgot to provide information about who the expert was, without mentioning that he was a member of the Parliament. Not all viewers might have known this. Also, some news items on the video did not have an upsound.

The standard for the promptness of information presentation

There were few violations of this standard, so it is not worth talking about their systematic nature. Only three participants of the telethon had violations: "1+1", "ICTV" with "STB", and "Inter". Mostly, this concerns the presentation of outdated information. The messages were also broadcast with a delay of several hours or even days. However, this is acceptable in a time of war, so there are no serious violations of this standard.

Among other violations of the analyzed standard, we note the lack of coordination between the channel's guests and news studios, which does not contribute to updating information. For example, in the "Suspilne" story, despite the fact that Serhiy Tsehotskyi, an officer of the 59th separate motorized infantry brigade, spoke about the frontline situation in the Avdiivka sector in the channel's guest studio, the final newscast again

quoted him from an interview with "Radio Svoboda' in the same form as in the newscast at 18.00.

The "Inter" TV channel twice presented as news the information about the completion of the SBI investigation into the Brovary accident. This was the event of the previous day, which was widely covered in the telethon the day before. However, the news lead did not even mention that it had happened the day before.

On November 28, 2023, the "My – Ukraina" TV channel aired a report on the "Grain from Ukraine" summit that took place in Kyiv a few days earlier, on November 25.

A standard for a balance of opinions and perspectives

Monitoring of "United News" shows that the telethon does not always cover topics which require a balance of opinions, so we did not find any significant violations of this standard. Over the course of several months, the number of violations increased slightly (from an average of 0.1 violations per hour to 0.2), mainly due to the "Rada" TV channel, which had 0.5 violations of the standard per hour of broadcasting on average.

An example of a violation of the balance of opinions can be seen in a story on "1+1" TV channel on November 27, 2023, when the studio discussed amendments to the law on national minorities in Ukraine. Three government officials were invited as experts, but there were no representatives of the opposition.

Also, in the material of the TV channel "My – Ukraina" of November 28, 2023, there was no mandatory expert assessment in the twice repeated message about the inclusion of the Head of the Presidential Office Andriy Yermak in the list of "most influential" people of the Politico publication.

Standard of accessibility of information presentation

Recently this standard has been violated more than before. The highest number of inaccuracies was found on the TV channel "1+1" (1.6 per hour), and the lowest – on "Inter" (0.8). Among the main types of violations, we record the use of lexemes that are not understood by the general public, difficult terms, jargon, abbreviations, borrowings, infographics, etc. Such anomalies occur when journalists mention concepts that are incomprehensible to the general audience without the appropriate background.

Among the examples we recorded on TV Channel "Rada", we found that they showed infographics of enemy losses 5 times in the news, which is difficult to understand, because complex numerical information in large quantities is presented on one slide in small print. It is inappropriate that during such visual support, the presenter voiced the positions in a different order than the one presented in the table.

Among the negative phenomena of violation of the standard, we observe the unjustified use of difficult-to-understand syntactic constructions of the clerical style in the oral speech of the hosts. For example, on the TV channel "Rada" in journalistic communication, we find such a difficult to understand statement that was voiced twice by the host: "*Investigators have notified five SES officials of suspicion. In particular, the head of the Aviation and Aviation Search and Rescue Department of the State Emergency Service of Ukraine, the acting commander of a special aviation detachment, the deputy commander for flight training, the commander of an aviation squadron and the head of the flight safety service of a special aviation detachment of the operational and rescue service of the civil protection service of the State Emergency Service of Ukraine from the city of Nizhyn, Chernihiv region*".

Also, in the newscast on "Rada" TV channel on November 27–28, 2023, the media used neologisms in their broadcasts that may not be clear to the general audience: "*to whom this **message** is directed*", "*it is necessaryto recharge **gadgets**", "about international **tracks**", "our information **slot**"*. A similar phenomenon was observed in a news item on "1+1" TV channel,

when a medical expert used a highly specialized lexicon: *"we have already blocked that **gap**"*.

Little-known words were also used by the hosts on "ICTV" on November 28, 2023 (*"they set up a sports ground for **workouts**"; "we have to leave **discretion**"; "it was such a **crash test**"*) and "Inter" (*"It's not exactly an American **shutdown**, but it's very similar"*).

We can also see the complexity of the statement in the synchronization of the doctor in the story about the opening of a modular polyclinic in Trostianets: *"includes an **autoreflectometer**, a sign projector, and an automatic digital **foropter**"*. The synchronization is not informative, because the audience will not understand some of the words.

Another type of violation of this standard was seen in a story on the TV channel "My – Ukraina" on November 28, 2023. In the news about a missile attack in Zaporizhzhia, the synchronization with a the lengthy caption *"Oleksiy Kravets, Deputy Director of the Department of Social Protection of the Population of Zaporizhzhia City Council"* lasted less than a minute and a half. Obviously, viewers did not have time to read it. In another story, a beautiful infographic was presented, but since it was shown on the screen for less than two seconds, viewers did not have time to perceive the information presented. We often find complicated abbreviations in the news subtitles that need to be deciphered: "Artur Mikhno, co-founder and **CEO** of Work.ua"; "At the **SES** Centralized Technical Training Center", etc.

Violation of ethical standards

While monitoring television broadcasting, we found that media professionals are prone to ethical violations. In the news, we come across non-compliance with the Code of Ethics of Ukrainian Journalists, in particular, the dissemination of biased information or unfounded accusations. Despite the high-profile nature of the event, we still consider it unethical to identify people in a story before the relevant court decision, as journalist Lilia Goncharuk did by naming the names of the organizers of the so-called "drunken parties" ("Suspilne", February 4, 2023). It is also a violation that both suspects were shown in the footage, although journalists should have kept in mind the right to privacy of the suspects until the court decision. In this case, the criminal topic is not of great public interest, as it is not related to war or corruption, and the named individuals are not public figures.

It is also unjustified to resort to anonymous accusations, as the media did in a story by "Suspilne" TV channel, talking about a criminal case of embezzlement of humanitarian aid in Estonia by an anonymous ex-volunteer Maria. In this journalistic material, we find another ethically incorrect phenomenon. A security guard was shown on the air without his face being blacked out, filmed with a hidden camera. The journalists did this without warning or consent of the person, which indicates interference with the person's personal space and also violates the professional actions of media workers.

Guided by ethical norms, journalists should closely monitor their broadcasting to avoid discrimination and stereotyping of vulnerable groups on air. Clause 15 of the Code of Ethics for Ukrainian Journalists states that no one should be discriminated against because of their gender, language, race, religion, national, regional or social origin, or political preferences. Accordingly, incorrect language and offensive phrases that may generate hate speech should be avoided in statements. It is necessary to refrain from allusions or comments regarding a person's physical characteristics or illness. For example, the Commission on Journalistic Ethics found unlawful the statement made by Olga Nemtsova, host of the "Rada" TV channel, during the broadcast on October 18, 2023, when the journalist compared the behavior of Russian President Vladimir Putin to autism. In a statement, the commission said it "categorically condemns the practice of stereotyping people with autism. This is a gross violation of journalistic ethics. Such words spread

prejudice against people with autism, may contain signs of hate speech, and ultimately lead to discrimination" [9].

Violations of ethical standards are also evidenced by the use of derogatory language by journalists. For example, in a story on the "STB" TV channel, a journalist used the derogatory phrase "third world countries": *"The delegation of the 'third world' countries arrives at the security forum"*.

It is unethical to present foul language on air in news content. For example, the material about military operations in the Zaporizhzhia sector contained swear words in the synchronized voices of the military (TV Channel "1+1"). Also, the TV channel "My – Ukraina" aired an unblackened logo with the obscene construction "H...evaya Odesa" (without three dots), and this happened at ten o'clock in the morning, when there could be children watching the screens.

Another ethical violation by the journalists of "United News" is the incorrect use of archival images. We have recorded such cases on several TV channels. For example, in stories about offenses at the Territorial Recruitment Center, images of random employees of the TRC, who did not have their faces covered and were easily recognizable, were superimposed on text that was negative in terms of connotative content. A similar incorrect use of illustrative content can be seen in the material of the "1+1" TV channel on June 27, 2023. Talking about the detention of a Russian accomplice during a missile attack on Kramatorsk, the journalists showed a man who had lost loved ones in the attack. At that time, the presenter said a phrase that did not match the image: *"SSU investigators have already notified the detainee of suspicion"*.

The failure to comply with ethical standards by "Inter" TV channel journalists is evidenced by the synchronization of one of the leaders of Hamas terrorists, in which he makes emotional appeals to Muslims to protest.

Another unethical statement was made by TV presenter Tetiana Honcharova on the "Rada" TV channel on August 11, 2023. The journalist uses morally unacceptable comparisons in the story: *"Let's think about this death today. That is, Russia launches four 'Kinzhals', one of the 'Kinzhals', and the result of this launch is the death of a child. That is, a Russian missile costs 10 million dollars and as a result, one Ukrainian child dies. In any case, these are not commensurate figures in any case"*.

4 Conclusion

The analysis shows that journalists most often violate the standard of separation of facts from opinions in the TV coverage of the "United News" telethon, followed by the violation of standard of reliability. We recorded relatively fewer violations of such standards as accuracy, completeness of information, accessibility of information, balance of opinions and points of view, and efficiency. Among ethical violations, we detected about 0.2% of inaccuracies, in particular, the use of unethical considerations or incorrect lexical items.

Journalists' failure to comply with the standard of accuracy is evidenced by such phenomena as generalized pseudo-references to sources of factual material, authorship of subjective opinions, and quoting unverified information from the Internet, including social media. The use of overly emotional and figurative statements, unauthorized subjective opinions, and vague quotes on air are manifestations of violations of the standard of separation of facts from opinions. Mismatches between pictures and text in stories, as well as inadequate illustration of live broadcasts, indicate violations of the standard of accuracy of information. Lack of answers to the main questions of the news, unclear designation of the archive in the background, incomplete presentation of studio guests or speakers in synchronized newscasts reveal errors in the standard of completeness of information. Various types of violations of the standard of accessibility of information presentation include the use of lexical items that are not understood by the general public, difficult terms, jargon, abbreviations, borrowings, infographics,

etc. Such anomalies occur when journalists mention concepts that are incomprehensible to the general audience without the appropriate background. It was found that the standards of promptness and balance of opinions and points of view in the telethon were hardly violated. The monitoring showed that media professionals are prone to ethical anomalies. In the news, we come across non-compliance with the Code of Ethics of Ukrainian journalists, in particular, the dissemination of biased information or unfounded accusations. Violations of ethical norms are also evidenced by disparaging statements or foul language used on the air.

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Primary Paper Section: A

Secondary Paper Section: AJ

TYPICAL LANGUAGE ANOMALIES IN WRITTEN PROFESSIONAL COMMUNICATION

[a]NATALIIA SHULSKA, [b]NATALIIA KOSTUSIAK, [c]LARYSA HROMYK, [d]IRYNA NASMINCHUK, [e]SVITLANA OSTAPCHUK, [f]OLEKSANDR MEZHOV, [g]IRYNA ZAVARYNSKA, [h]ROMAN DUBROVSKYI, [i]IRYNA KOMINIARSKA, [j]IRYNA POLIAK

[a,b,f]*Lesya Ukrainka Volyn National University, 13, Voli Ave., 43025, Lutsk, Ukraine*
[c,d]*Higher educational institution "Podillia State University", 12, Shevchenko Str., 32316, Kamianets-Podilskyi, Ukraine,*
[e]*National Aviational University, 1, Liubomyra Huzara Ave., 03058, Kyiv, Ukraine*
[g]*Ternopil Volodymyr Hnatiuk National Pedagogical University, 2, Maxyma Kryvonosa Str., 46000, Ternopil, Ukraine*
[h,i,j]*Kremenets Taras Shevchenko Regional Academy of Humanities and Pedagogy, 1, Litseyna Str., 47003, Kremenets, Ukraine*
email: [a]*chulskanatalia@vnu.edu.ua,*
[b]*kostusyaknataliia@vnu.edu.ua,* [c]*hromyklarysa@pdatu.edu.ua,*
[d]*nas.minchuk@pdatu.edu.ua,* [e]*svitlanaostapchuk@npp.edu.ua,*
[f]*mezhovoleksandr@vnu.edu.ua,* [g]*zif.30@ukr.net,*
[h]*dracroma2008@ukr.net,* [i]*irinakominarska@gmail.com,*
[j]*kovalukjrin2@gmail.com*

Abstract: The article analyzes typical language anomalies in the written professional communication of employees of public authorities of Ukraine. The role of linguistic competence in the professional profile of a modern public servant is determined. On the basis of negative material extracted from the texts of official documents, typical error-prone areas at the level of spelling, vocabulary, grammar (morphology and word formation) are identified and characterized. The author suggests relevant literary correspondences to the analyzed anomalies. The material of the study is constructions of modern official business style containing erroneous punctuation. The anomalies were extracted from the texts of official documents posted in the public domain on the websites of Ukrainian government agencies. It has been established that the most common errors at the level of spelling are disregard for the norms of the new edition of Ukrainian spelling, violation of the rules of euphony, and incorrect use of capital letters in the names of institutions, documents, and holidays. Spelling mistakes in documents are caused by non-compliance with the rules of technical typing, including unjustified use of hyphens instead of dashes, errors of incremental numerals, word abbreviations, use of dates, neglect of indents, and identical quotation marks. The lexical anomalies identified in the use of unmotivated tautology, pleonasm, words in an unusual meaning or violation of their compatibility are recorded. Among the most common morphological errors in the official business style, there are inaccuracies in the use of the vocative case when addressing the addressee in business correspondence, surname declension, use of the dative case, agreement of numerals with nouns, declension of numeral forms, and use of passive verb constructions with *-ся*. Syntactic anomalies include erroneous 'copied' phrases in which prepositions that are not typical for a particular context are used to express semantic and syntactic relations.

Keywords: language culture; error; professional communication; official business sphere; public servants.

1 Introduction

A successful professional portrait of an employee in any field is formed not only by basic qualification knowledge, but also by the language skills of a specialist as a conscious performer of national duties. After all, "a perfect knowledge of the state language, constant care for its prestige and functioning in all spheres of public life is one of the components of a set of personal qualities and character traits of a conscious citizen" [3].

At a time of powerful informatization of society, orientation of management processes in Ukraine to the best European standards, and increasing status of the native language in the world, sufficient language training is a particularly important component of professional success of a public authority employee. Despite the current trend toward mastering foreign languages, a true specialist must undoubtedly first and foremost know his or her native language at a high level. In the process of drafting resolutions, contracts, agreements, conducting business correspondence, and communicating with citizens at different levels, a public servant uses his or her basic knowledge of the native language. In order to properly perform their professional duties and prevent linguistic anomalies in official documents, civil servants need proper linguistic knowledge of phonetics, spelling, vocabulary, stylistics, terminology, syntax, etc. Failure to comply with language norms in management practice can lead to serious violations in documentation, cause a negative reaction from the interlocutor, and all this will eventually lead to career problems for employees. In view of this, there is a need to monitor and analyze typical language errors that occur in the professional written communication of public servants.

The researcher of errorology T. G. Bondarenko notes that "an error is an anomalous, that is, such non-normative linguistic formation that arises as a result of an unmotivated violation of the literary norm and is the result of incorrect thought operations" [2]. N. F. Kryvych writes about the culture of written communication and language culture as a way to self-improvement of a specialist, pointing out the following necessary requirements that determine the level of professional speech culture: purity of speech, free use of various verbal and expressive means, terms, expressiveness, originality. They are closely related to a person's worldview, culture of thinking, and communicative competence of the speaker [7]. The opinion of L.V. Doroshenko that "the ideas of improving language culture should be the main ones in the activities of civil servants" seems to be quite relevant [3]. O. L. Prykhodko, studying the language culture of civil servants in the scientific and theoretical aspect, believes that improving the linguistic culture of employees of state authorities will help to form better skills in the field of business speech of civil servants [9]. L. M. Artyushkina and O. M. Rud have written about speech competence as a component of the communication process of employees of state institutions [1]. The peculiarities of forming the culture of speech in the professional activity of civil servants are studied by O. I. Kozievska [6], O. L. Prykhodko [9], Y. M. Uzdenova [12]. S. Hadjiradeva [5] states the importance of language and speech competence in the context of professional speech communication.

The purpose of the article is to study typical linguistic anomalies in the written professional communication of employees of public authorities of Ukraine, in particular, to find out the role of linguistic competence in the professional profile of a modern public servant, to identify and characterize typical error-prone areas at the level of spelling, vocabulary, grammar (morphology and word formation) on the basis of negative material extracted from the texts of official documents, and to suggest relevant literary counterparts to the analyzed anomalies.

2 Materials and Methods

The material of the study is constructions of modern official business style containing erroneous punctuation. The anomalies were extracted from the texts of official documents posted in the public domain on the websites of Ukrainian government agencies. In order to fully disclose the topic presented and analyze the language culture of business texts, the article uses the following research methods: linguistic description, method of structural-semantic and transformational analysis, comparative method, method of component analysis.

3 Results and Discussion

Spelling anomalies

In the written speech of government officials, spelling errors are frequent, although most scholars tend to believe that such errors have an average degree of error risk. T. Bondarenko suggests that all cases of incorrect spelling / composition of words should be conditionally divided into two types: namely spelling (arising from a violation of a specific spelling rule) and non-spelling (not caused by a violation of any spelling rule, but arising in the process of computer text compilation) [2, p. 11]. The researcher presents a classification of spelling errors based on the types of spellings in relation to the graphic sign: she distinguishes between alphabetic and non-alphabetic ones (the latter include apostrophe, hyphen, contact, space, dash). Non-spelling errors are likely to occur at the stage of computer-assisted text production, while actual spelling anomalies indicate a lack of

relevant linguistic knowledge in the preparation of official documents and in the process of their editing.

Among the most common spelling errors in business communications, there are cases of disregard for the norms of the new version of the Ukrainian spelling, which came into force in accordance with the resolution of the Cabinet of Ministers of Ukraine of May 22, 2019. The most common mistakes include the incorrect spelling of words with foreign language components. For example: *Статистична інформація, розміщена на офіційному веб-сайті* (the right spelling in Ukrainian is *вебсайті) Головного управління статистики у Волинській області є доступною та відкритою для всіх користувачів без будь-яких обмежень* (*Statistical information posted on the official website of the Main Department of Statistics in the Volyn region is available and open to all users without any restrictions*) (http://www.lutsk.ukrstat.gov.ua/); *Відомості про осіб, щодо яких застосовано заборону, передбачену частиною 4 статті 1 Закону України «Про очищення влади», оприлюднюються на офіційному веб-сайті* (the right spelling in Ukrainian is *вебсайті) Міністерства юстиції України* (*Information about the persons to whom the prohibition provided for in Part 4 of Article 1 of the Law of Ukraine "On Purification of Power" has been applied is published on the official website of the Ministry of Justice of Ukraine*) (https://www.kmu.gov.ua/); *Судові рішення, внесені до Реєстру, є відкритими для безоплатного цілодобового доступу на офіційному веб-порталі* (the right spelling in Ukrainian is *вебпорталі) судової влади України (ч. 1, ст. 4 Закону України «Про доступ до судових рішень»)* (*Court decisions entered in the Register are open for free round-the-clock access on the official web portal of the judiciary of Ukraine (Part 1, Article 4 of the Law of Ukraine "On Access to Court Decisions")*) (https://vl .arbitr.gov.ua/sud5004/); *Віце-прем'єр-міністр* (the right spelling in Ukrainian is *Віцепрем'єр-міністр) Ольга Стефанішина зустрілася з Генеральним секретарем НАТО та провела низку зустрічей у штаб-квартирі Альянсу* (*Deputy Prime Minister Olga Stefanishyna met with the Secretary General of NATO and held a series of meetings at the Alliance headquarters*) (https://www.kmu.gov.ua/); *Роз'яснення прес-служби* (the right spelling in Ukrainian is *пресслужби) Держстату щодо розрахунків індексу споживчих цін в Україні* (*Clarification of the press service of the State Statistics Service regarding calculations of the consumer price index in Ukraine*) (http://www.lutsk.ukrstat.gov.ua/). According to the norms of current spelling, foreign for Ukrainian language components *веб-, прес-* (*web-, press-*), which are not full words, are written together.

A common anormative is the writing of the lexeme *проект* (*project*) according to the old model, while according to the current spelling of the word with the Latin root -ject-, are written with the letter *є*. We record the following examples of violations: *Цього року переважну частину заходів щодо вдосконалення статистичної інфраструктури, методології, організації статистичних спостережень, розвитку інформаційних технологій здійснювали у межах проекту* (the right spelling in Ukrainian is *проєкту) «Посилення потенціалу офіційної статистики»* (*This year, the majority of measures to improve the statistical infrastructure, methodology, organization of statistical observations, development of information technologies were carried out within the framework of the project "Strengthening the potential of official statistics"*) (http://www.lutsk.ukrstat. gov.ua/); *За оцінками Європейської комісії, цей проект* (the right spelling in Ukrainian is *проєкт) увійшов до першої четвірки найуспішніших (серед 140) у країнах європейської політики сусідства* (*According to the estimates of the European Commission, this project was among the top four most successful (among 140) in the countries of the European neighborhood policy*) (http://www.lutsk.ukrstat.g ov.ua/); *1 листопада 2021 року до Вищої ради правосуддя від Державної судової адміністрації України надійшов для погодження проект* (the right spelling in Ukrainian is *проєкт) змін до Положення про проведення конкурсів для призначення на посади державних службовців у судах,*

органах та установах системи правосуддя у відповідній редакції (лист Голови ДСА України від 28 жовтня 2021 року № 10-25900/21) (*On November 1, 2021, the High Council of Justice from the State Judicial Administration of Ukraine received for approval a draft of amendments to the Regulation on conducting competitions for the appointment of civil servants in courts, bodies and institutions of the justice system in the relevant version (letter of the Head of the State Judicial Administration of Ukraine dated October 28, 2021 No. 10-25900/21)*) (http://www.lutsk.ukrstat.gov.ua/); *Розгляд та оцінка проектів* (потрібно – *проєктів) актів законодавства з питань провадження підприємницької діяльності; Про затвердження громадянину Гриневичу Р. І. проекту* (the right spelling in Ukrainian is *проєкту) землеустрою щодо відведення земельної ділянки та зміну її цільового призначення для будівництва та обслуговування будівель торгівлі (03.07) у с. Княгининок Луцького району Волинської області* (*Consideration and evaluation of drafts of legislative acts on the conduct of business activities; On the approval for citizen R. I. Hrynevych the project on land management regarding the allocation of a plot of land and the change of its purpose for the construction and maintenance of commercial buildings (03.07) in the village of Princesses of the Lutsk district of the Volyn region*) (https://www.lutskrada.gov.ua/).

An equally common phenomenon in business documents is the failure to observe cuteness due to the improper use of the prepositions *у/в, з/із/зі*. Typical for official documents are erroneous constructions with the incorrect use of prepositions *у/в*: *в рамках реалізації соціального проєкту, затвердження послуг у управлінні, усунення перешкод в користуванні, зміни у рішенні, зазначених в клопотанні тощо* (*within the framework of the implementation of a social project, approval of management services, removal of obstacles to use, changes in the decision specified in the request, etc.*). We record other cases of anormative use of prepositions *у/в*: *в* (the right spelling in Ukrainian is *у) якому взятий на облік розпорядник бюджетних коштів* (*in which the administrator of budget funds is taken into account*) (https://www.treasury.gov.ua/); *В* (the right spelling in Ukrainian is *у) чинному законодавстві поняття визначені таким чином* (*In current legislation, the concepts are defined as follows*) (https://vl.arbitr.gov .ua/sud5004/); *Проте у* (the right spelling in Ukrainian is *в) багатьох випадках вказані поняття врегульовують майже однакові відносини, що в* (the right spelling in Ukrainian is *у) свою чергу породжує помилки їх правової кваліфікації* (*However, in many cases, the specified concepts regulate almost the same relations, which in its turn gives rise to errors in their legal qualification*) (https://vl.arbitr.gov.ua/sud5004/); *В* (the right spelling in Ukrainian is *у) новій редакції Господарського процесуального кодексу України закріплено відмову від принципу об'єктивної істини, оскільки цей принцип не був названий серед основних засад господарського судочинства* (*In the new version of the Economic Procedural Code of Ukraine, the rejection of the principle of objective truth is enshrined, since this principle was not named among the main principles of economic justice*) (https://vl.arbitr.gov.ua/sud 5004/); *В* (the right spelling in Ukrainian is *у) розумінні судовий наказ є офіційним розпорядженням, що видається судом (суддею) і зобов'язує певного суб'єкта на вчинення юридичних значимих дій* (*In the sense, a court order is an official order issued by a court (judge) and obliges a certain subject to perform legally significant actions*) (https://vl.arbitr. gov.ua/sud5004/). *Звернення, в* (the right spelling in Ukrainian is *у) яких порушуються питання довідкового та консультативного характеру, а також ті, які не потребують додаткового вивчення, розглядаються безпосередньо під час телефонної розмови шляхом надання консультацій* (*Appeals in which questions of a reference and advisory nature are raised, as well as those that do not require additional study, are considered directly during a telephone conversation by providing consultations*) (https://www.treasu ry.gov.ua/); *Про перейменування вулиці Крилова у* (the right spelling in Ukrainian is *в) місті Луцьку; Програма реалізується протягом 2023–2024* (a dash is needed instead of a hyphen) *років у* (the right spelling in Ukrainian is *в) один*

eman (*About the renaming of Krylova Street in the city of Lutsk; The program is implemented during 2023-2024 years in one stage*) (https://cumanska-gromada.gov.ua/); *Про затвердження Положення про службу у* (the right spelling in Ukrainian is *в*) *справах дітей Луцької міської ради у новій редакції* (*On the approval of the Regulation on service in children's affairs of the Lutsk City Council in the new edition*) (https://www.lutskrad a.gov.ua/). As one can see, most often documents do not follow the rules of using the preposition *у* before a consonant at the beginning of a sentence (most often *в* functions), as well as in the middle of a sentence, and sporadically incorrectly the preposition *у* instead of the justified *в* is used.

Typical ones are also anormatives regarding the use of prepositions *з/із/зі*. The most common erroneous phenomenon is the use of the preposition *з* (*with*) between consonants, which causes incoherency: *сектор з питань, витяг з протоколу, змін в рішенні, договір із підприємством* (*sector on issues, extract from the protocol, changes in the decision, contract with the enterprise*). Examples found on the websites of state authorities testify to such abnormality: *Орієнтовний план проведення Пенсійним фондом України консультацій з* (the right spelling in Ukrainian is *із*) *громадськістю у 2024 році* (*Tentative plan for the Pension Fund of Ukraine to hold consultations with the public in 2024*) (https://www.pfu.gov. ua/vl/); *У п'ятнадцятиденний строк з* (the right spelling in Ukrainian is *із*) *дня його одержання або в інший, встановлений Верховною Радою України, строк* (*Within a fifteen-day period from the day of its receipt or another period established by the Verkhovna Rada of Ukraine*) (https://www.tre asury.gov.ua/); *Одним із* (the right spelling in Ukrainian is *з*) *основних висновків прогнозу повинно стати визнання нагальної необхідності для України проведення чіткої державної демографічної політики* (*One of the main conclusions of the forecast should be the recognition of the urgent need for Ukraine to carry out a clear state demographic policy*) (http://www.lutsk.ukrstat.gov.ua/).

From the point of view of melodiousness, the postfix *-сь* in verbs, which must be replaced by *-ся* before the next consonant, is also non-normative, cf. *Їх частка залишила**сь*** (the right spelling in Ukrainian is *залишила**ся***) *на рівні 2018 року* (*Their share remained at the level of 2018*) (https://www. treasury.gov.ua/).

Another erroneous orthographic phenomenon is the use of erroneous forms *двох-, трьох-, чотирьох-* instead of normative *дво-, три-, чотири-*, cf. *При призначенні пенсії в* ***трьохкратному*** (the right spelling in Ukrainian is *трикратному*) *розмірі* (*When appointing a pension in threefold amount*) (https://www.pfu.gov.ua/vl/);

One of the error-prone areas of texts in the official business style is anormatives in the use of capital letters, in particular, regarding the writing of the names of institutions and organizations, regulatory documents, holidays, etc., cf. *…**П**останову* (the right spelling in Ukrainian is *постанову*) *КМУ № 211 від 11.03.2020 року «Про запобігання поширенню на території України гострої респіраторної хвороби COVID-19»* (*...Resolution of the CMU No. 211 dated 11.03.2020 "On preventing the spread of acute respiratory disease COVID-19 on the territory of Ukraine"*) (https://pidgayci-gromada.gov.ua/); *…керуючись ст. 12 Земельного **К**одексу України* (the right variant in Ukrainian is *кодексу), ст. 25 Цивільного **К**одексу …відповідно до **П**останови* (the right spelling in Ukrainian is *постанови*) *Кабінету **м**іністрів* (the right spelling in Ukrainian is *Міністрів) України № 476 … селищна рада вирішила...* (*in accordance with Art. 12 of the Land Code of Ukraine, Art. 25 of the Civil Code of Ukraine the village council decided...*) (https://cumanska-gromada.gov.ua/); *зокрема **П**останова* (потрібно – *постанова*) ***П**ленуму* (the right spelling in Ukrainian is *пленуму*) *Вищого господарського суду України від 26 грудня 2019 року* (*...in particular, Resolution of the Plenum of the Higher Economic Court of Ukraine dated December 26, 2019*) (https://vl.arbitr.gov.ua/sud5004/); *На*

*вимогу Луцької міської ради та враховуючи численні звернення громадян **Д**ержавними* (the right spelling in Ukrainian is *державними) контролюючими службами* (*At the request of the Lutsk City Council and taking into account the numerous appeals of citizens by the State controlling services*) (http://www.social.lutsk.ua/); *…відповідно до **б**юджетного* (the right spelling in Ukrainian is *Бюджетного) кодексу України...* (*in accordance with the Budget Code of Ukraine*) (https://ovadnivska-gromada.gov.ua/); *Щиро вітаю усіх бухгалтерів з професійним святом – Днем **Б**ухгалтера* (the right spelling in Ukrainian is *Днем бухгалтера*)! (*I sincerely congratulate all accountants on the professional holiday – Accountant's Day!*) (https://chopovuscka-gromada.gov.ua/).

Common spelling errors in documents are caused not by a violation of the literary standard, but by neglecting the rules of technical typing. Among the most typical anormatives of this type, we note the frequent use of a hyphen instead of a dash, since a hyphen should be put only in words, while between numbers and in a sentence as a punctuation mark, it is appropriate to use a dash: *Оформлення документів для виїзду на постійне проживання за кордон усиновленої іноземцями дитини –* (the normative variant is dash) *громадянина України* (https://dmsu.gov.ua/volyn); *…з них 13962,89 грн –* (the normative variant is dash) *основна заборгованість* (https://vl.arbitr.gov.ua/sud5004/). On the official websites of the authorities, in the information about the hours of reception of citizens, a hyphen is also mistakenly used instead of a standard dash, cf.: *понеділок-четвер: 08.30 - 13.00, 14.00 - 17.15 п'ятниця - 08.30 - 13.00, 14.00 - 16.00* (http://www.social.lu tsk.ua/).

Additions in ordinal numerals are also erroneous: *На **5-ій*** (the right spelling in Ukrainian is *5-й) сесії ухвалили такі рішення* (https://cumanska-gromada.gov.ua/); *На **23-у** (*the right spelling in Ukrainian is *23-му) зібрали всі необхідні дані* (https://cum anska-gromada.gov.ua/). Whereas, according to the norm, a one-letter suffixshould be used in numerals with a vowel as the penultimate letter, and a two-letter suffix with a consonant.

Public servants not always consistently follow the norms of generally accepted abbreviation of words: *призначено 378,8 **тис*** (the right variant in Ukrainian is *тис.) нових пенсій, у разі втрати годувальника – 648,6 **тис*** (the right variant in Ukrainian is *тис.) осіб* (https://www.pfu.gov.ua/vl/); *не пізніше ніж через 20 робочих днів – 682.00 **грн.*** (the right variant in Ukrainian is *грн*) (https://dmsu.gov.ua/volyn); *Засідання відбудеться у приміщенні Господарського суду Волинської області за адресою: **пр.*** (the right variant in Ukrainian is *просп.) Волі, 54а.* (https://vl.arbitr.gov.ua/sud5004/); *У період з 14 **год.** (*the right variant in Ukrainian is *год)* до 15 **год.*** (the right variant in Ukrainian is *год*) *проводитиметься оповіщення населення м. Львова та області сигналами цивільного захисту* (https://miskrada-radekhiv.gov.ua/).

Evidence of a low technical culture of the text of an official document is the neglect of indents, identical quotation marks, paragraph alignment rules, etc. We find such anomalies on the websites of state institutions: *Луцький районний сектор (м. Луцьк* (a comma is required) *вул. Володимирська,76* (indentation is required); *У залі судових засідань №208* (indentation is required) (https://vl.arbitr.gov.ua/sud5004/); *за адресою* м.Радехів (indentation is required), *просп. Відродження,16* (indentation is required), *Під час обговорення порядку денного І.Лах* (indentation is required) *внесла пропозицію щодо включення одного додаткового питання* (https://miskrada-radekhiv.gov.ua/); *Секретарю селищної ради Януль Т.І.* (indentations are required) *забезпечити оприлюднення цього рішення…*(https://cumanska -gromada.gov.ua/); *Тому говорити про 40%* (indentation is required) *працюючого населення, яке своєчасно не отримувало заробітну плату на початок минулого року, не актуально й не правильно* (http://www.lutsk.ukrstat.gov.ua/); *Про передачу в оренду земель сільськогосподарського призначення ТОВ «Волинь-Тера-Нова» за межами с.Липне* (indentation is required) (https://cumanska-gromada.gov.ua/);

Для ведення особистого селянського господарства гр.Шевчук (indentation is required) *Людмилі Олександрівні* (https://cumanska-gromada.gov.ua/). Sporadically, we come across unnecessary, unjustified indents: *Додатки 1 – 4* (the right variant is – 1– 4) *до цього рішення є його невід'ємною частиною* (https://cumanska-gromada.gov.ua/).

Not in all documents, we do record consecutive unbreakable indents between groups of three digits in values: *Видатки бюджету селищної територіальної громади у сумі 86954500* (the right variant is *86 954 500 гривень*), *у тому числі доходи загального фонду бюджету селищної територіальної громади 83842500* (the right variant is *83 842 500 гривень*) (https://cumanska-gromada.gov.ua/); *На коригування проектно-кошторисної* (the right spelling in Ukrainian – *проєктно-кошторисної*) *документації з реконструкції мереж вуличного освітлення в с.Хобултова* (indentation is required) *Володимир-Волинського району Волинської області – 19003* (the right variant is *19 003*) *гривень* (https://volodymyrrada.gov.ua/); *відображено в додатках 1,2,3,4,5,6* (indentations are required) *рішення сільської ради* (https://pidgayci-gromada.gov.ua/).

Among the names of institutions and organizations, we come across those presented in double quotes. In order to distinguish, in accordance with the norms of modern spelling, it is advisable to use quotation marks of different shapes – external and internal. In the function of the first, it is recommended to use angular quotation marks (the so-called "herringbone quotation marks" («…»), in the function of internal ones – *лапки-лАпки* ("…") [11]. The monitoring of the texts of official documents confirms that government officials do not use the current spelling norms regarding this punctuation phenomenon, cf. *Фінансова підтримка громадської організації «Автомобільний клуб інвалідів «Поршень Волині»* (the right variant is *"Поршень Волині"*)» (http://www.social.lutsk.ua/); *Комунальне підприємство «Санаторій матері і дитини «Пролісок»* (the right variant is *"Пролісок"*) (https://volynrada.gov.ua/); *громадська організація «Центр реабілітації осіб з інвалідністю «Джерело життя»* (the right variant is *"Джерело життя"*)» (https://www.lutskrada.gov.ua/); *Щодо включення одного додаткового питання «Про схвалення проекту* (the right spelling in Ukrainian is *проєкту*) *рішення «Про затвердження Програми соціально-економічного та культурного розвитку Радехівської міської територіальної громади»* potrébно (the right spelling in Ukrainian is *"Про затвердження Програми соціально-економічного та культурного розвитку Радехівської міської територіальної громади"*) (https://miskrada-radekhiv.gov.ua/); *Компенсація вартості послуги з догляду за дитиною до трьох років «муніципальна няня» призначається відповідно до Постанови КМУ від 30.01.2019 № 68 «Деякі питання надання послуги з догляду за дитиною до трьох років «муніципальна няня»* (the right variant is *"муніципальна няня"*) (http://www.social.lutsk.ua/). As one can see, most often double or single quotation marks are used in the texts, without using distinction.

The use of the "date" attribute in business speech also requires certain rules. There are two ways to represent the date in documents: digital and verbal-numeric. DSTU 4163:2020 "Unified system of organizational and administrative documentation. Requirements for processing documents" states that in various details of the same document, the date can be processed both verbally and digitally [4]. When writing a date digitally, its elements are indicated in Arabic numerals in one line in the following sequence: day, month, year. The day and month are indicated by two pairs of numbers separated by a dot; year - in four digits, a dot is not put at the end and *року* or abbreviation *р* is not added. In accordance with the requirements in the texts of regulatory and legal acts and references to them and in documents containing information of a financial nature, a verbal-digital method of indicating dates is used, with the insertion of a zero in the day of the month, if it contains one digit. Analyzing the documents, we note that most often this norm is followed, although we occasionally record errors:

Відповідно до ст. 26 Закону України «Про місцеве самоврядування в Україні», Положення про порядок найменування та перейменування вулиць, площ, провулків, інших об'єктів на території Цуманської селищної ради, затвердженого рішенням сесії № 13/183 від 23.02.2022 року (the right variant is 23.02.2022), *селищна рада вирішила* (https://cumanska-gromada.gov.ua/).

During computer typing, due to an oversight, the anormative use of an inverted apostrophe appears («ˋ»): *Здійснення контролю за ходом реалізації Програми покладається на Цуманську селищну раду, її виконавчий комітет, Службу у справах дітей та сім ˋ ї* (the rightvariant is «'») *Цуманської селищної ради* (https://cumanska-gromada.gov.ua/).

Lexical anormatives

The appearance and functioning of some lexical anormatives is caused by the negative influence of the Russian language. In view of this factor, T. G. Bondarenko clearly singles out the concepts of "interference", "Russianism", and "Surzhik formation" as negative facts of the language system [2, p. 10].

Among the typical lexical violations in official documents, we usually come across an unmotivated tautology, i.e., repetition of words or phrases, cognate words in one or neighboring sentences, cf. *Так, за подання до суду позовної заяви майнового характеру, яка подана юридичною особою…*(https://vl.arbitr.gov.ua/sud5004/); *наведення в позовній обставин щодо розміру заборгованості за кредитом, за відсотками за користування кредитом* (https://vl.arbitr.gov.ua/sud5004/); *Програма носить* (стилістично правильно – *має*) *комплексний та системний характер, а тому передбачається чітка координація дій всіх задіяних співвиконавців* (http://www.lutsk.ukrstat.gov.ua/); *Терміни, не визначені цим Порядком, вживаються у значеннях, визначених законодавством України* (https://www.lutskrada.gov.ua/); *До повноважень Уповноваженого та контрольного органу належать* (https://www.lutskrada.gov.ua/); *Виявляючи повагу до історичних традицій міста, з метою формування позитивного іміджу міста Луцька, виховання патріотизму, Луцька міська рада своїм рішенням встановлює дату відзначення Дня міста Луцька* (https://www.lutskrada.gov.ua/); *Співпраця з громадськими та благодійними організаціями реалізується шляхом участі та підтримки спільних заходів, фінансової підтримки діяльності громадських організацій, підтримки надання соціальних послуг вразливим мешканцям міста* (http://www.social.lutsk.ua/); *Громадяни України, які постійно проживають за кордоном, за оформленням паспорта громадянина України для виїзду за кордон звертаються до закордонної дипломатичної установи в країні проживання* (https://dmsu.gov.ua/volyn).

Pleonasm, i.e. duplication of meaning in two or more words, is no less common: *Надаю згоду на обробку своїх персональних даних* (the right variant is *персональних даних*) (https://www.treasury.gov.ua/); *рішення було прийняте багаточисельною* (the right variant is *численною*) *кількістю голосів* (https://cumanska-gromada.gov.ua/); *У переважній більшості* (the right variant is *у більшості, здебільшого*) *позивачами у справах цієї категорії є банківські та інші фінансові установи* (https://vl.arbitr.gov.ua/sud5004/); *Останнім часом переважна більшість* (the right variant is *переважна кількість, більшість*) *статистів користуються веб-сайтами* (the right variant is *вебсайтами*) *Держкомстату і територіальних органів державної статистики* (http://www.lutsk.ukrstat.gov.ua/); *Головними пріоритетами* (the right variant is *пріоритетами*) *її діяльності було і залишається повне та своєчасне забезпечення потреб усіх користувачів* (http://www.lutsk.ukrstat.gov.ua/); *…на сьогоднішній день* (the right variant is *на сьогодні*) *є неприйнятною* (http://www.lutsk.ukrstat.gov.ua/).

The use of words in a non-attributive sense is also non-normative: *За інформацією уряду, торік рівень інфляції **складав*** (the right variant is *становив*) *4 %* (https://www.treasury.gov.ua/); *Кількість населення сільської ради (станом на 01.01.2019 р.) – 8700 **чоловік*** (the right variant is *осіб*) (https://adm.dp.gov.ua/); *Відповідні кошти спрямовано у видатках по **напрямках*** (right variant is *напрямах*) (https://www.treasury.gov.ua/); ***невірно*** (right variant is *неправильно*) *застосував положення* (https://vl.arbitr.gov.ua/sud5004/); *Кримінальні правопорушення, у яких на початок звітного періоду рішення **не прийнято*** (right variant is *не ухвалено*) (https://vl.arbitr.gov.ua/sud5004/); *Скоротилось **число*** (right variant is *кількість*) *вчинених тяжких та особливо тяжких злочинів* (https://vl.arbitr.gov.ua/sud5004/); *Усі учасники засідання **приймали*** (right variant is *брали*) *активну **участь** в обговоренні демографічних прогнозів для формування довго- і середньострокової стратегії соціально-економічного розвитку країни* (http://www.lutsk.ukrstat.gov.ua/); *Основною метою розробки схем є підвищення безпеки пішоходів **за рахунок*** (better variant is *завдяки*) *влаштування нових пішохідних переходів* (https://www.lutskrada.gov.ua/); *Присутні можуть **задавати** свої **питання*** (right variant is *ставити запитання*) *особисто* (https://www.lutskrada. gov.ua/); … *для розгляду та **приймання*** (right variant is *ухвалення*) *рішення* (https://dmsu.gov.ua/volyn); *Результати конкурсу на **зайняття*** (right variant is *обіймання*) *посади директора КНП «Радехівська ЦРЛ»* (https://miskrada-radekhiv.gov.ua/).

More than once, in the speech of modern documents, we come across the 'copied' feminine verbal noun *передача* (*transfer*), e.g.*передача землі, передача майна, передача повноважень тощо* (*transfer of land, transfer of property, transfer of powers, etc*). It is worth avoiding this anormative and using lexemes that correspond to the literary standard and the specific context: *передавання, передання* або *надання*: *факт **передачі** справ і майна засвідчується актом* (https://vl.arbitr.gov.ua/sud5004/); *про погодження про **передачу** в суборенду земельної ділянки* (https://cumanska-gromada.gov.ua/); ***Передача** земельної ділянки у власність або у користування громадян на підставі набувальної давності здійснюється у порядку, встановленому цим Кодексом* (https://vl.arbitr.gov.ua/sud5004/); ***Передача*** (right variant is *передання*) *заяви для оформлення документів для виїзду за кордон на постійне проживання до територіального органу ДМС* (https://dmsu.gov.ua/volyn). The anormative one is also 'copied' lexeme of *видача* (*rendition*), while the correct counterpart is *видавання*, cf. *У разі прийняття* (the right variant is *ухвалення*) *рішення про відмову в оформленні чи **видачі*** (the right variant is *видавання*) *паспорта за результатами розгляду заяви-анкети та поданих документів надається письмова відповідь з причин відмови* (https://dmsu.gov.ua/volyn).

Violation of the conjugacy of words, based on interference phenomena is also observed: ***строки*** (the right variant is *терміни*) *призначення пенсії* (https://www.pfu.gov.ua/vl/); *не стежив за дорожньою **обстановкою*** (right variant is *ситуацією*); ***не оспорюючи*** (right variant is *не оскаржуючи*) *рішення* (https://lv.arbitr.gov.ua/); *вони проживають по **адресу*** (right variant is *за адресою*) (https://cumanska-gromada.gov.ua/); *Справи у спорах щодо цінних паперів, **у тому числі*** (right variant is *зокрема*) *пов'язані з правами на цінні папери та правами, що никають з них* (https://vl.arbitr.gov.ua/sud5004/); …*зазначена норма Цивільного кодексу України може бути застосована лише у випадку **прострочення*** (right variant is *протермінування*) *грошового зобов'язання у гривні* (https://vl.arbitr.gov.ua/sud5004/); … *іпотекодержитель **вправі*** (right variant is *має право*) *розпочати звернення стягнення на предмет іпотеки відповідно до цього закону* (https://vl.arbitr.gov.ua/sud5004/); …***в першу чергу*** (right variant is *насамперед*) *враховуючи тенденції вирішення комерційних спорів* (https://vl.arbitr.gov.ua/sud5004/); *У загальному розумінні судовий наказ є офіційним розпорядженням, що видається*

*судом (суддею) і зобов'язує певного суб'єкта на вчинення юридично **значимих*** (right variant is *значущих*) *дій* (https://vl.arbitr.gov.ua/sud5004/); *Щорічно **в рамках*** (right variant is *в межах, в рамах*) *роботи комісії з питань звітності здійснюється* (right variant is *здійснюються*) *інвентаризація звітно-статистичної документації і відповідні заходи* (http://www.lutsk.ukrstat.gov.ua/); *При цьому слід **відмітити*** (right variant is *зазначити, зауважити*), *що зростання суспільних потреб та вимог населення і відповідно стандартів рівня та якості життя, тісно пов'язане з поліпшенням соціально-економічного становища в країні* (http://www.lutsk.ukrstat.gov.ua/); ***У подальшому*** (right variant is *надалі*) *ці дані буде використано для розроблення заходів, спрямованих на зменшення звітного навантаження на респондентів та вдосконалення звітно-статистичного інструментарію* (http://www.lutsk.ukrstat.gov.ua/); *Для **розгрузки*** (right variant is *розвантаження*) *правової смуги руху у потрібних місцях буде встановлено знак «Стоянка заборонена»* (https://www.lutskrada.gov.ua/); *Особлива увага приділяється **благоустрою*** (right variant is *упорядкуванню*) *навколишньої території Луцька* (https://www.lutskrada.gov.ua/); *Можливі наслідки проведення в життя рішення для різних соціальних груп населення та **заінтересованих*** (right variant is *зацікавлених*) *сторін* (https://www.lutskrada.gov.ua/); *Завод здійснює **переробку*** (right variant is *перероблення*) *меліси* (https://www.lutskrada.gov.ua/); *І за наявності підстав зобов'язати його **відмінити*** (right variant is *скасувати*) *попереднє рішення про відмову в оформленні чи видачі паспорта* (https://dmsu.gov.ua/volyn); *документи для його обміну подаються **на протязі*** (right variant is *протягом*) *одного місяця з дати настання таких обставин* (https://dmsu.gov.ua/volyn); ***включити*** (right variant is *ввести*) *до виборчих списків* (https://turiyska-gromada.gov.ua/); *У разі виявлення помилок у заяві-анкеті працівник вносить до неї відповідні **поправки*** (right variant is *виправлення*) (https://dmsu.gov.ua/volyn).

In business speech, an uncharacteristic for the Ukrainian language interjection construction *таким чином* (*thus*) is common, which should be replaced with stylistically better options: *отже* (as a summary), *отож*, cf. ***Таким чином*** (right variant is *отже*), *вимоги міської ради про визнання протиправними дії заступника прокурора щодо звернення до Господарського суду…* (https://vl.arbitr.gov.ua/sud5004/).

The dominant anormative in business written communication is the use of lexemes *наступний / наступна / наступне / наступні* (*next*) in a non-attributive sense, when it is not about the sequence of events, e.g. *випливає з **наступних** підстав* (https://vl.arbitr.gov.ua/sud5004/); *Внести зміни до статей 27, 28 частини 2 статті 29 Статуту територіальної громади міста Луцька, виклавши їх у **наступній** редакції* (https://www.lutskrada.gov.ua/). Pronouns *такий / така / таке / такі* will be lexically appropriate in these contexts.

Active participles of the present tense -*уч/-юч, -ач/-яч,* are not characteristic of the modern Ukrainian literary language, and should not be used in texts of an official business style, cf. … *спрямовані на вдосконалення **діючих*** (the right variant is *чинних*) *форм державних статистичних спостережень* (http://www.lutsk.ukrstat.gov.ua/); *фактично **працюючих** держслужбовців* (right variant is *держслужбовців, які фактично працюють*) (https://www.lutskrada.gov.ua/); *Тому говорити про 40 % **працюючого** населення* (the right variant is *населення, яке працює*), *що своєчасно не отримувало заробітну плату на початок минулого року* (http://www.lutsk.ukrstat.gov.ua/); ***пояснююча*** (right variant is *пояснювальна*) *записка* (https://cumanska-gromada.gov.ua/); *На сайті оприлюднені **узагальнюючі*** (right variant is *узагальнювальні*) *результати* (https://cumanska-gromada.gov.ua/); *Наказом тимчасово **виконуючого*** (right variant is *виконувача*) *обов'язків Голови СЗРУ* (https://www.treasury.gov.ua/); ***виконуючий** обов'язки* (right variant is *виконувач обов'язків*) *начальника відділу* (https://cumanska-gromada.gov.ua/). Among the most common

ways of replacing active verbs that are not characteristic of Ukrainian business communication, the following are offered: with the help of monosyllabic, synonymous or complex adjectives; nouns in the nominative or genitive form, noun-prepositional constructions or adverbs; passive verbs; elimination from the text of an active participle that is superfluous in terms of content, the use of subordinate clauses or phrases of the appropriate content.

Perhaps the most widespread in terms of quantitative indicators is the non-normative use of the copied lexeme *даний / дана / дане*, which should be replaced by a normative pronoun *цей / ця / це* or other lexemes, cf. *На **даній** сторінці оприлюднюються офіційні документи громади: розпорядження, рішення, проєкти рішень* (https://cumanska-gromada.gov.ua/); *На **даний** час обласною прокуратурою завершується вивчення стану криміногенної ситуації в області* (https://vl.arbitr.gov.ua/sud5004/); *У **даній** статті розглядалось питання, чи тягне за собою скасування державної реєстрації права власності на вказане майно* (https://vl.arbitr.gov.ua/sud5004/); *У **даний** час Держкомстат здійснює заходи нормативно-правового та організаційного забезпечення проведення органами державної статистики загального сільськогосподарського перепису* (http://www.lutsk.ukrstat.gov.ua/).

Instead of the construction common in business texts *в повній мірі* (*in full*), it is expedient to use stylistically better *повною мірою* або *сповна*, cf. *Забезпечити **в повній мірі** ефективну роботу правоохоронної системи* (https://vl.arbitr.gov.ua/sud5004/);

Grammatical anormatives

Along with such important issues of language culture as mastering the rules of orthography and lexicology, in business communication the correct use of means of expression of opinion depending on the purpose and content of the statement, which are regulated by the grammatical norms of the language, is also of great importance. Grammatical norms of the modern Ukrainian literary language are differentiated into morphological (which regulate the correct choice of morphological forms of words during formation and word change, as well as their combination) and syntactic (they determine the normative construction of phrases and sentences).

Morphological errors are "such non-normative formations that do not correspond to the formal expression of at least one of the grammatical categories of gender, number, case, degree of comparison, person, tense, manner, state, species" [2, p. 12].

As for noun anormative phenomena, we most often record inaccuracy in the use of the vocative case when addressing the addressee in business correspondence, because in most cases, violating the literary standard, the nominative case is used, e.g.: *Шановний **Валерій Миколайович*** (the rght spelling in Ukrainian is *Валерію Миколайовичу*) (https://www.lutskrada.gov.ua/); *До речі, **Володимир Юрійович*** (the rght spelling in Ukrainian is *Володимире Юрійовичу*), *про ФАПи* (https://pidgayci-gromada.gov.ua/)

Declension of surnames is not always used consistently in documents, leaving them in the nominative case or declensing them incorrectly, cf. *У разі відсутності **Лець*** (the rght spelling in Ukrainian is *Леця*) *Ігоря Вадимовича* (https://www.lutskrada.gov.ua/).

A mistake-dangerous phenomenon in the texts of the official business style is non-compliance with the norms of the use of the dative case in the requisite "addressee", e.g. ***державному службовцю*** (the right spelling in Ukrainian is *службовцеві*) ***Петрову О. І.*** (https://www.lutskrada.gov.ua/).

Significant difficulties and, as a result, systematic deviations from grammatical norms are associated with the use in business texts of the correct case forms of nouns that are part of quantitative-substantive combinations. Normatively, the

numerals *два, три, чотири* (*two, three, four*), entering into grammatical relations with nouns, require from them the nominative plural form. Instead, in official documents, the correct form is systematically replaced by the genitive singular, obviously under the influence of Russian grammar, which is foreign to us, where this form is used sequentially. Monitoring the texts of the official business style, we come across the following numerical anomalies: *Два **керівника*** (the right spelling in Ukrainian is *два керівники*) *комітетів постійно на зв'язку з населенням районів* (https://pidgayci-gromada.gov.ua/); *Взяли участь **72 респондента*** (right spelling in Ukrainian is *72 респонденти*) (https://www.lutskrada.gov.ua/); *Відкрито **32 віддалених робочих*** (right spelling in Ukrainian is *32 віддалені робочі*) *місця, де здійснюється обслуговування громадян* (https://www.lutskrada.gov.ua/); *В ухваленні рішення брали участь **144 слухача*** (right spelling in Ukrainian is *144 слухачі*) (https://cumanska-gromada.gov.ua/). Errors often occur in the combination of fractional numerals with nouns, e.g. *Після **півтора роки*** (right spelling in Ukrainian is *півтора року*), *як набрала чинності нова редакція ГПК України, можемо з практичної точки зору оцінити відповідність очікувань з реальністю щодо застосування ГПК України* (https://vl.arbitr.gov.ua/sud5004/); *Закупити **5,5 тонн*** (right spelling in Ukrainian is *5,5 тонни*) *необхідного товару* (https://pidgayci-gromada.gov.ua/); *Його показник – **737,5 кілометрів*** (right spelling in Ukrainian is *373,5 кілометра*). *Кошти у сумі **64,7 тисяч*** (right spelling in Ukrainian is *64,7 тисячі*) *гривень передбачені також на реконструкцію Обласної дитячо-юнацької спортивної школи* (https://www.lutskrada.gov.ua/). We also fix anormatives in the declension of numeral forms, cf. *Ці кошти розподілено між **двісті сорок три*** (right spelling in Ukrainian is *двомастами сорока трьома*) *підприємствами* (https://www.lutskrada.gov.ua/).

As a result of interference phenomena in written speech, the pronoun *їх* (*their*) is often used in a non-attributive sense, e.g. ***Їх*** (right spelling in Ukrainian is *їхнє*) *значення не заповнюється* (https://pidgayci-gromada.gov.ua/); ***Їх*** (right spelling in Ukrainian is *їхня*) *частка залишилась на рівні 2018 року* (https://www.treasury.gov.ua/). Considering that *їх* (*their*) is the genitive and accusative form of the personal pronoun *вони* (*they*), it is normative to use the pronouns *їхній / їхня / їхнє / їхні* in such constructions. One should also not use the pronouns *котрий / котра / котре /* (*which*) over the norm, if it is not about time or singling out someone or something, cf. *Взяли участь в укладанні міжнародних договорів, **котрі*** (right spelling in Ukrainian is *які / що*) *стосуються міста* (https://www.lutskrada.gov.ua/)

Among verbal anormatives, the tendency is to use passive constructions with verbs in *-ся*. O. Ya Lavrynets, researching the paradigm of the passive in the modern official business style, notes that "the active use of passive constructions with verbs in *-ся* testifies to their gradual transition from the extreme periphery to the core of the syntactic system of the Ukrainian language, which contradicts the modern literary norm" [8, p. 46]. The researcher claims that passive verb constructions in *-ся* function in parallel with active constructions in modern samples of documents, and sometimes in the same text of the document. Linguists qualify the use of such constructions as a violation of modern speech norms, to eliminate which they advise using indefinite-personal, definite-personal, two-syllable sentences or passive (with predicative forms in *-но, -то*) constructions.

The conducted monitoring proved the redundancy of passive verbs in *-ся* in modern business speech, cf. *про те, що його (її) заробітна плата, яка **враховується*** (right variant is *враховану, яку враховують*) *при обчисленні пенсії, становить; особи, яким **нараховується*** (right variant is *нараховано, нараховують*) *грошове забезпечення* (https://www.pfu.gov.ua/vl/); *Правила є обов'язковими для всіх державних службовців апарату прокуратури та **доводяться*** (right variant is *доведені*) *до їх відома під підпис; Факт передачі справ і майна **засвідчується*** (right variant is *засвідчують*) *актом; Графік **затверджується*** (right variant

is *затверджують*) *наказом прокурора області; На цей час обласною прокуратурою* **завершується** (right variant is *прокуратура завершує*) *вивчення стану криміногенної ситуації в області; Прокуратурою* **вживатимуться** (right variant is *прокуратура вживатиме*) *заходи щодо перевірки інформації* (https://vol.gp.gov.ua/ua/index.html); *обвинувачений, який* **тримається** (right variant is *тримають) під вартою; копія постанови* **вручається** (right variant is *вручають) особі; судове рішення* **ухвалюється** (right variant is *ухвалюють); висновок* **підтверджується** (right variant is підтверджено) *зібраними доказами; особа негативно* **характеризується** (right variant is *особу характеризують) по місцю* (right variant is *за місцем) проживання* (https://lv.arbitr.gov.ua/).

A significant number of linguistic anormatives are also represented by syntactically erroneous phenomena. Traditionally, syntactic anormatives are analyzed at the level of word combinations, simple and complex sentences. In the studied documents, we find many phrases in which prepositions uncharacteristic for a certain context are used to express semantic and syntactic relations.

In official and business communication, as in general in the modern Ukrainian language, the use of copied constructions with the non-normative preposition *по* has become established. Researcher G. V. Sikora differentiates two groups of such constructions: 1) in which the analyzed preposition mostly replaces other Ukrainian prepositions; b) in which the preposition *по* appears as redundant, replacing preposition-free expressions [10, p. 52].

Anormatives with the specified preposition in the documents are represented by the following syntactic models:

1. Preposition *по* + noun in the locative case (literary norm prepositions *з / для / щодо* (*with / for / regarding*) + noun in the genitive case): **по викладених** (right variant is *щодо викладених*) *в апеляційних скаргах доводів* (https://lv.arbitr.gov.ua/); … *на експертизу проєкту* **по капітальному ремонту** (right variant is *з капітального ремонту) проїзду по вулиці Шевченка* (https://cumanska-gromada.gov.ua/); … *які заходи будуть вжиті* **по задоволенню** (right variant is *для задоволення) їх звернень і запитів* (https://www.pfu.gov.ua/vl/); *Заборгованість* **по фінансових санкціях** (right variant is *з фінансових санкцій) та пені* (https://www.pfu.gov.ua/vl/).
2. Preposition *по* + noun in local case (literary norm – preposition *за* + noun in instrumental case): *пенсія* **по інвалідності** (right variant is *за інвалідністю) – 1 454,5 тис. осіб; у разі втрати годувальника – 648,6 тис. осіб* (https://www.pfu.gov.ua/vl/); **по даним** (right variant is *за даними) вибіркових обстежень* (https://www.treasury.gov.ua/); *Особа негативно характеризується* **по місцю** (right variant is *за місцем) проживання* (https://lv.arbi r.gov.ua/).
3. Preposition *по* + noun in local case (literary norm – prepositions *на / в* + noun in local case): *трансляції* **по радіо** (right variant is *на радіо*) (https://www.pfu.gov.ua/vl/); *бюджет* **по області** (right variant is *в області*) (https://vl.arbitr.gov.ua/sud5004/).
4. Preposition *по* + noun in the locative case (literary norm – preposition *після* (*after*) + noun in the genitive case): **по оголошенню** (right variant is *після оголошення) підозри* (https://www.pfu.gov.ua/vl/).
5. The preposition *по* + noun in the local case, in which the preposition *по* is redundant and functions instead of prepositionless compounds fixed in the literary language: *Українцям запропонують ще одну програму* **по доступному житлу** (right variant is *програму доступного житла*) (https://vl.arbitr.gov.ua/sud5004/).

Prepositional constructions *у відповідності, у залежності, у порівнянні* (*in correspondence, in dependence, in comparison*), which, unfortunately, are often used in business texts, are not characteristic of the literary norm. Instead, the following constructions are correct: *відповідно до, залежно від, порівняно з*, пор. *пенсію на пільгових умовах* **у відповідності зі** (right variant is *відповідно до) списком № 1*; *у* **відповідності** (right variant is *відповідно до) до інструкцій* (https://www.pfu.gov.ua/vl/); … *що на 58,1 тис. платників більше* **у порівнянні** (right variant is *порівняно з) з 01.01.2019* (https://www.pfu.gov.ua/vl/)

Frequent ones are the phenomena of non-normative use of one-component prepositions *згідно, відповідно* (*according, respectively*), while the norm requires two-component ones – *згідно з, відповідно до* (*according to, in accordance with*): **згідно частини** (right variant is *згідно з частиною) четвертої статті 42 Закону України* (https://www.pfu.gov.ua/vl/); **згідно вироку** (right variant is *згідно з вироком) суду* (https://lv.arbitr.gov.ua/); **згідно абзацу** (right variant is *згідно з абзацом) 4 статті 7* (https://vl.arbitr.gov.ua/sud5004/). We also fix the confusion of these prepositional components: **відповідно з** (right variant is *згідно з) його написанням у раніше виданих на його ім'я документах* (https://dmsu.gov.ua/).

Not corresponding to the literary standard is also the use of prepositions-copies *відносно, на протязі* (*relatively, during*), which should be replaced by respectively *щодо / стосовно, протягом* (*regarding / in relation to, during*), cf. *До суду скеровано обвинувальний акт* **відносно** (right variant is *щодо / стосовно*) (https://lv.arbitr.gov.ua/); *Інформація* **відносно** (right variant is *щодо) режиму роботи* (https://dmsu.gov.ua/); *документи для його обміну подаються* **на протязі** (right variant is *протягом) одного місяця з дати настання таких обставин* (https://dmsu.gov.ua/).

A characteristic erroneous phenomenon at the level of syntax in documents is the use of non-characteristic constructions *у тому числі, разом з тим* (*including, along with that*), which should be replaced by stylistically better options, respectively – *зокрема / і навіть, водночас* (*in particular / and even, at the same time*), cf. *Справи у спорах щодо цінних паперів,* **у тому числі** (right variant is *зокрема) пов'язані з правами на цінні папери та правами, що виникають з них* (https://vl.arbitr.gov.ua/sud5004/); **Разом з тим** (right variant is *водночас), на думку ЄСПЛ, судовий збір є таким собі обмежувальним заходом.* (https://vl.arbitr.gov.ua/sud5004/).

4 Conclusion

Monitoring of official documents freely accessible on the websites of the state authorities of Ukraine, as well as editorial analysis of the texts, made it possible to identify the most typical anormatives at different language levels. Among the actual orthographic errors that indicate a lack of appropriate linguistic knowledge in the preparation of official documents, the most common are the disregard of the norms of the new edition of Ukrainian spelling, violation of the rules of cuteness, incorrect use of capital letters in the names of institutions, documents, holidays, etc. Improper spelling errors caused by non-compliance with the rules of technical typing are also common in documents. Among the most typical anormatives of this type, we note the unjustified use of a hyphen instead of a dash, errors of accretion in ordinal numerals, incorrect shortening of words, use of dates, neglect of indents, identical quotation marks, paragraph alignment rules, etc. Among the lexical mistakes in the documents, we note the use of unmotivated tautology, pleonasms, words in a non-proprietary sense or violation of their conjugation caused by the influence of a language foreign to us. The most typical morphological error-prone phenomena of the official business style include inaccuracy in the use of the vocative case when addressing the addressee in business correspondence, declension of surnames, use of the dative case, agreement of numerals with nouns, declension of numeral forms, use of passive verb constructions in *-ся*. Among the syntactic anormatives, false copied phrases dominate, in which prepositions uncharacteristic for a certain context are used to express semantic-syntactic relations.

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DIGITALIZATION AND STRENGTHENING RESISTANCE TO MISINFORMATION IN UKRAINE AS THE INSTRUMENT OF STRATEGIC COMMUNICATIONS

[a]VIKTORIIA ANDRIUKHINA, [b]OLEKSANDR HOMANIUK, [c]YELOVA TETIANA, [d]VIACHESLAV KOROTKYI, [e]VLADLENA KOTSIUBA, [f]ROMAN TARADIUK, [g]NAZARII SHULIAK

[a–g]*Lesya Ukrainka Volyn National University, 13, Voli Ave., 43025, Lutsk, Ukraine*
email: [a]*andriukhinaviktoriia@vnu.edu.ua* ,
[b]*alexua.man@gmail.com* , [c]*eyelova_tetiana@vnu.edu.ua,*
[d]*korotkyiviacheslav@vnu.edu.ua* ,
[e]*kotsiubavladlena@vnu.edu.ua* , [f]*taradiukroman@vnu.edu.ua* ,
[g]*nazariishuliak@vnu.edu.ua*

Abstract: The article is devoted to the relationship between digitization and stability strengthening of opposing disinformation in Ukraine through the development of digital skills of the population, including politicians and government officials. According to the European Business Association, only 53% of Ukrainians possess basic digital skills, and the issue of digital illiteracy is faced by 31% of the population. The government is implementing the concept of developing digital competences for citizens of Ukraine. Projects such as "Filter" and the campaign "Nations against Disinformation" are aimed at increasing media literacy and awareness of disinformation. Implemented programs focus on the development of critical thinking skills and collaboration with international partners, including IREX and the Ministry of Foreign Affairs of Great Britain. Initiatives such as the "School of Counteracting Disinformation" and the Disinformation Counteraction Center contribute to education and development of counter-disinformation strategies. The article also examines digital transformation in Ukraine as a main element of the country's resilience after the Russia-Ukraine war. The "Diia" project has received global recognition and contributes to the dissemination of Ukrainian technologies in other countries, enhancing Ukraine's global role in the digital space. It is emphasized that research is important especially in the era of information technologies, and the specified topic becomes extremely relevant in the context of the Russia-Ukraine war.

Keywords: digitalization; digital skills; disinformation; media literacy; strategic communications; digital transformation; cyber security; media diplomacy; diplomacy; foreign policy; technologies.

1 Introduction

Digitization and stability strengthening to overcome disinformation in Ukraine are critical aspects of strategic communications, especially in the age of information technology, and represent an extremely relevant topic for research during the Russia-Ukraine war. Let us consider these aspects and how they can serve as strategic communication instruments. Digitalization mainly concerns to: online communication platforms: development and support of official websites, social networks, and other online platforms for effective communication with the public; the usage of digital channels to distribute important information and ensure its credibility; electronic services for citizens (implementation of electronic services for obtaining information, platforms for citizen appeals and providing of public services); ensuring cyber security of electronic systems to prevent unauthorized access and maintain public trust; e-education and educational content: implementation of e-education to increase information literacy of citizens and teach them to recognize misinformation; development of digital educational content to support citizens in understanding complex issues. In turn, the stability strengthening to fight misinformation occurs through the improvement of media literacy: the development and implementation of media literacy programs in the educational system and public space; popularization of critical thinking and ability to analyze information; fact-checking and information monitoring, ensuring the availability of independent fact-checking resources for information verification; implementation of disinformation monitoring and analysis systems to react promptly for spreading false information; stability of the authorities positions, ensuring the unity and stability of the positions of the authorities on important issues to avoid confusion in communication; implementing effective communication to reduce the possibility of confusion of facts and misinformation; public involvement, support for civil society initiatives and projects to identify and counter disinformation; facilitating the interaction of authorities with citizens through various online tools.

So, the overall goal is to use digitalization to improve communication between government and public and to make society resilient to misinformation based on education, fact-checking, and effective communication.

The aim of the study is to analyze the processes of digitalization and strengthening resistance to disinformation in Ukraine as the instrument of strategic communications, especially during the Russia-Ukraine war.

2 Method

The main methodological principle applied to the analysis of the material is a perceptual, or addressee-oriented, approach, the essence of which is to explain communicative successes or failures through the mechanisms of perception of the message by the addressee. In addition, the work uses methods of definitional, semantic, and contextual analysis. The study also used linguistic-stylistic and pragmalinguistic analysis, general scientific methods of observation, generalization, and comparison of linguistic facts.

3 Results and Discussion

The 2020 National Security Strategy of Ukraine highlights that one of the main state directions of foreign and domestic political activities to ensure its national interests and security is active and effective resistance to special information operations, cyber-attacks, and other forms of propaganda. It is also stated that Ukraine will develop an inclusive political dialogue through the creation of a strategic communications system, raising the society' level of media culture, guaranteeing the safety of journalists while performing their professional duties, as well as developing competition in the field of providing information services to the population. The document states that Ukraine will carry out digital transformation, ensure the provision of administrative services using modern information technologies and spread digital literacy [6].

Firstly, optimizing of digitalization processes and strengthening resistance to disinformation are directly related to the development of digital competences of citizens, including politicians, civil servants, and diplomats. The expert study conducted by the European Business Association in 2021, known as the "Digital Transformation Index 2021", showed that 53% of Ukrainians have digital skills below the basic level, while 15% of Ukrainians have no digital skills at all. The results of the research showed that the main problem of the development of digital transformation for 31% of respondents is the lack of digital literacy [24]. In order to improve these statistics, on March 3, 2021, the Cabinet of Ministers of Ukraine approved the Concept of the Development of Digital Competencies until 2025, which emphasizes the importance of digital literacy for citizens [5]. The strategic goal of the Concept is educating 6 million Ukrainians in digital literacy within three years. According to the Ministry of Digitalization of Ukraine, the creation of such a Concept "synchronizes the basic concepts and requirements within the framework of digital competences with European standards, modernizes the processes of public administration, reduces the digital gap, harmonizes the national digital market with the European Union, accelerates the implementation of electronic democracy and electronic governance tools" [8].

Additionally, in 2021, on the basis of the European conceptual reference model of digital competences for citizens, the Ministry of Digital Transformation of Ukraine developed the "Framework of Digital Competences for Citizens of Ukraine" taking into account its national, cultural, educational and economic features.

As stated in the document, the development of digital technologies opens a "new window of opportunity" for Ukraine, therefore "taking advantage of these opportunities is a serious challenge and an important task for Ukrainian society". The document also contains the narrative stating that in the context of the fourth industrial revolution, digital competence is the key competence that involves "confident, critical and responsible usage and interaction with digital technologies". Digital competence encompasses the concepts of information literacy, media literacy, communication and collaboration, creating digital content together with programming, protecting personal data in the digital environment and cyber security, solving multifaceted problems and continuous learning. Thus, the Framework and its description are considered a guidebook on digital competencies for citizens of Ukraine, outlining a specific scope of knowledge and practical skills necessary for a wide range of citizens for comfortable usage of modern digital technologies [7]. The framework of digital competence for citizens of Ukraine has become a tool through which the level of digital competencies among Ukrainians can be improved and assists in the creation of state policies aimed at the practical usage of IT technology tools and services by specific target groups of population [25].

Secondly, strengthening resistance to disinformation is possible through the development of critical thinking and information hygiene among citizens and state authorities, which aims to strengthen resistance to disinformation, fakes, manipulation and propaganda. In August 2021, the Ministry of Culture and Information Policy of Ukraine presented the national media literacy project called "Filter", which aims to unite and coordinate efforts of the state and partners to form media literacy as an integral skill of modern Ukrainians [20]. According to the Minister of Culture O. Tkachenko, the project unites the efforts of both the public sector and the state in the direction of media literacy, the fight against fakes and disinformation. The minister believes that media literacy should become a pervasive topic for many state authorities, including the need for implementing media literacy courses in schools and universities [18].

According to information from the Ministry of Education and Culture of Ukraine, a comprehensive program has been developed for 2022-2025 aimed at developing and strengthening critical thinking skills and information hygiene in order to strengthening resistance to misinformation, manipulation, and propaganda. The implementation of this program is carried out by several entities, including the International Research & Exchanges Board (IREX) with the support of the U.S. Embassy in Ukraine and the Ministry of Foreign Affairs and International Development of Great Britain in partnership with the Ministry of Education and Science of Ukraine, the Ministry of Culture and Information Policy of Ukraine, and the Ukrainian Press Academy [26].

There are quite a few similar state online initiatives on media literacy supported and facilitated by international partners today. For example, "Very Verified: an online media literacy course" developed by the international organization IREX in collaboration with the online education studio EdEra (the project is funded by the U.S. Embassy in Ukraine and the Embassy of Great Britain in Ukraine with support from the Ministry of Education and Science of Ukraine). This project is based on Diia platform. Digital Education has created an educational series with the same name as "Very Verified: an online course on media literacy" [9]. According to the statistics of anti-fake organizations in Ukraine, older people are most affected by disinformation — they spread the most fake news on Facebook during the Covid-19 pandemic, and especially after the full-scale invasion of the aggressor. Therefore, with the aim of increasing media literacy among the elderly, as well as reducing their dependence on daily events and the development of critical thinking, the "Fit in Fakten" project was initiated, which is implemented by the Goethe-Institut in Ukraine in partnership with the Ukrainian popular science media "Kunsht", the Polish Foundation for the Development of the Information Society (FRSI), the German Curanda educational platform and the

Kuringa theater workshop, as well as Kyiv amateur theater "It's not even evening" with the support of the German Ministry of Foreign Affairs.

It is also worth mentioning initiation in 2022 of a new creative tool to counter disinformation called "Nations Against Disinformation", which is the first joint communication campaign in partnership between the Ministry of Foreign Affairs of Ukraine, the Ministry of Culture and Information Policy of Ukraine, the Ministry of Foreign Affairs of Estonia, and the project of the Rapid Response Task Force on Strategic Communications of the European External Action Service (EUvsDisinfo). The "Nations Against Disinformation" campaign is initiated by the Ministry of Foreign Affairs of Ukraine and the Ukrainian civil society organization BRAND UKRAINE, and it is co-funded by the European Union and the National Democratic Institute (NDI). According to the Ministry of Foreign Affairs of Ukraine, this initiative is aimed at raising awareness of the dangers of disinformation, including its serious negative consequences for societies. Partners conduct joint international campaigns, events, conferences, webinars, and workshops to exchange best practices in countering disinformation [19].

The campaign's website states that "disinformation is one of humanity's greatest challenges, it can change the borders of states and undermine democracy, it destroys trust in institutions, spreads chaos, and kills people". On the web resource of the campaign, there is an opportunity to take a test that allows determining "how disinformation affects you" [14]. After we passed such test, we noticed that the "Nations Against Disinformation" site suggests using links to web resources that will help increase resistance to disinformation and learn how to recognize it more effectively, namely:

1. "Civil network "OPORA", which was created in 2005 and is one of the leading all-Ukrainian organizations of public control and advocacy in the field of elections, parliamentary affairs, education, management of common property, energy efficiency, local self-government and comprehensive implementation of open data principles;
2. The NGO and educational platform "Center for Media Reform", founded by the Mohyla School of Journalism (in 2003) with the aim of introducing high standards of journalistic education in Ukraine, raising the level of media literacy, informing about the dangers of propaganda and the spread of fakes in the mass media) and its flagship project StopFake (since 2014), which today is known to media professionals all over the world and has analogues in 13 different languages (English, Romanian, Spanish, Bulgarian, French, Czech, German, Polish, Bosnian, Dutch, Italian, Russian, and Turkish).
3. The NGO "Detector Media", which was created in 2004 by Ukrainian journalists and whose mission is to improve the quality of Ukrainian media, increase the media literacy of Ukrainian society, and counter disinformation and propaganda. "Detector Media" has a special project "Analysis of Social Networks", which uses AI elements to analyze large data sets of the Ukrainian segment of Facebook, YouTube, Telegram, and Twitter.
4. The independent publication TEXTY.ORG.UA, which was founded in 2010 and operates according to the "seven principles of Texts" (texts do not chase daily news; texts focus on what truly impacts our lives; texts expand horizons; texts are interested in people, not target groups; texts include not only facts but also evaluations and conclusions; funding of Texts will never affect editorial independence; texts are always changing).
5. International volunteer community InformNapalm, which was founded in March 2014 and conducts OSINT research (Open Source Intelligence), translates and distributes publications in foreign languages, conducts important media, diplomatic, and educational work.

An important mechanism for countering disinformation through joint efforts between the government and civil society is the

establishment of the Center for Strategic Communications and Information Security at the Ministry of Culture and Information Policy of Ukraine, created in March 2021. As stated on the website of the Center called "SPRAVDI", their activities are aimed at the state and citizens, public organizations and international partners. In the first case, they conduct training sessions to increase awareness of hybrid threats, develop proactive narratives for government communications, and offer mechanisms for systematic informing about state efforts to counter disinformation. In the second, information threats and mechanisms of malicious influence are reported, instruments are provided to increase resistance to disinformation, and victory of Ukraine in the information warfare is highlighted. The third direction involves jointly conducting information campaigns and training sessions, as well as facilitating dialogue between the state and public organizations in developing the regulatory framework. Within the fourth one, Ukrainian expertise in detecting and countering disinformation is being disseminated, along with the joint development of recommendations for countering disinformation and building resilience to it [2].

In July 2022, the Center for Strategic Communications and Information Security established the "Disinformation Resistance School" for the purpose of training civil servants on the topic of strategic communications and countering disinformation. The target audience primarily includes communication teams from central executive bodies and other state authorities, as they are responsible for external communication on behalf of the state and serve as the "first line of defense" against information threats. Studying these categories in countering disinformation, as well as expertise in strategic communications, ensures the process of forming unified approaches of state bodies to communications, namely "one voice policy" [22].

Also, in March 2021, a working body of the National Security and Defense Council of Ukraine was established - the Center for Countering Disinformation, which ensures "the implementation of measures to counter current and projected threats to national security and national interests of the state in the information sphere, ensuring information security of Ukraine, identifying and countering disinformation, effective counteraction to propaganda, destructive informational influences and campaigns, preventing attempts to manipulate public opinion".

Employees of the Center for Countering Disinformation, with the support of the Advisory Mission of the European Union in Ukraine (EUAM), have developed a "Manual on Countering Disinformation". This manual includes sections on techniques and tools of informational influence, hostile resources and tracking possibilities (media resources, deep fakes, Twitter, Telegram, Facebook, and YouTube), cases of informational influence by the Russian aggressor, as well as recommendations for countering harmful informational influence and communicating with the target audience.

According to the Manual, there are 4 stages of public opinion formation:

1. New information (about the event, scientific discoveries, media news, political decisions).
2. Information received from experts and official representatives (commented by experts, officials, etc.).
3. Public information (which becomes widely known and is still being discussed, including in social networks).
4. Recipient (when a person receives information according to his membership in a certain social group, as well as the information channels he uses).

The first and second stages of forming public opinion are combined in the manual under the term "media system"; the second stage is called "public opinion", and the third stage is "cognitive functions of a person". As part of the activities of the Center for Countering Disinformation, various educational trainings are also held, such as the "FIMI - Ukraine" training in October 2023. The training presented the approaches of the European External Affairs Service (EEAS) to countering the threats of foreign information manipulation and interference

(FIMI), as well as the necessary political and diplomatic methods, strategic and proactive communications [11]. In November 2023, the Center for Countering Disinformation together with the Swedish Psychological Protection Agency (MPF) organized a training course in "Combating information influence measures" for representatives of state authorities and leading institutions of higher education [1].

Thirdly, an important aspect is the extensive digitization and digital transformation of the state, as well as the creation and development of digital projects in Ukraine. According to the expert from the independent analytical center in the field of foreign policy and international security "Ukrainian Prism", after many years of the Russia-Ukraine war, modern infrastructure and cyber resilience once again proved the advantages and importance of digital transformation, which is the basis of Ukraine's stability. While initially media diplomacy in Ukraine was perceived as a component of the Public Diplomacy Strategy and was defined more through the "communication dimension", today, taking into account international changes and threats, media diplomacy in Ukraine has changed somewhat. Nowadays, media diplomacy is more about spreading effective digital solutions at the international level [21].

For the past three years, the international community has been fascinated by the experience of digital transformation of Ukraine - both citizens of Ukraine and foreigners from many parts of the world are watching the Ukrainian "state in a smartphone" with delight. As stated on the single portal of state services Diia, the state should become a service provider, not a scary monster. Diia is an online service of public services, where everything is clear and understandable, allowing users to access services when and where they need them; it is also a mobile application with electronic documents and personal data from registers; it is a portal with online courses, in particular on digital literacy; it is a portal that offers assistance to small and medium-sized businesses. Diia provides administrative service centers in every corner of the country and offers a special legal regime for the IT industry. The team of the Ministry of Digitization launched the "Digital State" project, which aims to unite all government agencies into a single convenient and effective online system.

To implement the concept of a "digital state", the Minister of Digital Transformation Mykhailo Fedorov initiated 94 separate digital transformation projects in key areas in February 2021, the content of which can be found in detail on the *Diia.gov.ua* portal. The list of projects has been approved by the Government and must be implemented within three years. Interesting and worth noting is the fact that projects of the Ministry of Digital Transformation such as "Diia.City" and "Diia.Signature" have received awards for their innovation and contribution to the development of the global cyberspace. In June 2022, the "Diia.City" project won the Emerging Europe Awards in the "Modern and Future-Proof Policymaking" nomination. This award honors the projects of those countries that change the life of the developing region of Europe. Winners are selected through online voting for favorite project by people from all over the world. Such a victory in the international arena testifies to the positioning of Ukraine as a powerful IT hub and the creation of conditions for the development of companies or the attraction of investments. Menwhile, another project – "Diia.Signature" became a necessary and important component of building a digital state, and also won the "Best remote identification provider" nomination from the Ukrainian Fintech Award. Diia.Signature technology is revolutionary, because with just a glance, individual' facial biometrics are checked with the biometrics in the register, allowing signing any document. The most secure digital signature in a smartphone holds legal force. This is an extraordinary breakthrough in the digital market, which has not yet been achieved by any country outside the EU.

According to the results of a public opinion survey conducted by the Rating group on May 16-18, 2021, among 2,500 respondents aged 18 and over in all regions (except the temporarily occupied territories of Crimea and Donbas), Ukrainians have the highest level of trust in the "State in a Smartphone" program as the most

digitized public service. In just one and a half year, Ukraine has made a huge breakthrough in digitalization, for example, the world's first passports in a smartphone, the fastest business registration, online change of registration address, registration of property rights, electronic petitions, e-signature and automatic registration of individual entrepreneurs. An analog of the Ukrainian "Diia" is desired to be implemented in several other countries. So, for example, the USA intends to repeat the success of the Ukrainian e-government program in other interested countries. This information was announced by USAID Administrator Samantha Pawer during the World Economic Forum on January 16-20, 2023 in Davos. As part of the forum, an analog of the Ukrainian "Diia" - the Estonian digital application mRiik - was presented at the Diia Reels event. Borrowing the Diia application technology from Ukraine for the digitalization of public services will undoubtedly contribute to a significant replenishment of the state budget of Ukraine, and more importantly, it will lead to the improvement of country' diplomatic relations, as well as global recognition.

It is important that Ukraine, in its foreign policy strategies, has set the goal of promoting its image as a digital country, and not just increasing its power through the promotion of its technologies and digital capabilities. Thanks to the Diia product, Ukraine is recognized as a leader in the field of e-government solutions: in January 2023, Estonia launched the mRick mobile application, which is built on the basis of similar code and design approaches as Diia. Cooperation with Estonia became a precedent for the development and spread of Ukrainian technologies in other countries. Due to this, the American USAID support program will provide support of at least 650,000 US dollars for the spread of the Ukrainian e-government standard in other countries. In total, in the beginning of 2023, 5 countries have already expressed a desire to develop applications in their countries using the Diia prototype. Only at this stage, the Deputy Prime Minister of Ukraine and the Minister of Digital Transformation admitted that Diia has become an element of Ukrainian diplomacy – "It is the brand of Ukraine, it is our reputation, it is the development of our political influence". Diia also represents a case where Ukraine can share its experience with the EU and promote its approach to developing of Digital ID, which the EU plans to implement only in 2024, and then it will be necessary to work on the mutual recognition of EU and Ukrainian digital IDs. In May 2023, Ukraine held the Diia.Summit in Washington [21].

Since 2020, significant progress has been made in digitizing the consular services of Ukraine, particularly with the implementation of an electronic queue mechanism for citizen reception. Using the possibilities of the online form of the Ministry of Foreign Affairs of Ukraine, everyone could register electronically at the consular unit of the relevant Ukrainian diplomatic institution. In the online mode, individuals could select a convenient time and date of their planned visit, as well as find out about the list of necessary documents for the implementation of the corresponding type of consular service [23]. From November 15, 2023, one can register online for consular services using mechanisms such as electronic signature authorization (using file-based, cloud-based, and other secure media), Diia.Signature or BankID of the NBU. The website of the Ministry of Foreign Affairs additionally provides explanations and instructional video materials on electronic identification [10].

As we mentioned earlier, the Ministry of Foreign Affairs actively promotes the interests of Ukraine through digital communication products and companies, examples of which are the websites Ukraine.ua (to spread information about Ukraine as a creative, dynamic, and innovative country) and War.ukraine.ua (to highlighting Russia full-scale war against Ukraine), or the official account of Ukraine @ukraine.ua on the Instagram social network (for the purpose of promoting Ukraine and its national brand). However, in the conditions of a long-term war with Russia, other state bodies of Ukraine, besides to the Ministry of Foreign Affairs, also pay significant attention to the information field of the war. Such an emphasis on the information and media

aspect of state policy by its subjects certainly affects the optimization of media diplomacy processes in Ukraine and leads to the emergence of new mechanisms and tools. One of the examples of such tools, which appeared in response to nowadays realities and the necessity to defeat the aggressor, was the "Anti-War Coalition" created by the National Security and Defense Council of Ukraine (RNBO). As stated on the NSDC web resource, the Russian army kills civilians, destroys houses, schools, hospitals, objects of historical heritage, attacks critical infrastructure, engages in looting, and commits various war crimes without regard for anything sacred [16].

The armed attack by the Russian Federation has led to serious and massive violations of international humanitarian law with catastrophic consequences for the implementation of almost all human rights by the citizens of Ukraine. On the part of the aggressor's army, a huge number of facts have been documented that indicate violations of the rules of warfare, as well as convincing evidence of violations of the Ukrainian people' right to life, property rights, including mass destruction of civilian infrastructure. Examples of violations include instances of torture and cruel treatment, sexual violence – in particular, including gender-based sexual violence at war; these are also violations of the right to liberty and security, including kidnapping and arbitrary or solitary confinement. Thanks to the analysis of a number of Internet resources, such as articles, reports, and statements of representatives of various international organizations (UN, Council of Europe, OSCE, EU), public figures, Ukrainian and foreign mass media, as well as information from social media, the author gave specific examples of violations of human rights in Ukraine and showed how it was perceived by the international community.

For example, on April 13, 2022, the special expert mission of the OSCE published a report on violations of international humanitarian law, human rights, war crimes, and crimes against humanity committed in Ukraine since February 24, 2022. In this report, the experts claimed that Russia had violated IHL and that there was evidence of violations of the right to life, the prohibition of torture, and inhuman and degrading treatment. After the visit of Council of Europe Commissioner Dunia Mijatovych to Ukraine in May 2022, a Memorandum on the consequences of the war in Ukraine for human rights was issued. This memorandum was created on basics of interviews conducted by Dunia Mijatovych with victims and witnesses of serious violations of human rights, as well as relatives of the victims. On June 29, 2022, in the report of the Office of the United Nations High Commissioner for Human Rights based on the results of the work of the United Nations Human Rights Monitoring Mission in Ukraine (UNHRM), during the period from February 24 to May 15, 2022, illegal killings of civilians were documented in more than 30 settlements of Kyiv, Chernihiv, Kharkiv, and Sumy regions. Moreover, in November 2022, the members of the EU Parliament recognized Russia as a state sponsor of terrorism and a state that "uses terrorism" [15].

Considering this, governments of the countries around the world, companies, international organizations, associations, federations, public figures, millions of people around the world have been expressing support for Ukrainians over an extended period of time. Ukraine is very grateful for the assistance, but the Russian invading army and its political leadership continue to commit war crimes on the territory of the country. In view of such circumstances, the "Anti-War Coalition" requires constant strengthened until peace is achieved. The creation of a virtual map makes it possible to monitor the situation on the anti-Putin front online. Through the use of the "Anti-War Coalition" website, any individual can express support for Ukraine.

One can find out how to help Ukraine on the "Help" page of the Anti-War Coalition [13]. The functionality of the website is due to appropriately placed QR codes, allowing help directly through state institutions, through major international funds, through large and medium-sized private initiatives, enabling medical assistance, as well as help to animals. In our opinion, the most interesting content of the "Anti-War Coalition" web resource is

the "Map" page. This is a kind of interactive map, where by selecting a certain country in the world, one can learn about the type of support provided by that country for Ukraine (e.g., Kazakhstan - acts of solidarity and humanitarian aid) and the latest information about the aid with an indication of the date (e.g. China - ready to join a joint initiative of UN with partners to raise funds to support Ukraine in the winter). The functionality of the interactive map is so wide that it allows filtering the option of selecting subjects who have performed at least one act of support according to the selected type (it is possible to select all at the same time). Also, on this map, one can put a filter on the type of support, after which it is possible to additionally choose its subtype. An example of the use of available filters can be the USA, Finnlines Company, EBRD, Bolt.

Evidence of the effectiveness of the usage of media diplomacy methods in the implementation of Ukraine's foreign policy is the usage of digital technologies in the work of not only state and diplomatic institutions, but also non-state participants in international relations. As part of the optimization of media diplomacy processes in Ukraine, it is worth noting the active digital diplomacy of the diaspora, which contributes to maintaining contacts with the country of origin and forming its brand on the international stage. The result of such activities is the initiation of the global virtual forum "Unite with Ukraine" launched in October 2020 by the World Congress of Ukrainians. The forum, which functions as a tool of media diplomacy, was broadcast for all regions of Ukraine, together with Crimea and the rest of the Ukrainian territories occupied by the Russian aggressor. The first such virtual forum in 2020 gathered more than a quarter of a million viewers in Ukraine and the world. During these events, the audience was informed about the role and directions of Congress work, as well as the importance of Ukrainian foreign organizations in the process of restoring Ukraine' independence.

The World Congress of Ukrainians also initiated a massive global campaign on social media called #UniteWithUkraine, which allows supporting Ukraine in its struggle for freedom and independence. Instead, the information campaigns deployed within the framework of such an action are the next example of optimized processes of digital diplomacy in Ukraine. The Congress also creates information platforms and sites where it informs about the needs of Ukraine, the assistance provided to it, and highlights the current events of the Russia-Ukraine war.

Such platforms provide the possibility of subscribing of information digests distribution, establishing business contacts, and also contain details for providing financial support to the Armed Forces. After the full-scale Russian invasion, the subscription function provided daily news in Ukrainian and English to subscribers' by email addresses. Until February 2022, such newsletters were sent to subscribers approximately once a month. In March 2023, there was an attempt to attack the site of the #UniteWithUkraine network action by Russian hackers [17].

Similarly, the volunteer multimedia project Ukrainer (Ukraïner), created in 2016, is a community, organization, and platform that explores Ukraine and the Ukrainian context, telling stories to Ukrainians and to the whole world, translating and broadcasting them in dozens of languages. The mission of the project is the development of an open Ukrainian society through highlighting important topics, creating additional value of objects of cultural and historical memory. Since February 24, 2022, Ukraïner has relaunched all its communication channels, which have begun to talk about the war and overcoming the disasters caused by the occupying forces. The project collects stories of evacuees, notes initiatives that provide humanitarian and military support, conducts interviews with activists and exposes Russian propaganda, and shows the resilience of Ukrainians, told in different languages on different platforms [3]. The project has 12 language versions on the website (Ukrainian, English, German, French, Spanish, Turkish, Russian, Polish, Czech, Greek, Kartvelian, Japanese), as well as a number of individual pages on social media (Facebook, Instagram, TikTok, Linkedin,

Twitter, Viber, Youtube), where additional languages are presented (for example, Portuguese, Hungarian, Korean) [28].

According to the final recommendations of the report on "EU and Ukrainian Approaches to Digital Diplomacy in the Geopolitics of Technology', the Russian invasion of Ukraine has turned digital diplomacy into an extraordinary tool. Therefore, to optimize the processes of media diplomacy, Ukraine needs to focus on developing a strategic plan for media diplomacy and building institutional capacity. The Ministry of Foreign Affairs of Ukraine should initiate a comprehensive dialogue with the Ministry of Digital Affairs to understand the situation regarding Ukraine' involvement in global technology management and partnerships established with private companies. The result of the dialogue between the Ministry of Foreign Affairs and the Ministry of Digital Affairs should be a clear division of functions between the two institutions as subjects of media diplomacy. It is recommended to build a stable and strategic institutional model similar to the EU, where the Deputy Prime Minister will manage the development of digital policy and priorities of Ukraine, while the Ministry of Foreign Affairs will promote its externalization in accordance with foreign policy priorities with the support of the Ministry of Digital Transformation.

At the level of the Ministry of Foreign Affairs, Ukraine still perceives media diplomacy only through the prism of communication tools and as part of public diplomacy. Therefore, the Ministry needs to start working on a renewed media diplomacy strategy, recognizing its importance in diplomats and diplomatic missions work as a whole to achieve foreign policy goals. The MFA's renewed approach to media diplomacy should include reflecting existing opportunities for cooperation in the digital sphere at the bilateral, regional, and multilateral levels, as well as promoting the creation of new platforms for interaction with like-minded partners similar to the EU. It is also recommended to create an official position at the Ministry of Foreign Affairs of Ukraine responsible for implementing digital diplomacy and establishing communication between the Ministry of Foreign Affairs and the Vice President, the Ministry of Digital Affairs, diplomatic missions and external partners. Ukraine can take an example from Denmark and other states, where digital ambassadors or similar positions have already been appointed to handle digital diplomacy issues and coordinate activities in this direction.

The recommendations also state that the Ministry of Foreign Affairs should conduct trainings for diplomats on the basics of digital policy, geopolitics of technology and online security skills to ensure that Ukrainian media diplomacy serves the foreign policy goals of the state. It is also noted that Ukraine needs to continue actively promoting its best practices regarding the Diia ecosystem at the global, regional, and bilateral levels. It is necessary to continue spreading the example of Ukraine' media diplomacy, oriented towards products, in other parts of the world. Ukraine needs to change the main narrative from "building the most convenient digital state" to "building the most convenient and secure digital state". It is recommended to create more expert discussions and research on digital diplomacy and the use of technology in Ukraine to achieve both domestic and foreign policy goals [21].

As noted by the multimedia platform of foreign broadcasting of Ukraine "Ukrinform", the Ministry of Digital Transformation has launched a project to train future leaders in the digital sphere.

The Ministry of Digital Affairs emphasizes that the state needs experts to implement digital reforms and introduce electronic services, as well as to eliminate bureaucracy. For this purpose, the free educational project CDTO Campus is launched, which contains 4 types of educational programs: long-term, short-term, leadership, and custom programs. The project is designed for experienced chief digital transformation officers (CDTOs), namely digitalization deputies in various state authorities who want to improve their skills, and for future specialists. As of today, as noted by the Deputy Prime Minister for Innovation,

Development of Education, Science and Technology, Minister of Digital Transformation Mykhailo Fedorov, 55 CDTOs are working at the national and regional levels. The Ministry of Digital Transformation aims to scale such projects throughout the country, for the implementation of which it is necessary to prepare at least 1,500 CDTO. Graduates will be able to join the team and become part of the digitization of the state. Registration has already started for the first program provided by the project, called "Digital transformation in public governance" [4].

As indicated on the website of this project, "CDTO Campus prepares leaders of a new generation who will become a disruptive force of digital transformations at the local, regional and national levels". The lecturers of the project are specialists with real experience in the digital transformation of the public sector, who have already implemented successful projects and are ready to share the acquired knowledge with the next generation of digital leaders - in particular, employees of various state institutions such as the Ministry of Statistics, the Ministry of Justice, the Ministry of Health of Ukraine, the Ministry of the Education and Science of Ukraine, the State Enterprise "Diia", the National University "Kyiv-Mohyla Academy", as well as the project MTD Transparency and Accountability in Public Administration and Services (TAPAS), the Ukrainian non-profit charitable non-governmental organization "Eastern Europe Foundation" and the e-Governance Academy (about 30 leaders in total). The long-term programs of the project include the above-mentioned "Digital Transformation in Public Governance" - for active state builders who want to become a new generation of digital leaders for the development of innovative processes in government bodies, as well as the "Creating a Digital Future" program designed to create opportunities for the personal development of leaders of digital transformation of Ukraine, which play a key role in shaping the digital future of the country. Among the short-term programs three programs are planned to implement: "AI House: Basics of artificial intelligence", "Cisco: Implementation of secure digital platforms" and "EU4DigitalUA: Protection of personal data" [12]. As stated in the Telegram channel of the Ministry of Digital Affairs, applications for participation can be submitted on the project's official website. It is also noted that the CDTO Campus is implemented by the Eastern Europe Foundation, funded by the Visa Foundation, the Federal Ministry of Economic Cooperation and Development of Germany (BMZ) and supported by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, in cooperation with the Digitality GovTech Center of Excellence, under the patronage of the Ministry of Digital Affairs [27].

In our opinion, the initiation and implementation of such a project will have a direct impact on the optimization of media diplomacy processes in Ukraine. In addition to the creation of such educational projects with the aim of forming leaders of digital transformations at all possible levels, it would be appropriate to introduce a new specialization, such as "Media Diplomacy", "Digital Diplomacy", or "Cyber Diplomacy" in the field of International Relations. This would also allow training highly qualified personnel who will contribute to the high-quality and effective implementation of media diplomacy at all levels of domestic and foreign state policy of Ukraine.

4 Conclusion

The optimization of digitalization and resistance to disinformation in Ukraine depends on the development of digital skills among citizens, including politicians and civil servants. According to the research by the European Business Association in 2021, only 53% of Ukrainians have basic digital skills, while 15% do not have them at all. Lack of digital literacy is a problem for 31% of the population. The government approved the Concept of Digital Competence Development by 2025, directed on educating 6 million Ukrainians in digital literacy. "Digital Competence Framework for Citizens of Ukraine" was developed according to European standards. In the field of media literacy, the Ministry of Culture presented the national media literacy

project called "Filter", which aims to form media literacy among the population. The Ministry of Foreign Affairs is launching the "Nations Against Disinformation" campaign, and the Ministry of Education has developed a program for the years 2022-2025 to develop critical thinking. In particular, the School for Countering Disinformation and the Center for Countering Disinformation play a key role in training and countering disinformation. Digital transformation, especially due to the success of the "Diia" project, is defined as a key element of Ukraine' sustainability, strengthening its global image and international influence. Ukraine actively cooperates with Estonia and receives support from USAID to spread the Ukrainian e-government standard. "Diia" has become a tool of diplomacy, and cooperation with the EU allows Ukraine to promote its approach to Digital ID. The development of online services by the Ministry of Foreign Affairs and innovations in the consular service simplify the service for citizens. Media diplomacy in the conditions of war contributes to process optimization and attracts the attention of the international community.

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ENTREPRENEURSHIP BASED ON ESG PRINCIPLES IN THE DIGITAL ECONOMY

[a]ANASTASIIA MOSTOVA, [b]OKSANA BUDKO, [c]MARIANA MALCHYK, [d]ANDRII IVANCHENKO, [e]NATALIA KOVALCHUK

[a]Varna University of Management, Alfred Nobel University, 13A, Oborishte Str., 9000, Varna, Bulgaria
[b]Dniprovsky State Technical University, Dniprobudivska Str., 2, 51918, Kamianske, Ukraine
[c]National University of Water and Environmental Engineering 11, Soborna Str., 33028, Rivne, Ukraine
[d]National University Zaporizhzhia Polytechnic, 64, Zhukovskoho Str., Zaporizhzhia, Ukraine
[e]University of Customs and Finance, 2/4, Vladimir Vernadsky Str., 49000, Dnipro, Ukraine
email: [a]nastya.25061987@gmail.com, [b]bisnesscon@ukr.net, [c]mmalchyk@nuwm.edu.ua, [d]andivazntu@gmail.com [e]nv_kovalchuk@gmail.com

Abstract: The article presents an attempt of systemic research on the interconnection and synergy of ESG-agenda and digital transformation in entrepreneurship landscape. Crucial necessity of ESG-principles introduction into the practice of entrepreneurial companies today is emphasized. The research considers and systematizes core benefits and challenges of IT solutions supporting introduction and maintenance of ESG practices in companies, as well as outlines current trends and prospective vectors.

Keywords: ESG principles; digital transformation; entrepreneurs; sustainable development; digital communication.

1 Introduction

Digitalization from the general trend that determines the agenda of international conferences and round tables, the development of digital transformation strategies by large enterprises, the need to introduce information systems into the business processes of enterprises of various spheres of activities and of different sizes has led to qualitative changes in socio-economic relations in corporate sector in most countries. And in this regard, digitalization and increasing scope of digital communication can currently be considered as an established factor of the environment for the formation of the sixth technological order. Confirmation of the idea that digitalization is the technological background of the new sixth technological order can be found in the works of many researchers and representatives of the expert community [9].

However, not digitalization itself, but digital maturity is the driver of digital transformation and the development of the digital economy. Digital maturity in this context can be considered as a characteristic of economic agents: individuals, firms, institutions. Then, the level of digital maturity and its dynamics determine the speed and quality of all digitalization, digital communication processes and changes in business processes caused by the use of new digital tools [35].

With digitalization comes a new dimension of potential value addition. Digitalization can occur in agriculture, industry/ manufacturing and services. This involves adding value through the data value chain consisting of data collection, data processing, data analysis, and data monetization. Thus, the digital economy opens up additional avenues for potential value addition.

An integral and equivalent companion to digital transformation in the economy in recent decades is the ESG trend. In recent years, the role of sustainable development of companies based on ESG principles has been increasing. "Responsible" investing is becoming increasingly important, and a new criterion for investment attractiveness and selection of companies, in addition to financial indicators, is the issuer's adherence to ESG principles. The demand for a green economy in the world is growing, the trend of ESG entrepreneurship and responsible investing is gaining momentum, and shares of companies that take into account environmental risks and society's demand for a comfortable environment are showing more stable growth and stability.

At the same time, it should be noted that the practice of implementing digital transformation tools in companies is more developed than the practice of implementing ESG principles: in particular, 46% of participants in an online survey in Eastern Europe declared an advanced level of implementation of digital transformation versus 14% of companies at an advanced level in the field of ESG. At the same time, only 28% of survey participants declare an advanced level of implementation of practices in both areas, while the majority of respondents with a high level of digitalization consider themselves to be at the average (36%) and entry-level (24%). The low level of ESG transformation is largely due to insufficient understanding of the ESG transformation process [10]. Companies face not only the task of adapting ESG principles to the existing corporate structure and direction of activity, but also the task of initially developing methodological approaches to the implementation of these principles.

At the same time, the maturity of digital practices creates opportunities for synergies between digital and ESG transformation, which will lead to the achievement of the most significant results in both operational efficiency and sustainable development. Respondents are aware of the key role of digital solutions in ESG transformation: 65% of respondents are convinced that it is impossible to achieve ESG transformation without the use of digital solutions - for example, in reporting, as part of supply chain management, or for adaptation to climate change. Digitalization of ESG has a number of advantages, the main one of which, according to the majority of respondents, is increasing the productivity and efficiency of many of the company's processes (80%). Also, many respondents note an increase in investment attractiveness (62%) and faster achievement of target KPIs (56%) [34].

The main barriers to the use of digital solutions within the ESG activities of companies are: lack of necessary competencies (45%); insufficient development of ESG practices (44%); lack of understanding of the need for synergies between ESG and digitalization (40%); lack of cooperation within the company on the application of digital solutions in the field of ESG (40%); insufficient development of digital practices and digital communication (11%). Among additional challenges, respondents also note: the problem of lack of competencies among external system integrators (including in the international market); low interest or complete rejection of changes on the part of colleagues; imperfection of current legislation in the field of ESG regulation; lack of single system integrators who could offer a comprehensive solution in the field of digitalization for ESG practices of companies [23].

The digital solutions needed for businesses to achieve sustainable development are currently insufficient. This hinders rapid and effective ESG transformation. Now, there is a significant demand for the development of digital solutions within the environmental direction. Climate issues (16%), waste management (15%), and biodiversity conservation (13%) are the top areas for which there is a lack of digital tools in the market. Environmental pollution prevention and resource conservation are also among the top 5 ESG aspects for which there are not enough digital tools - 11% each, respectively [24]. Additionally, experts from large businesses now note a lack of solutions across the entire perimeter of the ESG agenda for medium and small businesses [31].

Meanwhile, consideration of ESG factors appears to be extremely important for running a successful business in all business areas and corporations. Customers, employees, shareholders, creditors, rating agencies, and regulators demand consideration of these factors; corporations must analyze how their business strategies affect the socio-economic world community. Organizations that do not take ESG factors seriously

risk losing customers, employees, and possible funding; they eventually become unviable.

Even before COVID-19 upended business and society and greatly contributed to the digitalization of the world, the environmental, social, and governance (ESG) movement was gaining momentum. Far-reaching issues such as climate change and economic integration have focused the attention of investors and entrepreneurs on the importance of long-term priorities and non-financial reporting, new promising future investment ideas and markets. Then the global pandemic raised awareness of how interconnected we all are, how quickly external shocks can affect the global economy, and how critical digital technologies and IT are to the functioning of economies. Like digital technologies, ESG has the potential to change the way successful organizations plan, implement, and operate. As with digital technology, ESG is a vast topic, making it difficult for business organizations to know where to start. Thus, considering entrepreneurial activity within two vectors – ESG and digital transformation – seems to be a very urgent task.

2 Materials and Methods

The methodological basis for the study was modern scientific concepts of economic theory, management theory and organization theory, entrepreneurship theory of corporate governance, as well as works devoted to current issues of digital transformation, sustainable development, responsible investment, and change management. During the research process, a dialectical approach, methods of system analysis, comparison and grouping were used.

3 Results and Discussion

Sustainable development at the company level is an approach to business management based on creating long-term value for a broad group of stakeholders, including future generations among others, by managing economic, environmental, and social factors. Today, a business that claims a good ESG assessment must meet development standards in three categories: social, governance, and environmental. In particular, environmental principles determine to what extent a company cares about the environment and how it tries to reduce damage to the environment. For example, shoe brand Timberland partners with tire manufacturer Omni United to make shoe soles from recycled tires.

In the early 2000s, there were only 20 companies with ESG ratings in the United States. As can be seen from the graph on Figure 1 below, by 2020 their number had grown to almost 800. The average ESG rating has doubled over 20 years, which is associated with an increase in the volume, quality, and availability of data [6].
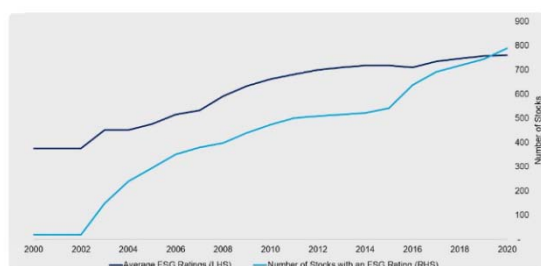

Figure 1. Dynamics of growth of the number of companies with ESG-ratings in the USA, 2000-2020 [6].

The WEF emphasized the potential of digital technologies with regard to cutting global emissions in the three sectors characterized with the highest emission by 20% by 2050 [21]. But on an organizational level, digital technology can be equally effective. Corporate use of digital technology, which is defined as the use of electronic tools, devices, systems, and resources that produce, store, or process data, has immense potential to drive an organization's ESG strategy and execution. This is why,

in the eyes of enterprises, ESG and digital technology may be viewed as two sides of the same coin. Digital technology must be integral to an organization's ESG journey, from strategy to transformation.

Another PwC survey discovered that many firms in various countries are still in 'start-up mode' when it comes to ESG strategy and execution, with just 18% of respondents reporting that their companies had people and systems in place to handle the entire range of ESG tasks. Organizations in the regions need to enhance their ESG strategy and execution at a rapid pace, and digital technology will help them do so [22].

For example, digital technologies, particularly drones and robotics, are already being employed in the Middle East as part of environmental initiatives to enhance efficiency, minimize waste, and provide a less carbon-intensive method of environmental management. ESG frameworks, in turn, may assist firms in taking a broader approach to sustainability while also highlighting the possible dangers of using new digital technologies.

Robotics and other digital technology can be utilized to support environmental initiatives such as trash reduction and carbon-intensive operations. However, they have a clear societal impact in the form of job displacement and decreased human-to-human contact. Microsoft's Chat GPT has lately highlighted similar societal problems associated with the use of artificial intelligence (in particular, in digital communication), such as the risk for prejudice and discrimination. It has also emphasized the relative immaturity of legislation in this field, which adds to the difficulty.

Along with mitigating these emerging opportunities and risks, changing how organizations use digital technology can significantly shift the dial on their environmental and social impact, such as embedding ESG metrics into technology sourcing processes (for example, considering carbon footprint when evaluating cloud technologies) and implementing electronic waste management. Digital technology may also play an important part in facilitating an organization's governance by providing technologies that promote transparency, decision-making capabilities, and compliance.

Entrepreneurs may put their ESG initiatives into action using digital technologies. As investors focus on ESG, corporations are increasingly integrating sustainability initiatives into their business operations, in particular being adhere to development of entrepreneurship based on effective marketing strategies in appropriate field. Given this new surge of demand, it's no surprise that a wide spectrum of software providers have stepped up their ESG product strategy. A recent Verdantix Benchmark review of 44 corporate ESG and sustainability software solutions revealed four major software categories serving use cases linked with operationalizing ESG and sustainability policies (see Figure 2 below). Verdantix highlighted ClearTrace, Envizi, Measurabl, Schneider Electric, and SINAI Technologies as providers suggesting complete offerings. Among the 29 environmental management software options, long-standing EHS providers with 20 or more years of expertise, such as Cority, Intelex, and Sphera, are best positioned to put the 'E' in ESG. The benchmark found just 24 digital solutions for managing social challenges, with EcoVadis and IsoMetrix offering the most extensive capabilities. Only 16 of the 44 suppliers we evaluated provided compelling digital solutions to assist execute governance reforms. Diligent, Enablon, IsoMetrix, and NAVEX Global emerged as vendors with superior capabilities [33].

Figure 2. ESG digital vendors [33]

Since the ESG approach is a new business concept focused on taking into account the needs of all stakeholders of the company, when developing a strategy it is necessary to analyze many groups of stakeholders who show interest in this issue, which is especially important in the business landscape:

▪ Business partners (in particular, foreign ones), at the level of corporate policy, establish requirements for the environmental friendliness of products, respect for consumer rights, ensuring safe working conditions, and so on;
▪ External investors are increasingly taking into account indicators of the quality of corporate governance, environmental and social performance of companies when making investment decisions. Such information is used to assess the level of sustainability of companies, the quality of non-financial risk management;
▪ Representatives of government agencies at various levels pay attention to the positions and practices of companies regarding participation in the development of the territories where they operate. Assessing the company's contribution to solving socio-economic and environmental problems influences the building of relationships with government officials;
▪ Representatives of local communities (including public organizations) are also interested in the balanced development of regions in all aspects of SD;
▪ Customers are interested in the quality of products, as well as the reputation of the manufacturing or servicing company. Many consumers are now beginning to pay attention to the use of management practices by companies taking into account the principles of SD. In addition, in the B2B sector, clients demand a certain level of SD from the supplier;
▪ Qualified specialists, graduates of educational institutions who choose a place of work may be guided by the principles of the company's sustainable development. Through the introduction of SD principles into current activities, a company can create a competitive advantage in personnel policy.

Stakeholders have a significant impact on the company's performance, as they determine the company's access to certain resources. Therefore, after identifying the interests of the main stakeholder groups, companies must select indicators to determine whether the company has achieved the targets for each stakeholder group.

Regardless of what is behind the use of practices to improve the company's sustainability level (including in frames of development of entrepreneurship based on effective marketing strategies) – whether it is concern for society and the environment, regulatory legislation, stakeholder pressure, or economic benefits - special attention should be paid to the process of integrating these practices into the company's activities [16; 17]. Although an increasing number of top managers recognize the importance of improving the level of sustainability for the long-term performance of the company, the problems that arise in the implementation of such activities deserve special attention.

The first challenge to forming a strategic SD program is setting clear and measurable goals. This problem is caused by the fact that increasing the level of SD is fundamentally different from the implementation of other organizational strategies. For example, production goals are set based on a clear connection with the organization's profit. The long-term effect of an innovation strategy is quite difficult to assess, but the intermediate result is new products or processes, and the final goal is also formulated in terms of profit. However, for the SD strategic program, the primary task is to get results of approbation of ESG principles, that is, simultaneously achieve goals in three areas: social, environmental, and economic aspects. The impact of social and environmental activities is usually characterized by a delayed effect and difficulty in accurate assessing.

The second problem that managers face in practice when trying to introduce SD principles into the company's activities is in the frames of the financial side of the company's activities. Since company management is often forced to achieve short-term financial goals (often at the expense of long-term results), the integration of SD practices depends on financing opportunities. In the case where an improvement in one of the factors is associated with an improvement in the economic aspect of the activity (for example, a reduction in energy consumption), the likelihood of the project being implemented is higher than in the case where indicators only improve in the environmental or social sphere of activity. Since most activities to improve sustainability require significant investments, managers are forced to weigh the pros and cons of actions.

Another issue that requires attention is the reaction of stakeholders. In practice, the reactions of different stakeholders to different activities may vary. This may be due to a change in the priorities of the company or society, a change in the level of cost of certain activities in the field of sustainable development of the company.

At the same time, investment decisions in entrepreneurial businesses must take into account the joint perspective of ESG integration and digital transformation to drive business decisions. Successful companies benefit greatly from pursuing ESG and DT change processes together. Those who carefully choose the right path and the most suitable IT partner or know how to manage the IT area of their business stay ahead and win [8].

The study "ESG in the Digital World: Challenges and Opportunities," which was conducted from February to April 2022, based on a survey of representatives from 61 companies, found out how digital transformation allows shaping the company's sustainable development practices and to what extent the role of digital solutions is critical to the agenda. The study identified key areas of development that will increase the synergy between digital and ESG transformation [36]:

1. Development of digital solutions for the environmental aspect of ESG activities. Despite the rapid growth of the digital ESG solutions segment, the market is still undersaturated. Respondents noted that the greatest lack of digital solutions is felt in the following ESG aspects of companies' activities: adaptation to climate change (16%); waste management (15%); biodiversity (13%). This problem can be addressed by highlighting the demand for digital tools for ESG and stimulating the development of such tools. The greatest potential in the direction of digitalization is characteristic for solutions created using technologies of advanced analytics, artificial intelligence (AI), Internet of things (IoT), blockchain, and robotics (RPA).
2. Building a management system and developing expertise. Representatives of companies note a lack of fundamental competencies among system integrators, the absence of single system integrators who could offer a comprehensive solution in the field of both digitalization and the implementation of ESG practices. For further development of ESG digitalization, an active exchange of best practices

between integrators and conducting educational events to build a competency base are required.

3. Development of ESG practices within companies. Despite the fact that the majority of respondents note a lack of ESG competencies within companies, this problem is currently partially addressed by involving third parties (for example, IT and consulting firms) to integrate digital solutions into ESG activities.

4. Scaling of digital solutions for ESG by major market players. The high cost of advanced digital solutions for ESG and the insufficient number of ESG experts in the market limit the possibilities of full digital transformation in this area for medium and small businesses. Representatives of large companies that actively interact with it see the solution in scaling digital tools. Market participants involved in digital and ESG business transformation are considering the possibility of unifying their own digital solutions for achieving ESG goals and distributing them on the market. This will enable reducing the direct costs of developing and implementing solutions while maintaining their effectiveness. It is expected that this trend will increase in the markets.

5. Methodology for assessing the effects of implementing digital solutions for ESG. The lack of generally accepted methods and models for assessing the economic effect of implementing digital projects in the field of ESG leads to difficulties in attracting domestic investments for such projects. At the moment, the share of domestic investment in many countries is up to 25%.

The popularity of ESG continues to grow over time as a way to evaluate businesses in promising investment areas. On the other hand, it can be extremely useful in preventing investments in companies that pose financial risks associated with their environmental practices. This leads to the emergence of a wide range of products and services in the global IT market, which, in turn, combine digital transformation and ESG.

As responsible finance matures and develops, non-financial reporting is becoming increasingly important: investors who allocate funds based on ESG factors, as well as regulators and exchanges that adapt to rapid market changes, are interested in disclosure of data, especially quantitative ones. Namely quantitative metrics allow comparing organizations with each other (if the same calculation methods are used and the information is publicly available) and making informed decisions. Therefore, the principles and standards of responsible finance imply the disclosure of quantitative information about ESG parameters. A good example is the UN Principles for Responsible Investment, which investors covering more than $120 trillion in investments have signed by early 2021 [18].

The content of a non-financial report is determined by the company's objectives, data available to it, best practices, the requirements of the standards in accordance with which it is prepared, and factors that are of interest to stakeholders. According to the materiality principle, reporting should reflect the largest ESG risks and also describe the system for managing them. As a rule, all reports include information about the organization's activities in such areas as environmental and climate protection, employee care, interaction with local communities, corporate governance and business ethics [29].

However, given the current pace and impact of digital transformation, a framework describing a systematic approach to inclusive disclosure of sustainability-related information, protecting stakeholders, must include the environmental, social, and economic sustainability, as well as technological evolution. This framework, described by the acronym EDGES, represents the integration of well-established ESG and financial reporting with digitalization technology [30]. The EDGES framework allows distinguishing between micro-sustainability and macro-sustainability. In this context, micro sustainability concerns the sustainability of an individual firm, which is reflected in overall profitability and digitalization. Macro sustainability is the impact a firm has on the entire ecosystem in which it operates.

The biggest problem in combining these taxonomies is the lack of universal IT tools that unite all the aspects necessary to simultaneously solve all the needs of a given business area. ESG software is typically designed to help track and report environmental, health, regulatory, social, and safety management initiatives. This software is usually intended to support corporate leaders by making it easier to aggregate data across organizations or portfolios to generate actionable insights and streamline reporting. The ESG software sector is expected to reach $571.74 million by 2028 [8]. In overall, this market is expected to only grow in the next few years.

With the advent of new technologies and the modernization of views on sustainable development, the following concepts are increasingly observed:

▪ "Circular Economy" - an economic system whose goal is to minimize waste and maximize the reuse and recycling of resources; waste from one type of industry can become raw materials for another;
▪ "Impact Investing" - a form of investing aimed at achieving specific social or environmental goals, in addition to obtaining financial benefits;
▪ "BCG-economy" - a bio-circular green economic model, a new approach to economic development, focused on sustainable development and environmental protection. This model is based on three key principles: biodiversity, circularity, and green economy.

ESG principles are very relevant for startups, allowing them to obtain sound results of approbation of ESG principles: it allows reducing costs, effectively building a team, and planning business development [32]. Even if it is more costly in the current moment, it brings sound benefits in long-term strategies. An important component of the ESG principles is high social responsibility, which lies in the company's attitude towards its team, partners, and clients. At the same time, there is an important difference between a startup and a large corporation in assessing the result of ESG processes - for a startup, it is acceptable for the assessment to be subjective, that is, it is enough for the manager and the team to evaluate the result, and it does not need to be proven. That is, in this case, achieving a specific result usually has a direct effect.

Demand for ESG is forcing companies to take sustainability into account. According to the results of EY survey conducted in 2020 among institutional investors, 98% of respondents confirmed that they monitor the ESG ratings of companies with which they do business [18].

The COVID-19 pandemic has also acted as a catalyst, accelerating the integration of ESG principles into company operations, the need to recalibrate economic strategies, and the benefits of supporting the global sustainability agenda 'beyond paper'.

A PwC study forecasts that the market share of ESG funds will rise to 57% in 2025, up from 15% in 2019 [20]. If businesses do not adhere to ESG principles in their operations, they are likely to face greater risks of exclusion from the global investment pool and a negative impact on their market capitalization. Figure 3 below shows that ESG-mandated assets are projected to make up half of all professionally managed assets globally in 2024. The worldwide panorama of professionally managed ESG assets is expanding. Global investor appetite for ESG products continues to create opportunities for organic AUM expansion. Recent polls show that client demand continues to drive investment managers' consideration of sustainability investment criteria in their decision-making processes.
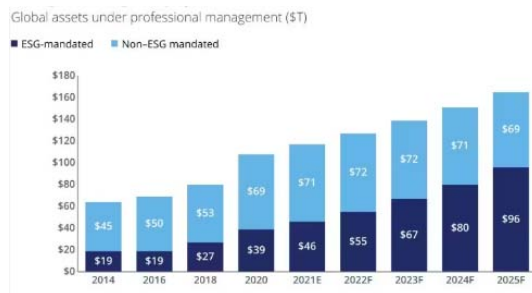
Figure 3. Professionally managed ESG assets globally by 2024
[7]

A very indicative "intersection point" of digital transformation and ESG is the so-called green computing. It is the study and practice of sustainable computing or IT. The goals of green computing are similar to green chemistry: reducing the use of hazardous materials, ensuring maximum energy efficiency over the life of the product, recyclability or biodegradability of non-performing products and factory waste [13]. Green computing is important for all classes of systems, from handheld systems to large-scale data centers.

In 1992, the U.S. Environmental Protection Agency launched the Energy Star program, a voluntary label designed to promote and recognize energy efficiency in monitors, climate control equipment, and other technologies. This has led to widespread adoption of sleep mode among consumer electronics. At the same time, the Swedish organization TCO Development launched a TCO certification program to promote the reduction of magnetic and electrical emissions on CRT-based computer displays; the program was subsequently expanded to include criteria for energy consumption, ergonomics, and the use of hazardous materials in construction.

Green Grid is a global consortium dedicated to improving energy efficiency in data centers and business computing ecosystems. It was founded in February 2007 by several key companies in the industry - AMD, APC, Dell, HP, IBM, Intel, Microsoft, Rackable Systems, SprayCool (acquired in 2010 by Parker), Sun Microsystems, and VMware. Since then, Green Grid has grown to hundreds of members, including end users and government organizations, all focused on improving data center infrastructure efficiency (DCIE). The Green500 list ranks supercomputers based on power efficiency (megaflops/watt), which promotes efficiency rather than absolute performance. Green Comm Challenge is an organization that promotes the development of energy conservation technologies and practices in the field of information and communications technology. The Transaction Performance Technical Council (TPC) for Energy complements existing TPC benchmarks by providing additional publications of energy performance alongside performance results. SPECpower is the first industry standard benchmark that measures power consumption versus performance for server-class computers. Other criteria that measure energy efficiency include SPECweb, SPECvirt, and VMmark [19].

Modern IT systems rely on a complex combination of people, networks, and equipment; as such, a green computing initiative should cover all of these areas. The solution may also require end-user satisfaction, management restructuring, regulatory compliance, and return on investment (ROI). There are also significant budgetary incentives for companies to take control of their own energy consumption [26].

In particular, cloud computing is also aimed at solving two main problems in the field of ICT related to green computing - energy use and resource consumption. Virtualization, dynamic resource provisioning, and tiered approaches based on green data centers enable cloud computing to significantly reduce carbon emissions and energy use. Large enterprises and small businesses can reduce their direct energy consumption and carbon emissions by 30% and 90%, respectively, by moving some cloud-based applications to the cloud.

At its core, green computing is an IT approach that aims to minimize environmental impact through efficient use of resources and optimization of technology. Thanks to analytics and data, environmental responsibility is enhanced. Green computing maximizes energy efficiency and improves data management. Green IT reduces the environmental impact of IT operations, especially in the design, production, operation, and disposal of servers. The importance of green computing is evident from Figure 4 below, presenting embodied greenhouse gas emissions of computing and electronic products.
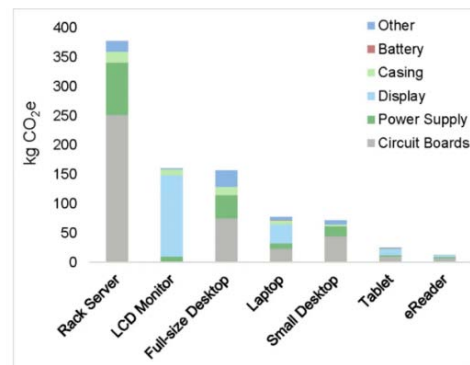

Figure 4. Embodied greenhouse gas emissions of computing and electronic products [28]

Experts note that by implementing green IT practices, a trickle-down effect develops, affecting the entire cost of corporate operations at various stages. Some businesses get an immediate return on investment from green IT initiatives, while others see a ROI in 3-6 months. These reductions do not include additional cost- and energy-saving methods like as virtualization and teleconferencing [13].

A recent report from Coherent Market Insights, "Green IT Services Market Analysis 2022-2030", shows the growth of the green IT services market. Its volume will reach 34.83 billion US dollars, and the growth rate will be 12.4% [5]. These statistics indicate an increase in the number of environmentally friendly computing resources.

Statistics presented by Coherent Market Insights (Figure 5) show that "the green IT services market was valued at US$ 12.46 Bn in 2021 and is forecast to reach a value of US$ 34.83 Bn by 2030 at a CAGR of 12.4% between 2022 and 2030" [5].
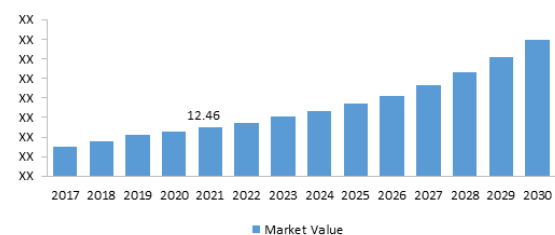
Figure 5. Green IT services market size analysis and forecast, 2017-2030 [5]

Green IT solutions are becoming a key driver of environmental, social, and governance initiatives. Moreover, the use of ESG reporting reveals information about approaches to environmentally sustainable IT solutions. A reliable IT system includes networks, hardware, and software. Thus, if a company wants to implement green technologies, it must ensure that each of them operates in a sustainable manner. They must ensure end-user satisfaction, regulatory compliance, good governance, and higher ROI.

Digital technologies are already having a significant impact on ESG implementation, being significant drivers of the results of approbation of ESG principles. The immediate impact is

improved data collection, reporting and analysis that impact every operation and aspect of the business. Another opportunity is digital twins of companies to track the performance of digital assets, predict energy use, and minimize waste.

Data centers consume a significant amount of energy around the world. To create energy-efficient data centers, companies can implement green IT. Green energy-saving initiatives include air conditioning, heating, refrigeration, and ventilation systems, as well as IT equipment, designed to operate efficiently with minimal energy consumption. This also includes data centers and servers, which generate enormous amounts of heat during calculations. Data centers can be green in a variety of ways: energy efficiency of equipment, power supply, and cooling systems. They also provide airspace management, power generation, and waste heat recovery.

Businesses can apply green IT to recycle materials used in computing devices. These initiatives will allow preventing harmful substances such as mercury and lead ending up in landfills. In addition, replacing equipment can reduce emissions and save energy. Moreover, companies can repurpose or donate unused computers to nonprofits and charities. They can also recycle obsolete systems and consumables such as paper and batteries.

Green IT requires businesses to provide longer product life. This limits the amount of e-waste and prevents the need for their additional production. Companies can also make emphasis on using or creating products that are upgradable and modular. Thus, businesses can produce or replace small modules or parts instead of manufacturing the entire system.

Circular economy models involve servitization. In this case, companies sell products as a service. These models also imply managing the processes of completing the product life cycle for customers [1; 27].

In addition to reducing environmental and social risks, digitalization can also impact the efficiency of processes related to sustainability management. The work [15] identifies 10 main stakeholders of sustainable development (states, companies, media, etc.) and notes that the use, for example, of big data technology makes it possible to improve mutual understanding between the parties and more effectively achieve goals in the field of sustainable development. A high level of digitalization allows stakeholders to more easily and quickly obtain the necessary information about the company's activities, and thus information transparency, in turn, reduces the asymmetry of information between the parties and contributes to making more rational decisions. For example, thanks to digitalization, companies practically cannot hide inconvenient operating results, and investors motivate management to actively participate in the ESG agenda by investing in more environmentally friendly and safe assets.

The digital environment may also be one of the mediators between non-financial and financial performance of a firm. Companies with high levels of corporate sustainability receive financial benefits from this in the long term, since increasing sustainability entails a change in intangible assets, which, in turn, affects operating activities [2; 4]. One of the main components of intangible assets is the company's human capital, which is influenced by digital technologies that can change people's lifestyles. Thus, reputation and positive image as factors for the successful implementation of the principles of sustainable development also depend on the characteristics of the digital environment [3].

It is important to note that the UN' Sustainable Development Goals, in the description of which the Internet and ICT are mentioned, emphasize the positive effect and increasing role of digitalization. However, the doctrines of sustainable development do not pay significant attention to the negative side of widespread digitalization. Thus, it is necessary to consider the life cycle of data and information as a resource that requires transformation processes: storage, structuring, operation, and

disposal, each of which is characterized by parameters of impact on the socio-, bio- and technosphere. Hence, the management of these processes should be cyber-ecological, proactively eliminating the negative impact on all areas.

The Data Economy, the App Economy, and the Gig Economy have changed business practices, the structure of the labor market, patterns of consumer behavior and choice, as well as business models of creation, retention, and delivery of values. As it is known, the basis of digitalization is the process of digitization and integration of data. The growth in the volume of data occurs as a result of human activity in all areas, from personal use of a personal computer, smartphone, tablet to the implementation of digital transformation strategies by the state, large corporations, medium and small businesses. Recent years have seen tremendous growth in the capabilities and reach of information and communications technology (ICT). The Internet, in particular, has become a critical driver of social and economic change, transforming how government, business, and citizens interact and offering new ways to address development challenges. The United Nations has included universal Internet access in the global sustainable development goals, which together are aimed at reducing poverty, improving health, education and the environment, ensuring economic development and social equality [11; 12; 14; 37]. The Internet is a unique platform for innovation, creativity, economic opportunity, and social inclusion that can make a significant contribution to achieving sustainable development goals. However, the world community does not consider the Internet and the cyber environment from the point of view of causing damage to the environment, social environment, and also to man himself.

Every day, increasingly more participants in business processes prove that data has enormous value, especially if it is purposefully collected, wisely stored, and used to its fullest. All of this is becoming increasingly challenging in a rapidly changing, multi-cloud, multi-layered world. The explosive growth of data, combined with the growing need to integrate and analyze it in unprecedented volumes and at unprecedented speed, creates a complex backdrop both in cyberspace itself and in the environment, and is pressing research into the impact of process of data creation, storage, transmission, and use on social, environmental, and economic spheres.

Attention to the growth and application of data is growing from all sides - users, businesses, and regulators, but until recently there has been no consensus on the possible unintended consequences of global digitalization. Studying the influence of cyberspace on the environment and social environment requires the use of a new concept - cyberecology, as well as the development of a methodological approach to ensuring cyber-ecological nature of business in the digital environment [8]. Cyber-green business is focused on the implementation of ESG principles. A key area of the cyber-ecological approach with regard to environment is the study of the intensive use of modern information technologies, which have a negative impact on carbon dioxide emissions and electricity consumption. Within the framework of social responsibility, attention is paid to cyberecology as a new direction in the sphere of human activity.

Overall, ESG serves as a strategic corporate strategy that encourages innovation and growth. Entrepreneurs may use ESG as a framework to create goods and services that address environmental and social issues while maintaining good governance. ESG prioritizes innovation, particularly when it comes to resolving environmental problems. Entrepreneurs are encouraged to develop sustainable technology and goods to fulfill the needs of an environmentally conscious customer base. This not only helps to better environmental results, but also positions firms at the forefront of a market looking for creative and ethical solutions. Market possibilities emerge when the global environment evolves toward sustainability and ethical business practices. Entrepreneurs that follow ESG principles may discover and capitalize on these developing possibilities, obtaining a competitive advantage. Implementing ESG practices can also result in cost savings by reducing resource usage and

improving operational efficiency. At the same time, digital transformation is an integral part of today's ESG landscape in entrepreneurship, the strategic basis of the ESG development trajectory.

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SHAPING THE COMPETENCIES OF THE FUTURE: THE IMPORTANCE OF DEVELOPING SOFT SKILLS IN HIGHER EDUCATION WITHIN THE LANDSCAPE OF INFORMATION TECHNOLOGIES

[a]YURII BURDA, [b]TETIANA SAMUS, [c]EVELINA BAZHMINA, [d]OLHA BONDARENKO, [e]DMYTRO MYRNYI

[a]*O.M. Beketov National University of Urban Economy in Kharkiv, 61002, Kharkiv, Ukraine*
[b]*Oleksandr Dovzhenko Hlukhiv National Pedagogical University, 24, Kyiv Str., 41400, Hlukhiv, Ukraine*
[c,d]*National University Zaporizhzhia Polytechnic, 64, Zhukovskoho Str., Zaporizhzhia, Ukraine*
[e]*Zaporizhzhia State Medical and Pharmaceutical University, 26, Maiakovskoho Ave., 69035, Zaporizhzhia, Ukraine*
email: [a]*science.yurii_burda@gmail.com,*
[b]*tatiana12samv@gmail.com,* [c]*evelina.bazhmina@gmail.com*

Abstract: The article emphasizes that modern professional activity requires mastery of not only highly specialized knowledge but also soft skills. The peculiarities of modern society, which has passed from the VUCA state to the BANI state, are noted, emphasizing that it implies even greater turbulence and unpredictability of the environment, as well as the ever-growing role of information technologies. Today, in the labor market, "soft" skills play a key role in professional activity. Therefore, the task of higher education is to educate a professional who can realize himself in the conditions of high competition, which requires the introduction of educational technologies that form in students' soft skills with solid digital components. The article is devoted to soft skills, which are necessary for young specialists starting a professional career. The objectives of the study were: to determine the optimal composition of soft skills, most in-demand among employers; to evaluate their importance for the successful start of the professional career of young engineers; to reveal the main problems of the formation of soft skills within the educational process. Formulated conclusions can be used to improve university training of young specialists competent in the labor market in the BANI-environment.

Keywords: soft skills; university; VUCA; BANI; experimental learning; information technologies.

1 Introduction

In modern science, soft skills are viewed as universal attributes required for the subject to attain personally meaningful goals. In this context, soft skills are non-cognitive adaptable talents that complement hard skills (specific professional skills). These adaptable talents are viewed as a collection of non-specialized super-professional abilities that enable productive and harmonious contact with others. Flexible skills are described as qualities that enable the individual to develop and sustain interpersonal interactions in both professional and non-professional areas of life and activity, while taking into consideration personal potential. Soft skills may also be characterized as automated parts of conscious action that are generated in the process of implementation and constitute a coordinated capacity to accomplish a certain sort of motor, sensory, cognitive, or mental activity [11].

Potential prerequisites for a person's professional and personal self-actualization today are likely soft skills that ensure success regardless of the specifics of professional activity and the direction in which it is carried out. As a result, current academics frequently seek to view the idea of "soft skills" via the lenses of subjective perception, scientific interests, or even economic rewards. This is why there is no widely acknowledged and unambiguous substantive definition of soft skills [17]. The theoretical study of diverse research allows us to define the unifying psychological qualities of flexible skills and talents that are required for productive and harmonious contact with others, as well as professional and personal well-being.

Until our days, most people believed that success in professional activity was determined by a person's level of professionalism, which included self-awareness in the field, knowledge of official (position-based) tasks, perseverance, and so on. However, current trends imply that this is an obsolete misconception. Now, a competent expert is a "public specialist" who understands how to select, in a mobile and integrative manner, a productive mode of contact with the environment, which consists of many aspects, the dynamism of change and transformation of which is

determined by the situation of immersion. Sometimes, those who seek to realize themselves in society lack not just professionalism, but also the capacity to communicate effectively [3]. According to Budhai and Taddei [4], today's creative individuals must transcend the limitations of ordinary opportunities while being active and adventurous. According to Jeremy Lamri [17], success in modern culture is not something we are born with; rather, it is the result of ninety percent of our own effort and labor. Soft skills training market size is expected to grow by USD 119.22 billion till 2027 (see Figure 1):

Figure 1. Soft skills training market expected growth, 2023-2027 [29].

According to recent research, adaptable abilities are important for graduates of diverse specializations in any region throughout the world. Soft talents encompass social and professional communication, nonverbal communication, trust development, and leadership. According to research, flexible abilities are more important than hard skills in today's workplaces [24]. Scince flexible abilities enable an individual to respond swiftly to professional and social upheavals, they are the most important in the university study process. The university's instructional environment fosters the development of these skills and attributes in students through academic and extracurricular activities. In this context, the study of possibilities and processes for the development of soft skills in higher education is particularly relevant today.

Moreover, digital technologies are a significant engine of growth, productivity, competitiveness, and innovation potential. In the labor market, they threaten current professions, particularly those involving the execution of boring activities, while also creating potential for the establishment of new ones, mostly connected to the digital economy. Jobs are developing as individuals engage more with digital technologies and artificial intelligence. While it is impossible to anticipate the rate of digital change and innovation in society, it is obvious that digital skills are becoming increasingly important for job possibilities and economic growth.

Keeping pace with the digital economy is not just about improving computer literacy, as the latest research on skills and occupations suggests. In particular, the surveys' results suggest that those working in fields that require at least moderate ICT skills, in addition to job-specific technical skills, also need a healthy mix of cognitive and socio-behavioral skills (Marr, 2022). Occupations with a high level of ICT skills rely heavily on people who can solve problems, learn, adapt, apply new methods and technologies, and have deep technical knowledge. Thus, the relationship between soft skills and digital skills is becoming ever closer, which makes it expedient and even necessary to consider them in a complex, inseparable from each other.

2 Literature Review

Today, some scholars think that there is a new shift in the educational paradigm as a result of the developments that occurred in affluent nations in the middle of the twentieth century and were related with civilization's slow transition to a

postindustrial society. These procedures established the definition of new skills of the twenty-first century, skills of a contemporary specialist, which must be developed beginning with preschool and primary education and ensuring the continuity of their creation across all levels of general and vocational education [37].

The transformation of the educational paradigm as a worldwide trend, caused by the world civilizational process, provided a response to our time's issues. The well-known scientist E. Toffler wrote about this in the twentieth century, describing it as a "wave of change". Toffler described the evolution of the education system as follows [23]: the first wave of change was the agrarian revolution; the second was the construction of an industrial civilization; and the third was modern realities, or the post-industrial wave.

Toffler observed that in most industrialized nations, schooling consisted of the acquisition of the following qualities: punctuality, obedience, and mechanical boring labor skills. All of these psychological qualities are in high demand in regular production in an industrial culture. Another characteristic of the second wave, directly connected to education, is the separation of society into producer and consumer: education is "produced" by the instructor and "consumed" by the student [23]. In general, the change in the educational paradigm is reflected in Table 1.

Table 1: Attitudes towards education in the new educational paradigm and paradigm of the 20th century, comparison

Educational paradigm of the 21st century	*Educational paradigm of the 20th century*
Learning system of nonlinear nature	The class-lesson training system of linear type
Teacher is a mentor, coordinator of students' actions; he organizes the information and educational environment	The teacher is a translator of information
Flexible class composition	The permanent composition of the class
Information resource is unlimited	An information resource is limited
Expanded information and educational environment (designed by the teacher and students)	Ready-made information and educational environment (prepared by the teacher)
Autonomous cognitive position of the student	The position of the student is the position of the consumer of ready-made information
The content of education is constantly supplemented, integrated from various sources of information, and transformed	The content of education is presented in textbooks and curricula, and if even it is added, it is to an insignificant extent
Education is the creation by a person of the image of the world in himself, aimed at the formation of subject, social, and spiritual culture	Education is the transfer of already-known samples of knowledge, skills, and abilities to students

Source: Compiled by the authors

Digital Competence, since 2006, has been considered one of the eight key competencies for lifelong learning for EU citizens. In January 2018, a set of recommendations for improving digital competence was published, which expanded its definition to include coding and cybersecurity [39]. These recommendations also introduce the concept of digital citizenship, draw attention to the vulnerability of personal data and threats to cybersecurity. They also cover media literacy and its associated risks of false news, cyberbullying and radicalization, which require awareness-raising and mitigation measures to counter.

The vision of the European Union on the use of digital technologies in education and training is expressed in the following communiqué of the European Commission:

- "Rethinking Education: investing in skills for better socio-economic outcomes" (2012). This document points to the link between the need for a "world-class professionally oriented training system" and the opportunities offered by the use of ICTs;
- "Opening up Education: innovative teaching and learning for all through new technologies and open educational resources" (2013). In this document, technology and open

educational resources are defined as opportunities for change in EU education. The importance of developing self-assessment tools for learners, educators, and educational institutions is emphasized, and the document calls for improving the capacity of educational systems in the EU and at the national level in the following aspects:

- Helping educators and students to master digital skills and teaching methods;
- Promoting the development and accessibility of open educational resources;
- Connecting classrooms to the Internet, equipping them with digital devices and materials.

Thus, digital skills have become a mandatory competence of a modern competitive specialist and can be included without exaggeration in soft skills. A widely used concept today is "digital skills". However, these skills include: technical skills in the use of digital technologies; the ability to meaningfully use digital technologies for work, study, and everyday life in general; the ability to critically evaluate digital technologies; motivation to participate in digital culture, while soft skills are much broader and successful application of digital skills is hardly possible without a good level of soft skills – this concerns, for example, working in distributed teams, leadership in a digital environment, the ability to recognize cyber threats (for example, related to phishing and online social engineering), etc. Scientists came to the conclusion that soft skills contribute to the effective interaction of a specialist with a digital society, high labor productivity [20]. Thus, the formation of effective soft skills occurs precisely under the condition of the widespread use of information technologies in education.

Today trend is characterized as "softer skills for a digital future" [21]. American specialists propose a pyramid of ten soft skills necessary to promote digital transformation (see Figure 2).
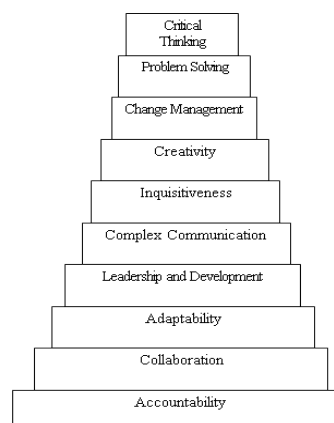
Figure 2. Ten soft skills needed to drive digital transformation
[18]

Given the significant shifts in emphasis, as evidenced by the changing roles of student and teacher, curricula in the post-industrial era should focus on developing critical thinking, communication skills, creative ingenuity, and skills of interaction, as the ability to build interpersonal relationships is most in demand in this era.

Soft skills are required in every type of activity, thus it is critical to begin molding them from the early stages of education in a general education school and continue to actively develop them throughout university educational practice. In the process of professional training, the most effective development of soft skills may be done via the use of innovative technologies, interactive technologies that have shown themselves in the world educational practice [30; 38].

In order to retain social competitiveness, a modern human must constantly monitor trends and gain new knowledge and skills. Such an unstable scenario is referred to as the VUCA (volatility, uncertainty, complexity, ambiguity) world. The acronym VUCA

refers to the world's volatility and impermanence. It defines situations and factors in business and society that are beyond human control. In the modern world, graduates must gain new competences in order to successfully realize their professional potential. First and foremost, it is not about professional expertise, but rather about the ability to notice and adapt to changing environmental situations. According to experts, this is why we're hearing more about the need to improve soft skills [2; 13; 16; 15; 26; 27; 33; 34; 42].

Various writers mean by this idea different skills; yet, it is feasible to extend the classification in an expanded fashion. In particular, they define core communication skills (teamwork, negotiation, self-presentation, fundamental sales abilities, public speaking, outcome-oriented, business writing, client focus), self-management skills (emotional intelligence, excitement, initiative, perseverance, reflection, and feedback), skills of effective thinking (systemic, creative, structural, and logical thinking, discovering and evaluating data, generating and making decisions, design thinking, tactical and strategic thinking), leadership skills (performance management, planning, assigning tasks to staff, incentive, monitoring task completion, and mentoring) [25].

Scientists at Vienna University of Applied Sciences (H. Wahl, K. Kaufmann, F. Ekkrammer, and others), whose opinions are cited in Dell'Aquilla et al. [6], classified soft skills as follows: self-motivation and self-management; resistance to stress; readiness for further education or training; analytical skills, team integration and management; focus on goals and objectives; communication skills; skills of presentation.

Many scientists have addressed the issue of the development of soft skills at various eras, with each considering and defining the idea of soft skills in a unique way, which may be explained by the differences in perception and scope of scientific interests. It should be emphasized that all known definitions of the term are at least somewhat interlinked and interdependent, with some being inextricably linked. The practice of a holistic interpretation of the idea of soft skills and its content is successfully identified, in our opinion, through content analysis.

The traits listed above are exactly what will help to 'survive' in the VUCA environment. However, other experts believe that the period of VUCA has already passed. In 2016, a new concept called BANI was presented [43]. This notion works similarly: it defines the world around a human in four words (and offers suggestions on how to engage with it).

Ito 'deciphers' the paradigm as follows: B (Brittle) - the unwinding spiral of scientific and technological progress has formed a new construct of "disruptive innovations", which makes even the most stable systems fragile and incapable of self-preservation and control over the situation (examples are: the Internet, which is a decentralized system; the concept of M. Zuckerberg's metaverse, in which it is possible to establish other rules of civil behavior and regulation of relations between actors); A (Anxious) - the individual's loss of a sense of stability and control leads to permanent stress and depression, expressed in the reluctance to make decisions or express own position due to the inability to influence the events taking place in any way; N (Nonlinear) - as a new way of life takes shape - Industry 4.0 - events are increasingly becoming systemic in nature, affecting everything and everyone at once, which is a consequence of the increasing interdependence of actors at all micro-, meso- and macro levels; I (Incomprehensible) - information, which is the foundation of Industry 4.0, is generated in such large volumes that the individual ceases to be capable of high-quality processing and assimilation of it, which leads to a decrease in understanding of the processes taking place and a deterioration in business manageability and the impossibility of building a long-term development strategy [1].

It would be inaccurate to claim that the worlds of VUCA and BANI are diametrically opposed. BANI does not abandon the VUCA notion, but rather reformats it. This was necessary since many processes have gotten more sophisticated during the 1980s

and 1990s, and phenomena that did not exist previously (for example, widespread digitization). At the same time, the methods "built" in VUCA began to fall short; they remain crucial (as seen, for example, by the requisite flexibility and awareness outlined in BANI), but something else is also required.

It is frequently impossible to prosper without adequate soft skills. M. Rao (2012) says that a person's efficacy in professional activities is directly proportional to the amount of development of his soft skills, which separate successful experts from failed ones and effective organizations from inefficient ones. Scientists consider the critical nature of thinking and activity, openness to everything new and the ability to navigate it, communication skills, the ability to find and process information, the desire and aspiration for constant self-improvement, and so on to be among the leading qualities of the 21st century personality [10].

Several publications demonstrate the value of soft skills in numerous areas of the economy and business. For example, D. Pons (2016), based on a study of over 100 experienced engineers in various sectors, concluded that the two most desired soft skills in engineering are: 1) communication (both with management and within the team); and 2) planning (both of personal activities and projects) [28]. Furthermore, based on a study of more than 300 employers in 15 countries, scholars identified priority personality traits: 1) Communication and 2) Critical Thinking in Product Development. Other experts point to slightly different soft skills that university graduates need to develop for effective work in the sphere of design and engineering activities (building, architecture) [22].

A consulting company ThinkDigitalFirst proposes brief but essential description of vision of what does being in a BANI-world mean for digital leaders: "To be a digital superhero you'll need to embrace the idea that effective digital leadership is never about doing it once. It takes commitment to continuous effort, a never-ending push that involves challenging your team to upset the status quo in pursuit of better ways of working. Effective digital leaders are also good communicators, who value creativity and the willingness to stick your head above the parapet and challenge established processes. They are on a constant journey of exploration, searching for new ways to exploit technology and use analytics to understand how to provide better service to customers, support suppliers and partners and build a more sustainable organization. In a BANI world, following 5-steps will ensure your effectiveness as a digital leader: 1) Always keep your finger on the pulse of industry trends; 2) Ensure you define and communicate a clear vision across the organization; 3) Make sure that you are a digital agent of change at the helm; 4) Develop a customer-based strategy; 5) Use data-driven analysis" [7]. Thus, as one can clearly see, purely digital skills represent an integral part of soft skills within the landscape of information technologies, and, in turn, information technologies is a crucial tool for training specialists who would be able to enter labor market of the BANI-world successfully.

Under such circumstances, there is an obvious need for detailed research that correlates the realities of the BANI-world with the possibilities of transforming university educational paradigms in order to ensure high-quality training of graduates with the full range of necessary soft skills and motivation for life-long learning. Meanwhile, a higher assessment of soft skills' role in comparison to professional competencies for the successful start of a professional career of young specialists does not imply great extent of change in the content of educational programs in a particular specialty, but rather the need to revise attitudes, approaches to the formation of soft skills, and the use of appropriate teaching technologies, as well as interactive models of teacher behavior, including soft skills as the core means of interaction with students.

3 Method

The methodological basis of the study is represented by general scientific principles, which include the following: the principle

of development, according to which a person is defined as a developing system under the influence of socially determined components; the principle of cause-and-effect relationships; systematic approach, according to which a complex of soft skills can be considered as a multidimensional structure in the interaction with the surrounding reality

During the research, the methods of content analysis, classification elements within grounded theory approach, and structural-logical analysis were employed.

4 Results and Discussion

The requirement to build soft skills necessitates a rethinking of learning processes, as the traditional method entails the transmission of professional abilities ("hard skills") from instructor to student. In most situations, mastering soft skills does not need the introduction of new disciplines since abilities are learned via ways, through a process, rather than through material (content). Soft skills may be developed in parallel with information transmission utilizing sophisticated pedagogy techniques, as well as through supplemental education programs, but it is achievable within practically any subject using familiar approaches [19]. Meanwhile, the whole array of methods used are consistent with the learning pyramid, which states that with the "lecture" learning format, only 5% of the material is learned (which has been repeatedly confirmed empirically: when asked "What have you learned at the last lecture?" students, at best, start flipping through the notes), but often even in practical (seminar) classes, the teacher rather shares information than attracts students to problem solving and discussion [22]. In the learning pyramid, over 50% of the material is assimilated, if there is a group discussion, practical tasks are performed (in our opinion, each student should try to complete the task, and not just the most active or who came to the board), and even mutual teaching takes place.

Analyzing the potential of diverse fields for the creation of soft skills, researchers frequently identify the same talents that need to be developed: critical thinking, communication, and teamwork [35]. L. Fernandez-Sanz et al. [9] present an overview of research conducted in 45 countries to establish essential soft skills. Scientists conclude that humans often employ the same talents.

Although soft skills have firmly established themselves among purely professional talents, their level of development is rarely examined during training sessions. The topic of objectively measuring the quality of this category of talents remains unresolved. Many procedures have yet to become classic, as scientists are always developing them in order to make them more precise and easy. Among the various methodological techniques, the mutual evaluation of students should be stressed [6].

Studies in the area of soft skills are continuous. The core subjects of study cover the following:

- Soft skills diagnostics and assessment (which is especially considered crucial in STEM education) [32];
- Using of diverse approaches, methods, and tactics to build these talents, such as multidisciplinary project work and group work formats [10];
- Comparison of the efficacy of the methods and tactics utilized, such as collaboration and project activities, debates and role-playing, in the development of critical thinking and communication skills [30];
- Identification of individual skill development characteristics – in particular, teamwork, critical thinking, and so on [17];
- Using of linguistic disciplines to enhance soft skills [24].

Meanwhile, in overall, the emergence of a skill system, as described in Figure 3, is predicted, which includes creativity, collaboration, communication, and critical thinking:
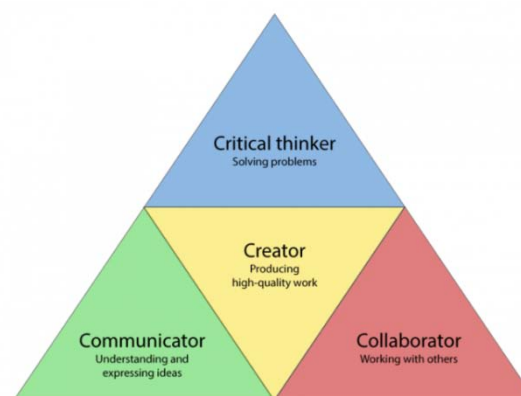

Figure 3. Skills of the 21st century [3].

However, in the BANI world, it is vital to grasp the current "pitfalls" of the so-called "hidden dimensions of BANI" (see Figure 4), and the higher education system must undergo suitable revisions.
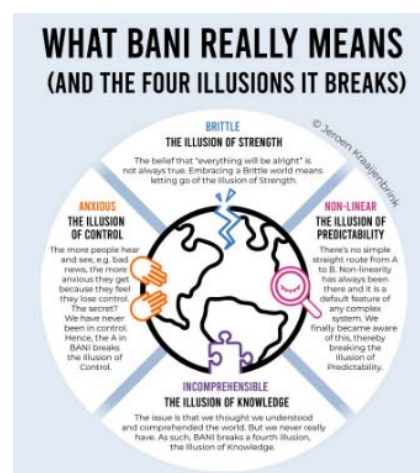
Figure 4. Hidden (latent) manifestations of BANI world [36]

Today university graduate should be able to detect and resolve these illusions in himself, his team, and the company. In turn, this is achievable on the basis of the development and execution of training courses and programs targeted at the construction of skills specialized for the BANI-world, which is yet unknown to the sight of VUCA-world 'natives' (see Figure 5):
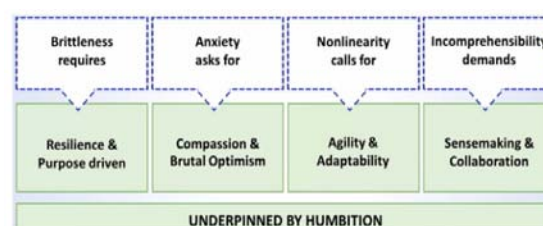
Figure 5. Traits of competitive university graduate in BANI-world [15].

Soft skills are classified as transversal skills (competencies), which are described in European research as critical to sustainable development. Transversal skills are defined as a set of closely related specific competencies that combine: the use of interactive tools (language, symbols and texts, knowledge and information, technology); interaction in heterogeneous groups (building relationships with others, cooperation, teamwork, conflict management and resolution); independent activity (actions for the future, the formation and implementation of life plans and personal needs) [35]. Soft skills that serve as the

foundation for transversal ones include the capacity to deal with information, as well as the universal traits of thinking flexibility, criticality, and creativity, as well as a broad interdisciplinary spectrum of adaptable abilities.

Experiential learning, as used by corporate colleges, prominent business schools, and some Ivy League institutions, is one of the most successful techniques for gaining such abilities. It is a method of informal learning that relies on "trial and error" [5]. The Experiential Learning Cycle is a four-stage learning process that is repeated in every contact and experience: Experience, Consideration, Thinking, and Acting.

Kolb's learning cycle integrates information, activity, and reflection into the experimental learning process. The Association for Experiential Education recommends categorizing learning as experiential if it delivers the following [41]:

- Reflection, critical analysis, and synthesis;
- The chance for students to take the initiative, make decisions, and be accountable for the outcomes;
- Students engagement in learning intellectually, creatively, emotionally, socially or physically;
- Curriculum design facilitates learning from natural consequences, failures, and accomplishments.

The use of the provided criteria indicates a wide range of alternative configurations and variations of educational activities, measures, or events.

Eli Noam, a Columbia University professor, did an empirical study on the efficiency of experiential learning in financial management and management accounting students using the methodology of the same university's MBA courses [8]. The course "IT Investment Management" was chosen for experimental training since it was the second year of study and the third in the program's cycle of financial disciplines (after "Financial Management" and "Corporate Finance and Business Value Management"). The reasoning behind developing the complete cycle of financial disciplines entails a gradual transition from simple to sophisticated. According to Noam, the most important aspect of experiential self-learning is the actual problem or topic on which the trainees would be working. The task's reality-based character results in a fundamentally different degree of awareness and appraisal of uncertainty as compared to other active learning approaches (such as the traditional usage of case studies) [8]. At the same time, the instructor must balance authoritarianism and democracy when working with the group. This will establish a clear course of action and boost the confidence of skeptical participants, while also allowing participants to choose specific approaches, actions, and creative solutions to experimental problems, as well as teach students to adapt their behavior strategies when working in environments with various types of leadership. He also points out that the participants' social experience and maturity contribute to productive work, profound conscious learning, and reflection. Students who have strong social and communication skills are more likely to participate and encourage their teammates. This is especially crucial when the assignment involves a high level of ambiguity [8].

The degree of trust between the teacher and the program participants is an important condition for success. It contributes to effective communication and, at first, provides a time advantage: participants can work actively even if they do not fully understand the goal and direction, but according to the training event's plan, this understanding should come as a "moment of insight". Such a soft skill is very important, because its use in the BANI-environment is frequently required. Otherwise, such an approach is quite harmful for the instructor, as it might produce irritation and contribute to catastrophic disagreements [8]. With the correct dynamics of the course and a well created and 'orchestrated' climax (for example, presentation of the work's findings), participants' self-reflection (beyond the limitations of group reflection) can be removed from the course itself. This will save time, letting digging deeper into personal experiences "alone with self" [8].

As previously stated, there is currently no single classification for soft skills, and the exact number of attributes and talents that meet the description of such skills has yet to be identified. However, all of the talents described above are enhanced by thinking characteristics (speed, inventiveness, adaptability, and consistency (systemic nature)). Flexibility of thought refers to a person's capacity to swiftly and readily look for different solution options. thought flexibility is the capacity to flexibly dispose of source data, build associative associations, and shift in behavior and thought from one class of occurrences to another, frequently widely apart in essence. Many experts believe that thinking is one of the most significant human qualities. Thinking enables a person to tackle critical life problems, identify solutions, and be innovative in problem solving. Thinking may differ. It might be analytical, critical, creative, or abstract. However, it is critical that it be adaptable, as this is the foundation of future abilities as a specialist in the BANI sector.

5 Conclusion

The article defines soft skills as a collection of non-specialized, career-important cross-professional talents that are responsible for effective involvement in the work process, high productivity, and cross-cutting, meaning they are not tied to a single subject area. However, conceptually, they suggest the ability to think about ideas from different perspectives or solve multiple problems at once, to use a creative approach in the implementation of specific tasks, and to change the algorithm to a fundamentally different one, a template for analysis and synthesis. The demand for such skills in the modern labor market necessitates a shift in the paradigm of designing and implementing training courses and programs in higher education toward a greater use of experiential learning methods, with a focus on the development of emotional intelligence.

It may be important to build supplementary training programs for the development of personal traits in all aspects of soft skills. To plan activities for the development of soft skills, it is best to include not only instructors and educators, but also students themselves.

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THE OBJECTIVE SIDE OF THE COMPOSITION OF CRIMINAL OFFENSES ENCROACHING ON PHARMACEUTICAL ACTIVITY IN UKRAINE

[a]OLENA FROLOVA, [b]IVAN DEMCHENKO, [c]IEVGENIIA KOVALEVSKA, [d]OLGA KOVAL, [e]IRYNA LUTSENKO

[a]*Interregional Academy of Personnel Management, 2, Frometivska Str., 03039, Kyiv, Ukraine*
[b-c]*Bogomolets National Medical University, 13, Tarasa Shevchenka Ave., 01601, Kyiv, Ukraine*
[d]*Kyiv National University of Technologies and Design, Mala Shyianovska (Nemyrovycha-Danchenka) Str., 2, Kyiv, Ukraine*
[e]*Kharkiv National University of Internal Affairs, 27, L. Landau Ave., 61080, Kharkiv, Ukraine*
email: [a]scientistua@ukr.net, [e]lra29121982@gmail.com

Abstract: The article examines the objective side of the composition of criminal offenses encroaching on pharmaceutical activity in Ukraine. Taking into account the peculiarities of activity and passivity in human behavior in the criminal offenses that encroach on pharmaceutical activity, the author proposes to single out the following groups of actions under the Criminal Code of Ukraine, which combine certain types of actions as mandatory signs of the objective side of the specified corpus delicti: 1) action and inaction (activity or passivity) associated with improper performance by a person of his professional duties in the field of pharmaceutical activity (pharmaceutical duties) as a result of negligent or dishonest attitude towards them (in other words, manifestations of the so-called "medical and/or pharmaceutical negligence"); 2) actions consisting in the disclosure of certain information related to pharmaceutical activity; 3) actions consisting in violation of the procedure for carrying out special medical and pharmaceutical "procedures" in the process of pharmaceutical service; 4) actions that violate the order of circulation of medicinal products. The author notes that certain types of criminal offenses that encroach on pharmaceutical activity are constructed as material, i.e., those where consequences (socially dangerous consequences) are a mandatory element. The article considers the consequences in the corpus delicti of the specified criminal offenses. The article focuses attention on the fact that certain criminal offenses that encroach on pharmaceutical activity include optional (alternative) features of the objective side, namely: the method of committing a certain act, the setting (situation) of committing a criminal offense, the place of committing a criminal offense .

Keywords: criminal legal protection of pharmaceutical activity; pharmaceutical activity; criminal responsibility; Criminal Code of Ukraine; criminal offense; health care; objective side; consequences.

1 Introduction

As any act of voluntary human behavior, a criminal offense is a unity of its external (objective) and internal (subjective) properties and signs. The external side of a criminal offense forms its objective side [1, p. 133], or, in other words, the objective side of a criminal offense is an external act of human behavior (a concrete manifestation of social reality), which must be distinguished from the objective side of the composition of a criminal offense - the legislator's judgment about this act of behavior reflected in the Criminal Code [8, p. 180].

The purpose of the article is to investigate the objective side of the composition of criminal offenses that encroach on pharmaceutical activity.

2 Materials and Methods

The research methodology is based on the method of dialectical cognition, which allows analyzing the phenomena under study in a static state and in dynamic interaction. In preparing the study, a complex of general scientific and specific scientific methods was used, in particular, system-functional and system-structural methods made it possible to conduct a comprehensive study of criminal law and criminological patterns. The research methodology includes a systematic analysis of criminal law and medical legislation.

3 Results and Discussion

The content of the objective side of the corpus delicti formed by two groups of signs: 1) signs that are components of the criminal illegal activity itself and directly characterize its external manifestation (these include action or inaction, method, tools and means, consequence and causal connection); 2) signs characterizing the set of conditions under which the act is committed (place, time, setting of the act, as well as their peculiar combination - the situation). Most of these signs are

optional (since they are included not in all criminal offenses of specific types), and the universally mandatory sign of the objective part is only the act [1, p. 133].

Taking into account the peculiarities of activity and passivity in human behavior in the composition of criminal offenses that encroach on pharmaceutical activity, the following groups of actions can be distinguished according to the Criminal Code of Ukraine [5], which combine certain types of actions as mandatory features of the objective side of the specified crimes:

1) Action and inaction (activity or passivity) associated with improper performance by a person of his professional duties in the field of pharmaceutical activity (pharmaceutical duties) as a result of negligent or dishonest attitude towards them (in other words, manifestations of the so-called "medical and/or pharmaceutical negligence") (Articles 131, 137, 139, 140 of the Criminal Code);

2) Actions consisting in the disclosure of certain information related to pharmaceutical activity (Articles 132, 145 of the Criminal Code);

3) Actions consisting in violation of the procedure for carrying out special medical and pharmaceutical "procedures" in the process of pharmaceutical service (Articles 134, 138, 142 of the Criminal Code);

4) Actions that violate the order of circulation of medicinal products (Articles 141, 305, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320 , 321, 322, 321-1, 321-2, 322, 323, 325 of the Criminal Code).

Let us move on to the characteristics of the signs of actions highlighted above.

The first group is actions related to the improper performance by a person of his professional duties in the field of pharmaceutical activity (pharmaceutical duties) as a result of negligent or dishonest attitude towards them. Articles131, 137, 139, 140 of the Criminal Code provide for separate varieties of the so-called "medical and/or pharmaceutical negligence", an independent element of corpus delicti in which is an act expressed (designated): 1) in Part 1 of Art. 131 of the Criminal Code as "improper performance of professional duties by a medical, pharmaceutical, or other employee"; 2) in Part 1 of Art. 137 of the Criminal Code as "failure or improper performance of professional or official duties regarding the protection of life and health of minors"; 3) in Part 1 of Art. 139 of the Criminal Code as "failure to provide assistance to a sick person without valid reasons by a medical worker who is obliged, according to the established rules, to provide such assistance"; 4) in Part 1 of Art. 140 of the Criminal Code as "failure or improper performance of professional duties by a medical or pharmaceutical worker". Therefore, within this group of actions, the feature "improper execution" is "common" to the corpus delicti of criminal offenses provided for in Art. 131, 137, 140 of the Criminal Code, while the sign of "non-performance" is "common" for the corpus delicti provided for in Art. 137, 140 of the Criminal Code (in Article 131 of the Criminal Code, such type (form) of action as "non-performance" is not established).

The concept of "improper performance" refers to the corresponding manifestations of activity and passivity of a person's behavior. Moreover, when characterizing active behavior, it is necessary to take into account the different scope of relevant professional (Articles 131, 137, 140 of the Criminal Code) or official (Article 137 of the Criminal Code) duties assigned to a person and performed by him.

The concept of "non-performance" (Articles 137, 140 of the Criminal Code) denotes only relevant manifestations of a person's passivity and assumes that a person does not perform those specific actions that he is obliged to perform. Such an obligation to perform certain actions must be regulated in the relevant legislative or other legal act, and the implementation of

this obligation must also be assigned to a specific person by the relevant legal act. Therefore, non-performance means inaction, when a person does not perform certain professional or official duties at all, which he is obliged to and could perform on the basis of regulatory or other legal acts [2, p. 85].

The second group includes actions consisting in the disclosure of information related to pharmaceutical activity. Clarifying the signs of the actions of this group requires a general and specific description of the mechanism of disclosure, the types of which are appropriately "represented" in the composition of criminal offenses provided for in Art. 132, 145 of the Criminal Code. Moreover, it is important that only the general characteristics are clearly not enough for a complete description of the disclosure mechanism, since in this case it is not clear which elements of it (the mechanism) characterize the action, and which ones go beyond the content of the action and are the result (consequence), which are formed by disclosure.

At the general level, the concept of disclosure means that specific data (information) is illegally brought to the attention of at least one third party who does not have the authority to get to know them (or a certain group of such third parties) [12, p. 249]. In particular, P. Andrushko reasonably draws a conclusion, commenting on the provisions of Art. 132 of the Criminal Code: "disclosure of information ... is the illegal familiarization of other persons with such information or the creation of conditions that made it possible for outsiders to become familiar with it, committed by a person who is obliged to keep such information confidential" [13, p. 253]. Regarding the content of the disclosure provided in Art. 145 of the Criminal Code, the scientist points out: "this is the illegal familiarization of at least one third party with information that constitutes a medical secret according to the current legislation, by a person to whom this information became known in connection with the performance of professional or official duties and which he did not has the right to disclose" [13, p. 275-276].

The specific level of characteristics of the disclosure mechanism assumes that: 1) there are specific norms that prohibit a person who is obliged to keep the relevant information secret from disclosing it to third parties who do not have the authority to be familiarized with this information (or, in other words, to be aware of such information); 2) disclosure by a person who is obliged to keep the relevant information confidential implies the formation of a specific result (consequence) in the form of awareness of third parties with the specific content of such information (in principle, namely due to the emergence of such awareness of a third party, it can be said that the relevant information is disclosed and brought to its attention, and the disclosure itself is finished, complete). Moreover, several alternative options are possible regarding the consideration of the specified result (consequence) in the content of the structure of the composition of criminal offenses provided for in Art. 132, 145 of the Criminal Code.

The third group implies actions consisting in violation of the procedure for carrying out special medical and pharmaceutical "procedures" in the process of pharmaceutical service (Articles 134, 138, 142 of the Criminal Code). For example, in Art. 134 of the Criminal Code, the act as an element of the objective side is "presented" as: 1) "carrying out an abortion" (Part 1); 2) "forcing an abortion" (Part 2); 3) "illegal abortion" (Part 3); 4) "forcing sterilization" (Part 4).

As part of illegal medical activity, provided for in Art. 138 of the Criminal Code, the act is manifested in a person' engaging in medical activities without a special permit and in the absence of proper medical education.

In the composition of the criminal offense provided for by Art. 142 of the Criminal Code, the act is expressed in the illegal conduct of medico-biological, psychological, or other experiments on a person.

The fourth group includes actions that violate the order of circulation of medicinal products (Articles 141, 305, 306, 307,

308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 321-1, 321-2, 322, 323, 325 of the Criminal Code). An obligatory element of the objective side of the corpus delicti of criminal offenses of this group is an act, the signs of which indicate the corresponding fragment of the circulation of medicinal products.

Separate signs of action in the content of the objective side of the composition of criminal offenses relate to the violation of the order of introduction of pharmaceutical activity items (items that provide pharmaceutical activity) into circulation and their stay in circulation. Thus, the signs of the objective side of the corpus delicti of criminal offenses provided for in Art. 307, 309, 311, part 1 of Art. 321 of the Criminal Code is the illegal production, manufacture, acquisition, storage, transportation or forwarding of the composition provided for in Art. 317, Part 1 of Art. 320, Part 1 of Art. 321 of the Criminal Code, - production and manufacture of the corpus delicti provided for in Part 1 of Art. 318, Part 1 of Art. 321-1 of the Criminal Code, - production (illegal production), use and sale, in the corpus delicti provided for in Part 1 of Art. 320 of the Criminal Code, - storage, transportation, forwarding, in corpus delicti provided for by Art. 307, 312, 321 of the Criminal Code, respectively - illegal sale and sale. Article 313 of the Criminal Code defines the objective aspects of a criminal offense as illegal production, acquisition, storage, transfer or sale. In addition, as part of the criminal offense provided for in Part 2 of Art. 321 of the Criminal Code, alternative signs of the objective part are violations of the established rules of acquisition, storage, transportation, forwarding, and as corpus delicti of the criminal offense provided for in Part 1 of Art. 321-1 of the Criminal Code - acquisition, transportation, forwarding, storage, and sale.

Separate components of criminal offenses that encroach on pharmaceutical activity are constructed as material, i.e., those whose mandatory element are consequences (socially dangerous consequences). In particular, in Part 1 of Art. 131 of the Criminal Code, the consequences are presented as the infection of a person with HIV or another incurable infectious disease that is dangerous for human life, and in part 2 of this article of the Criminal Code -as the infection of two or more persons. In Art. 132 of the Criminal Code, the consequences are a mandatory component of the disclosure of information on conducting a medical examination of a person to detect HIV infection or another incurable infectious disease that is dangerous to human life, or AIDS and its results. Similar in their criminal law nature are the consequences inherent in the content of the disclosure provided for in Art. 145 of the Criminal Code, but with the difference that concerns the so-called double consequences: the legislator adds "severe consequences" to the consequences as a mandatory component of disclosure in the article of the Criminal Code. In Part 3 of Art. 134 of the Criminal Code, the consequences are a long-term health disorder, infertility or death of the victim, and in Part 5 of the same article of the Criminal Code - the death of the victim or other serious consequences. In Part 1 of Art. 137 of the Criminal Code, the consequences are defined as significant harm to the health of the victim, and in Part 2 of this article of the Criminal Code - as the death of a minor or other serious consequences. In Art. 138 of the Criminal Code, the consequences are indicated by the concept of "severe consequences for the patient", and in Art. 139 of the Criminal Code - the concept that "it may have serious consequences for the patient" (part 1) and "caused the death of the patient or other serious consequences" (part 2). In Art. 140 of the Criminal Code, the consequences are defined as "severe consequences for the patient" (Part 1) and "serious consequences for the minor" (Part 2), and in Art. 141 of the Criminal Code - as the death of the patient or other serious consequences. In Part 2 of Art. 314 of the Criminal Code, the consequences are moderate or serious bodily injury to the victim, and in Part 3 of this article of the Criminal Code - the death of the victim. In Part 2 of Art. 321-1 of the Criminal Code, the consequences are provided as a long-term disorder of a person's health, and in Part 3 of this article of the Criminal Code - as the death of a person or other serious consequences. Double alternative consequences in the form of the death of the victim or other serious consequences are

provided for in Part 3 of Art. 321-2 of the Criminal Code. In Part 3 of Art. 323 of the Criminal Code, the consequences are defined as harm to the victim's health, and in Part 4 of this article of the Criminal Code - as significant harm to the victim's health or other serious consequences. In Art. 325 of the Criminal Code, the consequences are associated with damage in the form of the spread of diseases or the danger of such spread (Part 1), as well as with the death of people or other serious consequences (Part 2).

Let us consider the specified consequences in the constructions of the corpus delicti of the specified criminal offenses.

In Part 1 of Art. 131 of the Criminal Code, the consequences of "a person's infection with the human immunodeficiency virus or another incurable infectious disease that is dangerous to human life" are doubly mandatory and are associated with the mandatory properties of the result of a person's infection with HIV or another incurable infectious disease that is dangerous to a person human life: the first type of consequences of "infecting a person with HIV or another incurable infectious disease" is associated with the introduction (presence) of HIV or another incurable infectious disease into the human body, while the second type of these consequences is associated with the creation of danger to human life. Therefore, not every infection of a person with a virus of an incurable infectious disease is a mandatory consequence of the composition provided for in Part 1 of Art. 131 of the Criminal Code.

Due to its criminal-legal nature, the consequences in the composition provided for in Art. 132 of the Criminal Code, are single constructive, i.e., they are a mandatory component of the disclosure of information about conducting a medical examination of a person to detect HIV infection or other incurable infectious disease that is dangerous to human life, or AIDS disease and its results. In the corpus delicti provided for by Art. 145 of the Criminal Code, the consequences are doubly mandatory: the first type of consequences in the form of the awareness of third parties in the information related to the medical secret is combined with the second type – "severe consequences".

Part 3 of Art. 134 of the Criminal Code stipulates alternative consequences in the form of a long-term health disorder, infertility or death of the victim. A health disorder lasting more than three weeks (more than 21 days) should be considered long-term.

Infertility is characteristic of a violation [6, p. 62-63] of the physiological condition of women, which is related to the medical processes of ovulation, the functions of the fallopian tubes, the uterus and the peritoneum of the pelvis, etc. [7, p. 3], as a result of which a woman is unable to conceive (regardless of whether it is possible to medically eliminate such infertility of a person who has had an illegal abortion) and "has lost the ability to bear children" [9, p. 37]. Therefore, for the presence of infertility of a person who has had an illegal abortion, as one of the consequences of the criminal offense provided for in Part 3 of Art. 134 of the Criminal Code, it does not matter whether medical workers managed to eliminate infertility through medical intervention or not and, accordingly, restore the ability of such a woman to bear children (such a result of medical intervention is outside the scope of a criminal offense).

Part 5 of Art. 134 of the Criminal Code implies consequences in the form of the death of the victim or other serious consequences. The concept of "other serious consequences" refers to more or less serious types of harm, compared to the death of the victim, affecting the life or health of the person who is forced to undergo sterilization without his voluntary consent, namely: the risk of death, the formation of a long-term health disorder of the victim (an example is an increase in the level of testosterone in the human body, as a result of which blood thickens, hypercoagulation develops, the risk of a heart attack, stroke appears, bone tissues soften [3, p. 197]), infliction of serious bodily injuries on the victim (for example, as a result of the subsequent surgical operation to remove the genital organ),

the death of several victims or the infliction of serious bodily injuries on them, etc.

The concept of "significant harm to the health of the victim" (Part 1 of Article 137, Part 4 of Article 323 of the Criminal Code) is associated with the infliction of light physical injuries on a person (such as those that caused a short-term health disorder or minor loss of working capacity, and without a short-term health disorder or minor loss of working capacity).

The concept of "other severe consequences" in the wording "death of a minor or other severe consequences" (Part 2 of Article 137 of the Criminal Code) includes damage to the victim's life and/or health, which is more or less severe compared to the death of one minor, in particular: moderate or severe bodily harm, death of several minors, etc. Similar one is the approach to specifying the content of the sign "severe consequences for the patient" in Article 138 of the Criminal Code, "death of the patient or other serious consequences" in Part 2 of Art. 139 of the Criminal Code (in contrast to the actual occurrence of the patient's death or other serious consequences (Part 2 of Article 139 of the Criminal Code), in Part 1 of this article of the Criminal Code, the consequences are associated with the danger of serious consequences and are denoted by the concept "may have serious consequences for the patient"), "severe consequences for the patient" (Part 1 of Article 140 of the Criminal Code) and "serious consequences for a minor" (Part 2 of Article 140 of the Criminal Code), "death of the patient or other serious consequences" in Article 141 of the Criminal Code, as well as "death of people or other serious consequences" in Part 2 of Article 325 of the Criminal Code. The content of the above concepts related to the occurrence of serious consequences for the victim must take into account the duration of the victim's health disorder, in the determination of which, in the Rules of Forensic Medical Determination of the Severity of Bodily Injuries, the duration of the disorder is taken into account (as a criterion) for more than three weeks (more than 21 days) [10].

Moderate bodily injury and severe bodily injury are distinguished in Part 2 of Article 314 of the Criminal Code as consequences that are alternative signs in the qualified corpus delicti of illegal introduction of narcotic drugs, psychotropic substances or their analogues into the body. In Part 3 of Article 314 of the Criminal Code, the consequence as an alternative sign of a specially qualified composition is connected with the "death of the victim".

In Part 3 of Article 323 of the Criminal Code, the consequences are provided in the form of harm to the victim's health, and in Part 4 of this Article of the Criminal Code - in the form of significant harm to the victim's health or other serious consequences. Comparison of these provisions of Part 3 and Part 4 of Article 323 of the Criminal Code allows concluding that "damage to the victim's health" in Part 3 of Article 323 of the Criminal Code does not reach the size of the essential. Therefore, the meaning of the concept of "harm to the victim's health" should be associated with consequences less than minor physical injuries without short-term health impairment, namely: infliction of physical pain on the victim, which does not reach the nature of minor bodily injuries without short-term health impairment.

In Article 325 of the Criminal Code, the consequences are "represented" as harm to individual and/or public health in the form of the spread of diseases or the danger of such spread (Part 1), as well in the form of death of people or other serious consequences (Part 2).

Separate corpus delicti of criminal offenses encroaching on pharmaceutical activity include such optional (alternative) features of the objective part as:

1) Method of committing a certain act: Part 2 of Article 142 of the Criminal Code stipulates the signs of "actions ... committed ... by means of coercion or deception" (actions in Part 1 of this Article of the Criminal Code mean "illegal conducting of

medical-biological, psychological, or other experiments on a person").

In addition, the method of committing the act is provided for in Part 2 of Article 307, Part 2 of Article 317 of the Criminal Code in the form of "involvement of a minor", and in Part 3 of Art. 307 of the Criminal Code – "involvement of a young minor". The concept of "involvement" means a specific form of encouraging a minor to commit the actions described in the relevant parts of Article 307 of the Criminal Code.

Part 2 of Article 308, Part 2 of Article 312 of the Criminal Code provides such a method as "the use of violence that is not dangerous to the life or health of the victim, or with the threat of using such violence".

Part 3 of Article 308, Part 2 of Article 313, Part 2 of Article 320 of the Criminal Code alternatively provide for such a method as "abuse by an official of his official position", which includes three mandatory elements: a) use of the powers of such an official, which is specified in Article 364 of the Criminal Code or in Article 364-1 of the Criminal Code; b) the purpose of receiving an unlawful benefit, c) receiving it contrary to the interests of the service (Part 1 of Article 364 of the Criminal Code) or the interests of a legal entity of private law (Part 1 of Article 364-1 of the Criminal Code) [4, p. 275-278].

Part 2 of Article 321-1 of the Criminal Code provides such a method as the use of information systems, which is indicated by the wording "... with the help of information systems, including the Internet".

2) Setting (situation) of committing a criminal offense: Article 132 of the Criminal Code provides for the sign of "fulfillment of professional or official duties" (awareness of a medical worker in "information about conducting a medical examination of a person to detect HIV infection or other incurable infectious disease that is dangerous to human life" is associated with such duties), or information about "AIDS and its results"); Article 145 of the Criminal Code stipulates that with the "fulfillment of professional or official duties" a person becomes aware of a medical secret that he intentionally divulges (the specifics of the specified professional and official duties are taken into account in this case);

3) Place of commission of the criminal offense: Part 2 of Article 307 of the Criminal Code states that the actions provided for in Part 1 are committed "in places designated for educational, sports, and cultural events, and in other places of mass gathering of citizens". The above-mentioned places should be understood as a certain plane within which a mass of people participating in the respective educational process, sports competitions or educational and training meetings, in the field of culture or provision of cultural services are located.

Conclusion

Thus, separate components of criminal offenses that encroach on pharmaceutical activity include optional (alternative) features of the objective side, namely: the method of committing a certain act, the setting (situation) of committing a criminal offense, the place of committing a criminal offense.

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LINGUISTIC FEATURES OF JAPANESE ADVERTISING AS A CULTURAL PHENOMENON

[a]ANDRII BUKRIIENKO, [b]TAMARA KOMARNYTSKA, [c]KOSTIANTYN KOMISAROV, [d]YULIYA NAUMOVA, [e]HANNA VOZNIUK

[a,c]*Borys Grinchenko Kyiv Metropolitan University, 18/2, Bulvarno-Kudriavska Str., 04053, Kyiv, Ukraine*
[b]*Taras Shevchenko National University of Kyiv, 60, Volodymyrska Str., 01033, Kyiv, Ukraine*
[d,e]*Kyiv National Linguistic University, 73, Velyka Vasylkivska Str., 03680, Kyiv, Ukraine*
email: [a]andriibukriienko@gmail.com, [b]tkomarnytska@knu.ua, [c]kkomisarov@kubg.edu.ua, [d]u1anau@gmail.com, [e]hannavozniuk @gmail.com

Abstract: The article makes an attempt of interdisciplinary comprehension of the phenomenon of modern Japanese advertising as cultural, social, and linguistic phenomenon. Traditional features of Japanese advertising and methods of influencing consumers' buying decisions are analyzed, with subsequent transition to research of English borrowings in Japanese advertising texts, as well as cultural implications of these borrowings processes.

Keywords: Japanese advertising; culture; language; globalization; loanwords.

1 Introduction

The relevance of the theoretical analysis of advertising as a cultural phenomenon of the globalized world is due to the fact that modern advertising is becoming a universal conductor between the most different areas of global culture. Being a form of mass communication, advertising today represents a phenomenon that is included in most spheres of human activity and creates a unique culture-forming field for the individual. By reproducing numerous cultural symbols and codes, advertising acts not only as an indicator reflecting the features and general picture of modern culture, but also as a social institution capable of shaping it through targeted influence on certain segments of society. As a cultural phenomenon, advertising places and promotes its own ideals and norms into the mass consciousness of consumer society, and at the same time not only carries an "attractive message", but also transmits special ideological content through distributed symbols and signs. Active and almost continuous impact, designed to reach a wide range of target audiences, allows the advertising industry to act as a mechanism that carries out the directed translation of meanings that organize the social reality of a civilized person. In a certain sense, advertising ideologizes this reality. The advertising slogan itself becomes one of the symbols of modernity, gradually moving away from the message "how to buy" and approaching the idea of "how to live" (because the intention to "live without buying" is already unlikely at the present stage). And since due to the information age and technological leap, advertising has become global in nature, this phenomenon is difficult to overestimate both in scale and significance.

The creative side of advertising communication includes two hypostases as a product of the activity of creating an advertising message: on the one hand, it is the subjective manifestation and implementation of the ideas of the advertising producer, on the other hand, it is a general objective reflection of a set of factors (cultural, social, geographical, political, economic, etc.) and the circumstances (including place, time, goals, etc.) in which this advertising was created [13].

The relevance of linguocultural analysis of advertising as a phenomenon of Japanese culture is due to many reasons. First of all, it is because the main goal of advertising as an integral part of mass culture is not only to inform consumers about goods and services, but also to shape a person's lifestyle and value system. By visualizing the interests, desires, and motives of the buyer, forming his needs, advertising appeals to the value systems of society and reflects the characteristics of the national mentality [12]. Analysis of advertising messages, changes in their content and methods of presentation allows, on the one hand, to decipher the meaning of the message, understand what social ideals and norms they form, and, on the other hand, to consider paradigm shifts and sociocultural transformations. Modern Japanese advertising is of interest to scientists due to the nationally specific features of the pragmatic impact on the recipient, including the use of humor in advertising, based on the creative use of language.

Moreover, an important component of "specific" Japanese globalization is associated with the spread of Japanese material and spiritual culture. The main place here is given to goods of material production: Japanese cars and electronics have become the hallmark of Japan throughout the world. In recent years, the Japan Foundation and other organizations have begun to export national cultural products - Japanese painting, tea ceremony, ikebana, etc. However, the most popular examples of mass culture are karaoke, manga, anime, films and television series. Only Japanese martial arts, such as karate and aikido, which have gained enormous popularity throughout the world in recent decades, can compete with them. Exploring the peculiarities of the formation of the Japanese nation from a global perspective, Iyotani Toshio, professor of the department of foreign languages at the Tokyo University of International Affairs, argues that the Japanese state felt the need to develop stable national cultural patterns, which were later widely introduced into Japanese society along with established social norms and became the basis spiritual unity of the nation [3]. The construction of a "pure" image of the country occurs within the framework of the affirmation of national and cultural identity.

In connection with the above, it is obvious that Japanese advertising, including its linguistic design, is a unique phenomenon that is interesting from an interdisciplinary perspective. Researchers classify the Japanese language as a language, when studying which it is necessary to take into account not only social and pragmatic factors, but also the factor of cultural semantics [10]. The dependence of forms and representations becomes the basis for identifying cognitive materialism of culture as an independent direction in the study of cultural phenomena, combining cognitive and social sciences, which allows establishing new connections between cognitive and social sciences. Linguistic structures are part of culture, and metaphorical linguistic use is the basis for the design of cultural cognitive structures.

2 Materials and Methods

The research is based on the methodological principles of semiotic, hermeneutic, interdisciplinary, structural-functional, and typological approaches, which make it possible to analyze the features of the phenomenon of Japanese advertising and determine its place and role in the global cultural space.

3 Results and Discussion

The main trends in the development of advertising in Japan reflect the peculiarities of the national psychology of the Japanese, their worldview, therefore, a linguocultural analysis of advertising through the prism of the relationship between language and culture would allow to better understand the hierarchy of values of modern Japanese and the dynamics of transformation of sociocultural stereotypes.

The language of Japanese advertising is very eclectic. It mixes native and borrowed expressions, traditional and foreign concepts. Such eclecticism is quite natural for Japanese culture, which masterfully combines the incompatible and is capable of filling any new form with traditional content. The process of mastering borrowed concepts, combining them with original concepts and ideas often takes comic forms, cf.: *Bijinesu Ryokan* "Traditionally Japanese business hotel" - an advertising banner on a traditionally Japanese hotel; *ieroo onrii* "Only for yellow people" (English *yellow only* - the inscription above the entrance to the café); La Men "Ramen" - an attempt to latinize the name of the Japanese diner; *pantii taimu* - an unsuccessful attempt to

combine in the name of the cafe the word "pan" that came earlier from the Portuguese *pan* with English *tea* and *time*; it turned out to be *panty time*.

Borrowings in Japanese (except for Chinese words) are called 外来語 (gairaigo) - "a word that came from outside", and are written mainly in katakana (see Figure 1). Hiragana and katakana are two distinct ways of writing the same set of 46 sounds. Hiragana is often used to write native Japanese words, but katakana is used for words borrowed from other languages. For example, *arigatou*, which means "thank you" in Japanese, is commonly written ありがとう (a ri ga to u) using hiragana characters, whereas "America" is written アメリカ (a me ri ka) using katakana.

Figure 1. Katakana

Sari [20] studied the genesis of shortened borrowing terms in Japanese. Data are derived from the Automotive Technology Column on the Asahi Shinbun Digital Website. According to the research, gairaigo may be formed in three ways: (1) by omitting the initial portion of the term, which is known as *jouryaku* in Japanese. For instance, the form of internet shop in English becomes *nettoshoppu*; (2) the omission of the last part of the word which is called *geryaku*: vehicle navigation in English becomes *kaanabi*; and (3) the removal of the initial and last portions of a word which is known as *jougeryaku*. For example, the English term "laser radar" becomes *reedaa* in Japanese.

The incorporation of English words into the Japanese linguistic system to create gairaigo has cultural implications. Gairaigo has implications for Japanese speakers' language attitudes, vocabulary enrichment, early recognition of English embedded in Japanese, and cultural maintenance. The way the Japanese borrowed and treated English words reflects their language attitude. On the one hand, Japanese speakers use English terms in Japanese. On the other hand, they do not wish to lose their Japanese language characteristics. The development of gairaigo by retaining linguistic features from both English and Japanese demonstrates that one word may represent two separate civilizations. *Tarento, ibento, dorama, samitto, keesu*, and the other terms in Table 1 have linguistic traits with English and Japanese. By incorporating Japanese language elements into gairaigo, Japanese people have demonstrated a kind of method of preserving culture. Thus, the replacement of [v] for [b] in the word event to *ibento* reflects not only the issue of sound adaptation in Japanese, but also the desire to preserve their culture.

Table 1: Gairaigo in Japanese

English	Gairago
Class /klɑːs/	クラス kurasu
Machine /məˈʃiːn/	ミシン mishin
Event /ɪˈvent/	イベント ibento
Summit /ˈsʌmɪt/	サミット samitto
Talent /ˈtælənt/	タレント tarento
Drama /ˈdrɑːmə/	ドラマ dorama
Case /keɪs/	ケース keesu
Cleaning /ˈkliːnɪŋ/	クリーニング kuriiningu
Image /ˈɪmɪdʒ/	イメージ imeeji
Set /set/	セット setto

The advertising text is compiled on the basis of a general strategy - to attract the consumer, force him to view the advertising message, interest him in the advertised product or the conditions for its sale. The requirements for language are brightness, accuracy, brevity, expressiveness, and attractiveness. Attractiveness is achieved through the use of traditional cultural stereotypes, game elements, bright, figurative, memorable words, as well as through the uniqueness, sophistication, and elegance of the advertising text.

The title phrase is the semantic center of the advertising text. To attract attention, the headline must be original and unique, but the routine of the task in the context of an abundance of advertising leads to the appearance of a mass of 'template' headlines, for example: *Uritsukushi* - "Full Sale", *Misejimai* - "Store Closing", *Bikkuri Tokka* – "Amazingly low prices", *Daitokka* – "Morning fair, price reduction", etc. At the same time, the demand for novelty and originality creates increasingly more extravagant headlines, for example: *Bigin Dza Kimono Bijin* - "Let's start (the course) of a beauty in a kimono!"; *Yasui Ne! Tokuda Ne!* – "Low prices! Profitable, right!", where the final NE is written using the hieroglyph depicting price (値), and a play on words caused by ambiguity appears; *Katte Kudasai* - "Buy", where the last part is written using the hieroglyph 際 Sai/Matsuri (holiday); *Gekiyasu Dai Sai* - "Great celebration of exceptional cheapness" (from food advertising); *Bikkuri Sai* - "Stunning Holiday" (from a pachinko commercial); *Ekoroji Wa Oishi* - "The environment is delicious!" (from an advertisement for environmentally friendly products). The headline can also be made in a non-Japanese language, arousing the consumer's interest with an original-sounding foreign word, for example, *Woody Special* (about the wooden block in the control panel of a Honda car); *Bridal Fair* (in advertising furniture sets for a young family); *Ruzzyu Fea* - fr. *rouge* - red + English *fair* (advertising for a jewelry store), etc.

In the headlines, special attention is drawn to the abundance of words and morphemes with the meaning of intense actions, exciting and even catastrophic events, the purpose of which is to create excitement and make an exciting effect on the consumer, for example: *Yasusa Bakuhatsu! Tettei Gekiyasu Tokka...* - "An explosion of cheapness! The function of stimulating the consumer is also performed by figurative and imitative words that convey the feeling of excitement, for example: *Haru No Tokimen Fea* - "Exciting spring fair!" (from an advertisement for confectionery products); a similar meaning can be conveyed by borrowed words *Ekisitingu Shimanakasai Dayon Dan* - "An exciting holiday at the Shimanaka store". Tension can be created through alliteration. Headings often contain sharp voiced consonants that enhance the impact on the recipient of advertising information, cf.: *Biggu Ba Gen* - "Big Sale", *Guddo Ba Gen* - "Good Sale".

The next element of the advertising text is incentive phrases. Their purpose is to provide arguments that can convince the consumer to use the advertised goods or services without missing an opportunity, for example: *Ima Nara Okaidoku* - "If now, then it's profitable!"; *Ima Wa Chansu* - "Now you have a chance!"; *Biggu Chansu* - "Real chance!; *Goraiten No Okyakusama Ni Kagiri Sanwaribiki Sasete Itadakimasu* - "Only

customers who come to the store are given a thirty percent discount". Some stimulating phrases take on the character of slogans: cf.: *Hirogaru Yumeni Tashikana Michi* - "A reliable path to ever-expanding dreams!".

Another obligatory element of the advertising message is the information block. An advertising message rarely contains more or less detailed purely descriptive text. The latter is either combined with stimulating phrases, listing the advantages of the advertised goods or services in an extremely laconic, intelligible and expressive form, or is absent altogether. In this case, all the necessary information is given in photographs, figures, technical specifications, tables, etc. Long passages and complex syntactic structures are usually absent in the text.

It is characteristic that among the elements of traditional culture in Japanese advertising, as well as in business itself, special sensitivity to the changing seasons and holidays occupies an important place. The attention of the service industry to the calendar is due not only to the dependence of the buyer's wallet and free time, but also to much deeper aesthetic motives. The Japanese people's reverent attitude towards natural phenomena, weather, and the change of seasons is probably one of the reasons that these phenomena are mentioned more often in advertising texts than in English-speaking countries.

In addition, one of the elements of Japanese advertising is the use of metaphors and symbols that have deep meaning in Japanese culture and history. For example, an image of sakura, a beautiful Japanese tree, can be used in advertising as a symbol of strength, beauty, and vitality. Typically, advertisements of this type are created during the cherry blossom season in Japan, from February to the end of May, and some cafes and restaurants even make special menus that include cherry-flavored dishes [12].

Advertising research shows that humorous television advertising in Japan accounts for 28%, of which 9.5-12% of Japanese television advertising messages contain puns [2]. A large number of puns in Japanese advertising texts belong to the semantic type "neighbors" (49%), built on consonance and not creating additional meaning. Such puns are built like a rhyme, helping, first of all, to attract and retain attention, which is confirmed by the distribution of functions that puns perform in Japanese advertising. Less common ones are puns related to the "family" (35%) and "mask" (16%) types, which are based on a clash of meanings or the effect of deceived expectations and imply a more complex game with meaning, that makes their impact potential higher [2].

Puns are represented at various language levels, and a significant predominance of phonetic (74%) puns significantly distinguishes Japanese advertising from European or Slavic advertising.

The analysis allows identifying several ways of manifesting and creating evaluativeness, namely four, of which two are main ones: the transfer of positive features of the donor lexeme to the recipient lexeme as a result of their juxtaposition within a pun (37.7%) and the creation of a blend - a single semantic space (16.3%). Meanwhile, in 44% of cases, there is no transfer of connotations and evaluations. In advertising texts, puns serve the function of attracting attention (18%). This is followed by camouflage (15%), persuasive (13%), text-forming, entertaining, informative functions (12.7%, 11.8%, and 11.4%, respectively), evaluative (8%), the function of creating an intellectual game with the recipient (5%), meaning-forming function (2.9%), etc. [2].

To understand the importance of the traditional element in Japanese advertising, it is worth noting several factors that influenced the emergence of this phenomenon. Japan is considered an incredibly homogeneous nation with very little ethnic or racial diversity and a strong sense of collectivism, with a love of Japanese products often trumping interest in foreign brands. An aging population means that older consumers have the greatest purchasing power. A deep understanding of both ancient and modern aesthetics permeates many areas of both Japanese daily life and commercial activity. Japanese consumers

are incredibly image-sensitive, and brands play a significant role in a person's self-identity. In traditional Japanese culture, such concepts as respect, honesty, and spirituality occupy a very important place. These concepts are often found in Japanese advertising, where they are often used to create an image of a traditional, decent, and honest company.

Japanese companies try to avoid over-explaining what a product is because it can be perceived as insulting the customer, calling into question his ability to exercise good judgment or implying that he is too stupid to understand what he wants. This understanding, in turn, gives advertising agencies and creators freedom to pursue their artistic impulses [2].

Good examples of such advertising include Sony's advertising for their electronics brand "Bravia", which uses Japanese culture of flowers and beauty, particularly images of cherry blossoms and natural landscapes, to demonstrate the beauty and quality of the screen. Asics' advertising for their shoe brand taps into Japanese culture of healthy living and spiritual development by showing athletes in spiritual practice and enjoying nature.

However, with the development of the economy and technology, Japan has become an increasingly open and globalized country, which has led to changes in the social and economic conditions in the country. This was also reflected in Japanese advertising, which became more modern and innovative. In modern Japanese advertising, one can see the use of more advanced technologies and marketing methods, as well as a younger and more dynamic audience. At the same time, traditional values and elements of Japanese culture still play an important role in creating the identity of Japanese companies and brands. Examples of such advertising include a cellular ad for SoftBank, which uses a pencil animation style reminiscent of traditional Japanese cartoons and depicts situations from life in modern Japan.

Overall, Japanese advertising is a combination of traditional and modern elements that reflects the complexity and diversity of today Japanese identity. For example, advertising campaigns related to Japanese food often use traditional elements such as calligraphy and images of traditional foods to present them as authentic and traditional. At the same time, many technology and gadget advertising campaigns also use modern and innovative images and designs to present their products as innovative and modern.

Also an important element of Japanese advertising is the "kawaii" culture born in Japan, which can be characterized as the use of cute and childlike images in all areas of life. A researcher from Denmark, Borggreen, refers to the category of kawaii in the context of Japanese visual art and notes that it should be understood as a cultural style of everything cute, be it manga comics, anime cartoons, youth fashion, computer games, design, etc. [3, p. 41]. Japanese researcher Yuko Hasegawa, agreeing with this well-established concept, suggests understanding kawaii more broadly as something valuable: "something to which we are drawn and driven by the desire to protect something pure and innocent" [6, p. 128].

Other Japanese researchers Ishihara Soichiro, Obata Kazuyuki, and Kanno Kayoko also note the expansion of the boundaries of kawaii. While initially the concept was associated only with childhood, then by the end of the 20th - beginning of the 21st century people of all ages began to use it. The authors believe that "when people say the word 'kawaii', they often use it to express approval or make an unconscious attempt to look younger than their age..." [7]. The desire to look younger, more relaxed and to feel comfortable creates the need to purchase adorable and cute things, which creates a high demand for kawaii aesthetics and makes it truly mass.

The kawaii aesthetic is characterized by the conventions of manga, which are elevated to the absolute. The simplest images become popular because of their easy adjustment to a person's emotional state. All this leads to the gradual subordination of Japanese popular culture to the kawaii principle. And since modern mass culture tends to reflect the entire volume of cultural heritage, those phenomena that were not previously such

are also subject to 'kawaiization'. This also applies to the modern actualization of the mythological heritage.

Another feature is that the Japanese consumer does not need to be convinced of the high quality of the product offered, he already knows it. This is due to the long-established reputation of Japanese goods in the market, because everything Japanese in most cases means reliability, stability and a high level of quality. Therefore, as Riessland said, "advertising faces a slightly different task: to create an image of a product that will correspond to the very national character of the Japanese, their psychology, ethics, aesthetics" [17, p. 137]. This idea can be supported by an article from Rix, which talks about the difficulties of attracting the attention of the Japanese to advertising: "This is all the more difficult when you consider that the residents of this country are bombarded with a whole waterfall of advertising messages, each of which often takes only 15 seconds" [18, p. 44]. It is almost impossible to hold the attention of a Japanese viewer in such a short time, but not for a Japanese advertiser who knows what methods and principles to use to win over consumers, but first one needs to know the history, culture, and mentality of the inhabitants of the Land of the Rising Sun. With the help of this knowledge, it is possible not only to create unusual, original, and sometimes strange advertising, but also to keep the viewer's attention on it.

The Japanese type of thinking is associative, prone to understatement (this feature also comes from traditions, the history of the country itself and the formation of the mentality), so it is much easier for the Japanese to remember the mood, atmosphere, etc. Riessland in his work notes that the inhabitants of Japan suns pay great attention to form and style [17, p. 131]. This suggests that they are much more receptive to symbolism than, for example, Europeans, which accordingly determines the choice of linguistic means used in the advertising message.

As it is known, rhyming is a technique commonly used in slogans in many languages, however, due to the fact that in Japanese literature there is no tradition of versification in the spirit of European poetry, in Japanese slogans this phenomenon is extremely rare with a few exceptions (among these exceptions, for example, たしらしくを（あたらしく *Watashi rasiku-o atarashiku*, "To transform oneself into something new"). Some peculiarities of the organization of Japanese slogans are connected with this. In particular, pragmatonyms and ergonyms, essential elements of European slogans, are often absent in the texts of their Japanese counterparts, which may be due to the fact that in Western slogans they relate rhythmically to the rest of the text, which is not typical for Japanese slogans. Japanese slogans that are not rhythmically connected with pragmatonim and ergonym turn out to be autonomous, which allows them to be classified as a free type. There are, however, a few exceptions: あなたと、コンビに、ファミリーマート *Anata to, kombini, Famiri:ma:to*, 'Near you. Kombini Family Mart' and 何をする にもいつもそこに *Yahoo! Japan Nani-o suru-ni mo itsumo soko-ni* – "Yahoo! Japan, No matter what you do, there's always Yahoo! Japan".

The use of elements of colloquial speech in Japanese advertising is also very interesting. Colloquial speech (conversational style) is one of the styles of the Japanese language, serving the sphere of informal, everyday communication and implemented mainly in oral, dialogue form. Its main characteristics include spontaneity, emotionality, less clear organization of sentences, frequent omissions of "conjectural" elements, close connection with non-verbal components of language (gestures, grimaces, etc.), and many others [10].

The researchers analyzed 10 videos from the "Japanese commercials HIR" channel (from December 2021 to March 2022) and 19 videos from the "JCMC JHI" channel (from March 2022 to May 2022), which post compilations of Japanese television advertisements, as well as commercials demonstrated in mobile applications. Since each video on these channels is a compilation of several dozen shorter advertising videos, the total number of advertising videos taken for analysis is 776. All

videos were analyzed regarding the use of elements of spoken language in them at various levels of language: phonetic, lexical, morphological, and syntactic [6]. At the phonetic level, the elements of colloquial speech are most clearly expressed when comparing the speech of actors acting out a scene and the speech of a voice-over. As a rule, the pace of voice-over speech is more measured and uniform, each word is pronounced clearly and with a minimum amount of emotion. On the contrary, the actors imitate the scene of everyday communication, and, therefore, their speech is fast and emotional. In addition, it is characterized by emphatic lengthening of vowel sounds and doubling of consonants: (1) *Ju ni oku suggooi* - Two hundred thousand billion is coool. (2) *Toroori chiizu ga tamaranai!* - The cheese keeps streeetching and streeetching!

Distinctive features of the lexical level include the relatively rare use of kango, however, this is more typical for the speech of actors. Voice-over speech can contain quite a large number of kangos, especially complex ones are duplicated on the screen using subtitles to simplify perception. Nevertheless, one can observe that in the speech of the actors there are practically no words that are difficult to understand, as well as homonyms. On the other hand, the frequent use of colloquial and evaluative vocabulary is noteworthy: (3) *Choo harateru* - The weather has become very bad. (4) *Koitsu oreni totteno onriwan da* - For me, this [motorcycle] is the only one! (5) *Minnani happio todoketai minna yorokobu dzo!* - I want to bring happiness to everyone! Everyone will rejoice!

Examples (3) and (4) present the colloquial prefix *cho*:- ("very"), as well as the use of the colloquial (to some extent even rude) form of the first person personal pronoun *ore*, which is used by men. Moreover, one can also notice gairaigo *onriwan* ("the only one") and *happi* ("happiness") borrowed from English, which would hardly be found in texts of a different style. Indeed, recently there has been an increased use by the Japanese of borrowed words gairaigo in everyday speech. These are often words that have equivalents in Japanese, but gairaigo is preferred due to the fact that they sound more progressive and fashionable.

One can also note the high frequency of use in advertising of colloquial words that come from various dialects (usually from the Kansai dialect of the Japanese language): (6) *Megamio kutte-yaru, buttoi meno kande-yaru, dekai kuchide kandeyaru, masugiru Choo buttoi, kamigotae* - I eat [Megami brand noodles], chew the thick noodles, gobble them up on both cheeks, how delicious! It leaves a feeling of super thick [noodles] in your mouth.

In addition to the colloquial prefix *cho*:-, one should pay attention to the adjectives *buttoi* and *dekai*, which are widespread in the Kansai dialect, as well as the verb *kuu*, which in standard Japanese has a reduced value ("to fress"), but in the dialect of the Tohoku region is used in a neutral meaning "to eat". In addition, in this example one can find the colloquial adjective *umai* ("delicious") and a more reduced version of the directed verb *-yaru* (rather than the neutral *-ageru*).

No less important is the lexical feature of colloquial speech, such as the presence of onomatopoeic words of various categories. It must be emphasized that in the Japanese language onomatopes can be found in all sorts of functional styles, but namely in colloquial speech they are expressed most clearly and contribute to a better conveyance of the image of the described object or phenomenon: (7) *Pyokon-to haneru, haru no kokoro kurun-to odoru* - It flies, jumps, the heart spins in the dance in the spring; (8) *Mineraru ritti-na doro-de kami sarasara sa* - Thanks to mud enriched with minerals, hair [becomes] silky; (9) *Yappa odoodowa? - Nani-oh-gotyagotya* - Are you still afraid? - Why is everything in disarray? (10) *O-toku sugite, ukiuki-ga tomaranai* - The profit is incredible, I can't stop enjoying it.

It is interesting that among the listed examples there are not only onomatopes that imitate sounds (*pekon* - "the sound of a bouncing ball"), but also words that convey various types of non-sound images: action (*kurun* - "to spin"), visual impressions (*gotyagotya* - "disorder"), tactile sensations (*sarasara* - "silkyness"), as well as emotions (*odoodo* - "fear", *ukiuki* - "inspiration"). It is worth noting that while in (10)

onomatopes are grammatically built into the sentence by attaching them to verbs using an adverbial formant, in examples (8)–(10) this is not observed: the verb is either completely omitted or reduplicated onomatopoeic root attaches case indicators to itself, acting as a noun. Such syntactic willfulness of onomatopoeic words is characteristic primarily of colloquial speech, which is not alien to less stringent rules for constructing sentences.

From the point of view of grammar, attention is drawn to such a feature of colloquial speech as the use of final forms of the verb, which are considered more familiar and less respectful (style "-u/-ru"): (11) *Aitsu, masaka mo: shigoto owata no ka?* - Is he already finished with work? (12) *Mo: ikkai misete* - Show it once again; (13) *Oh, juice! Masi taberu na*! - Hey there! You can't eat here! (14) *Minna-de erande, oisiku, tanosiku* - Everyone will choose, tasty, joyful.

In example (11), instead of the neutral-polite past tense form *ovarimasita*, the more familiar *ovata* was chosen. The choice of such forms in advertising is dictated not only by their conversational nature, but also by their brevity, which is important for an advertising video that seeks to convey the maximum amount of information in a few tens of seconds and reach the largest possible audience. For the same reason, one can note such features of colloquial speech as the use of rougher and, accordingly, shorter imperative forms (12)–(13), as well as non-conclusive forms of the verb or adjective (14).

In addition, colloquial speech is especially characterized by inversion, which is rarely found in texts of other functional styles in the Japanese language: (15) *Umai no, kono hito* - And he is good, this man; (16) *Anata-ga kagayaku, ippai-o* - You shine with all your might. Another distinctive feature of colloquial speech found in Japanese advertising is the omission of case indicators, and sometimes entire words, restored from the context: (17) *Are? Omotta to: ri-no itinen-ni natta koto atta* - What? It just so happened that the year turned out the way I thought it would; (18) *Minna! Pake:ji no uragawa mite*! - Hey, everyone! Look at the back of the package!

The main purpose of using conversational elements is to create a more friendly, informal environment, which makes it easier to establish contact with a potential buyer, attract his attention and, accordingly, influence him. The main trend that can be traced at all levels of language is the reduction of elements derived from the context. While in colloquial speech the reason for this phenomenon comes down only to saving speech resources and increasing the speed of text pronunciation by simplifying it, advertisers also pursue a mercantile goal: to pay less money for displaying an advertisement by shortening the video, but at the same time convey as much information as possible.

Some researchers examine the functioning of precedent names in Japanese advertising texts. Precedent names are an integral part of the concept of "precedent phenomenon," which represents elements of the material world and intangible culture that are significant for the bearer of a certain linguistic culture [1; 5]. References to them are renewed in the discourse of the linguistic personality.

The use of precedent names in advertising occurs for a number of pragmatic reasons. For example, they are well known to the potential recipient. This simplifies perception and removes the block of mistrust regarding advertising as a genre. They act as a kind of a reference standard, allowing evaluating what is happening and forming an image of the product. Being cultural signs, they perform a password function, highlighting the addressee of the message.

Precedent phenomena can be considered as a means of linguistic representation of concepts, organizing stereotypes and moral ideals of the people into a single system, transmitting experience and cultural memory from generation to generation, recording assessments and attitudes to reality through the text [8]. Thus, precedent phenomena act as phenomena of a linguocognitive nature, having emotional and cognitive significance for a native speaker. Meanwhile, it is necessary to make a reservation that it is impossible to speak for sure about the universality and well-

known nature of precedent phenomena even within the framework of one national linguistic culture.

At the same time, precedent names in their denotative use do not have the task of characterizing the advertised object and do not directly reflect its qualities. In this case, the goal comes to the fore to attract attention and remain in the memory of the recipient, evoking an emotional response with its enchantment, sometimes absurdity, as well as fascinating twists and turns of the plot, or, if there is a lexical-phonetic transformation that helps to construct a pun or paronym, to interest, entertain the recipient, create a "carnival" atmosphere [8].

Thus, in the 2016-2018 advertisements of the mobile operator *Au* of the Japanese telecommunications company KBB, there are precedent names of mythological characters from different fairy tales: Momotaro, Kintaro, Urashima Taro, Kaguyahime, Otohime, etc. The characters are collected in one narrative, the plot, text situation, in which they operate. Although the advertisements contain references to precedent folklore texts, the plot of the advertisements is not directly related to them. To understand the message, it is enough to read the superficial meaning (the main place is occupied by the process of communication between the characters, while theoretically each of them can be replaced by someone else), but a full understanding of the development of the storyline requires knowledge of folklore texts. The main goal of introducing a precedent name is to captivate the recipient and create an image of a mobile operator whose service is unifying and whose services are convenient to use to communicate with loved ones.

Also, a precedent name can perform the function of the above-mentioned pun, undergoing phonetic or lexico-morphological transformations.

The pun creates a strong humorous effect, masking the utilitarian nature of the sentence behind an amusing context. The informative function is performed by the verbal context, which reveals the essence of the pun and explains where and when the event will take place. The pun performs a text-forming function, providing compositional and meaningful unity between the image and description of the event.

In 51% of cases, puns in Japanese-language advertising play on realities, precedent phenomena, national specifics and stereotypical ideas, linguocultures. Thus, pun affects knowledge stored in the cognitive database and presuppositions of the recipient and cannot be understood only from the position of linguistics [2].

The rich punning potential of the Japanese language stems from several sources: this is facilitated by multi-layered homonymy due to the combination of the above-mentioned coexisting semiotic systems (hieroglyphics and two syllabic alphabet - hiragana and katakana) and paronymy arising due to the limited compatibility of signs of the syllabary alphabet, numbering 46 characters, while approximately 80% of lexical units consist of 3-6 mora or 4 syllables. Let us note that the formative and graphic capabilities of the Japanese language provide scope for language play, which has become an integral part of Japanese culture and literature: "the conveyance of several meanings in one word or expression is highly valued in Japanese aesthetics" [2].

Of particular interest are techniques for creating interlingual puns. They are represented by cases of interlingual homophony and paronomasia - in Japanese advertising, they have distinctive properties, namely: they are built on foreign borrowed words gairaigo, which are written in the Japanese katakana alphabet [1].

Speaking about the use of the Latin alphabet, experts note its important role in creating an image and transmitting the idea of mass consumption, as well as the Americanization of the text [9; 16; 17]. In addition to the need to change the recording system and disrupt the usual system of sound representation of a language with a syllabic structure, the introduction of the Latin alphabet and lexical units with foreign language inlays into the text in general and into puns in particular has as its prerequisite "... the recipient's linguistic competence - knowledge of a

foreign language at the level necessary for understanding the transmitted meaning" [11]. Meanwhile, there is a not very high level of foreign language proficiency among graduates of Japanese schools, and the Latin alphabet is still perceived by the masses as something alien.

However, according to researchers, "in the near future, the Japanese language will be completely internationalized," absorbing the vocabulary of English and "with its help, other languages of Europe and America" [22]. There are increasingly more Western borrowings in the texts of commercial advertising. Western borrowings, as new, original means of language associated with a global context, are, as a rule, aesthetically more attractive than native Japanese and Chinese vocabulary. And this property of Western borrowings is widely used in advertising, names of catering establishments, leisure and entertainment [16].

Over time, as borrowed words are adapted, their freshness is lost, and more and more bright "overseas" words are introduced into the discourse of commercial advertising, as well as the leisure and entertainment industry, for example, "supermarket" is replaced by a more recent name for a chain of grocery stores - Food Plaza (from English food "food" and Spanish *plaza* ("square")). As the last example shows, the language of commercial advertising uses not only English, but also Spanish, French, and Italian words and expressions, for example, *grandeur* "greatness", *rouge* "red", *boulangerie* "bakery", *festa* "holiday", *dolce vita* " sweet life".

The creativity of the creators of the discourse of the mass consumer industry, as well as leisure and entertainment, gives rise to many words and expressions that are not typical for European languages. This is how the Japanese chain of stores selling household goods gets the name カインズ ← Cainz (from the English 'kindness'), another chain of household goods stores of the company 京葉産業株式会社 (Keiyo Industrial Co., Ltd) operates under the name D2 ケーヨーディツー, in creation of which the first word of the Japanese name and the "two Ds" from the English phrase 'day to day' are used. Hairdresser in the prefecture Chiba is named Cut Park, and the flower shop is called Flower Shop TOKORO. The cafe in the business district of Tokyo is called Eau de Vie ("Water of Life"), and the Asian restaurant is called Soaltee Dining. It does not matter that the vast majority of residents of the Japanese capital do not understand French, and the word *Soaltee* comes from the name of a fashionable five-star hotel in Nepal and is not a common household name in the English language. The brightness, originality, and memorability of borrowed words and expressions in the area under consideration are more important than their meaning. Therefore, in the discourse of the service sector and commercial advertising, it is more effective to say not 弁当, but ランチ・ボックス（lunchbox）, not 女性, but レディース（ladies）, not 出来事, but イベント（event）, not 生活, but ライフ（life）, not 健康的, but ヘルシー（healthy）, not 計画, but プラン（plan）, etc.

As one can see, the new borrowed words are more expressive, stylistically higher, and aesthetically attractive than the corresponding native Japanese and Chinese words. Therefore, cafes and restaurants, shops and entertainment centers, cars and cigarettes, magazines and confectionery receive foreign names. This corresponds to the logic of the Westernization of Japanese culture and Japanese mass consciousness. These processes were launched by the Meiji Restoration and resumed after Japan's defeat in World War II. They are widespread, if not avalanche-like, and lead to changes not only in the lexical composition of the Japanese language, but also in its phonetics and grammar, although, of course, they are not limited to the areas described.

It should also be noted that the greatest growth is observed in the digital advertising segment in Japan (see Figure 2 below), while the dynamics of newspaper advertising is negative. This imposes corresponding imprint on the linguistic characteristics of advertising texts - in particular, there are more interweavings of English words and new formations in Latin letters.
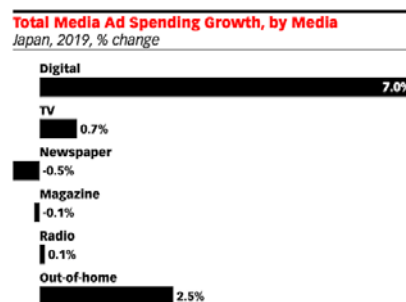

Figure 2.Total media ad spending growth in Japan, by media [14]

The trend of increasing the digital segment of advertising naturally leads to a convergence of the language of advertising with the language of social media, which today is one of the most important advertising platforms. A characteristic property of social network linguistics is the symbolic nature of language. The limitation of utterances in time and space contributes to the metaphorical, aphoristic nature of communication texts, the emergence of neologisms (networkisms), the use of syntactic and lexical abbreviations and abbreviations for the sake of economy, and the reduction of punctuation marks [21]. Neologisms in Japanese social media are characterized by a high speed of spread, which is associated with the specifics of communication within social media, that consists in high user activity. The hashtag also has a significant impact on the popularization of new words.

One of the reasons for using 外来語 (gairaigo) specifically in relation to Japanese social networks is the trend among young people in which the use of borrowed words in vocabulary is fashionable. For example, in Japanese, there is a word for "camera" - 写真機 (shashinki), but social network users use the neologism カメラ (kamera). The word 写真機 (shashinki) was used about 900 times as a hashtag on Instagram from 2017 to 2019, while カメラ (kamera) was used more than 6,996,851 times. In this regard, the word 写真機 (shashinki) is an archaism, the use of which within social networks is minimal [6].

Some features are also observed in advertising for B2B audiences. Below we provide a short list of borrowed words that are often used in advertising targeted to the B2B market:

1. コンテンツ (content)

2. クラウドファンディング (crowdfunding)

3. リスクマネージメント (risk management)

4. デジタルヒューマニティ (digital humanities)

5. ダイバーシティ (diversity)

6. エクリチュール (écriture – фр. «письмо»)

7. ンパワーメント (empowerment)

8. ウェルビーング (well-being)

9. ステークホルダー (stakeholders)

10. ソーシャルディスタンス (social distance)

11. レガシー (legacy)

12. リスペクト (respect)

13. プラットフォーム (platform)

14. ハッシュタグ (hashtag)

15. GIGA (Global and Innovation Gateway for All) スクール (school)

16. ICT (Information and Communication Technology)

17. SDG ｓ (Sustainable Development Goals)

It is interesting to refer to the programmatic political speech of Japanese Prime Minister F. Kishida, sounded in the Japanese Parliament on January 17. 2022. The text of F. Kishida's speech contains about 150 words related to Western borrowings. They make up approximately 1.3% of the total number of words in the text, that is, the frequency of use of borrowed words, compared to S. Abe's 2015 keynote speeches, has approximately doubled. A large amount of special terminology from various branches of science and technology catches the eye, not only in the form of individual words, but also in the form of phrases, for example: データセンター (data center), パルスオキシメーター (pulseoximeter), デジタルサ ービス(digital services), サテラ イトオフィス (satellite office), ライフサイエンス (life sciences), ユニバーサル・ヘルス・カバレッジ (universal health coverage), フィランソロフィー (philanthropy), ゼロエ ミッション (zero emission), カーボン プライシング (carbon pricing), サプライチェーン (supply chain), and others. The text of F. Kishida's speech contains Japanese-made anglicisms that have become familiar to the Japanese (和製英語) – マイナン バーカード (mynumbercard), and advertising slogans – 新しい 資本主義のグランドデザイン ("The Grand Design of New Capitalism"), and the names of future projects with the predominance of words in the katakana script - アジア・ゼロエ ミッション共同体 ("Zero Emission Asian Commonwealth")).

Conclusion

The phenomena of rapid Westernization of Japanese culture, language, and the very way of life of the Japanese observed in recent decades are inextricably linked with global trends in the development of the world community. The English language does not have official status in Japan, but it has become an integral part of the speech communication of the Japanese language community and is widely used in commercial advertising. The rapid increase in the number of Western borrowings in the modern Japanese language is the visible part of the iceberg of the Westernization of Japanese culture and Japanese mass consciousness.

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MODERN MUSIC PERFORMANCE CONTEST AS A CULTURE PHENOMENON

[a]SVITLANA BORYSOVA, [b]VEROMIKA PIESHKOVA, [c]ALEXANDER PLOKHOTNYUK, [d]IRYNA POLSTIANKINA, [e]NATALIA DEMESHKO

[a,b,d,e]R. Glier Kyiv Municipal Academy of Music, 31, L. Tolstogo Str., 01032, Kyiv, Ukraine
[c]Luhansk Taras Shevchenko National University, 3, Kovalya Str., 36003, Poltava, Ukraine
email: [a]s.bbbor89@gmail.com, [b]veronikapeshova@ukr.net, [c]alexandrplokhotnuk@gmail.com, [d] irina@horowitz.org, [e]demnab_1862@gmail.com

Abstract. The research aimed to determine the distinctive features of contemporary performing arts and their reflection in the specifics of the instrumental competitions. In particular, the roles of the jury and the audience are considered in the context of the influence on the development of the musical career and skill of participants in the competitions and the vectors of instrumental music development in general. Particular attention in the study is paid to musical works created using the latest digital technologies. In general, the role of instrumental competitions in shaping the development vectors of the performing arts and accompanying concerns are outlined.

Keywords: instrumental competitions; performing arts; online contests; conceptual art; digital personality.

1 Introduction

Knowledge about contemporary performing arts is not homogeneous. There is theoretical, "verbal" knowledge the essence of modern stylistic trends, the names of performers, the name of concert halls, competitions, etc. This type of knowledge complements the "intonational", non-verbal knowledge about the sound of musical works in a modern form. Sources of information about contemporary performing arts are also divided into two types scientific and methodological literature on contemporary performing arts (articles, essays, reviews, studies, monographs), and the primary given the sound of musical works in modern interpretation. Intonational knowledge about contemporary performing arts can be divided into four parts according to the organizational formats of the performing arts:

1. Modern contests.
2. Festivals.
3. Concerts.
4. Audio, video recordings, webcasts and websites with recordings.

These four sources most fully represent the features of the performance of musical works in modern interpretation; at the same time, they have specific formats and forms. The performed work appears in different system contexts corresponding to these sources. Each format of performing arts has its own idea, ideal, and style.

In its modern form, competitions/contests appeared in the 19th century, when professionals began to replace the era of amateurs. Before that, along with professionals, there were amateur actors, amateur musicians, artists; home music making, amateur art and poetry salons were popular. There have been piano duets on three lines of musical notation, especially for playing music together with a beginner amateur one-line player [19]. Good quality has been replaced by perfectionism the desire for absolute quality which can be achieved in one's activities.

To date, many national competitions are organized into a global competition movement. It is prestigious for any competition to be a member of the World Federation of International Music Competitions. Evidently, the competitions in terms of the skill level of the participants, the competence of the jury, and the complexity of the competitive program differ quite significantly. So, among the piano competitions, the range of participants' training extends from amateur competitions to the most difficult professional competitions in several rounds in a complex of specialties solo concerto, accompanist skills, such as at the Honens Piano Competition in Calgary.

The pathos of competition at contests contributes to the development of a virtuoso-technical direction in the performing arts [2]. The program requirements of most contests include complex technical studies. If technical possibilities allow, some contestants demonstrate transcendental masterpieces of etude performance. The requirements for the performance of sketches are a "passing" criterion for evaluating the contestant. In this regard, the contestants can be divided into three groups: a group of virtuosos, participants with "sufficient" playing technique, and the rest of the participants who did not pass to the next rounds of the competition due to imperfect technical skills.

It is quite clear that the ideals and criteria for evaluating performances by listeners and jury members do not coincide for a number of reasons. Both the audience and the jury in the ideal sphere compare two types of work: an extremely rare masterpiece of performing art (novelty of interpretation, artistic discovery) and widespread good performance (accuracy, impeccable quality, canonical rather than heuristic interpretation). Listeners often confuse the evaluation of the performance and the evaluation of the composer's work. The jury, having a thorough knowledge of the composer's form, evaluates only the performance. In addition, according to B. Gillespie, the criteria of the jury are functioning as "cultural standards", a kind of benchmark for the subsequent development of the performing arts [12].

However, it is impossible to create any objective system for assessing the content of a musical work, while an objective assessment of the form of a work is a simpler task. The accuracy of the execution of the text, the perfection or errors in the performing "grammar" and expressive means, etc. these evaluation criteria are much easier to agree on and confirm in the course of discussions between the jury members. The difficulties of formalizing the content parameters of the performance of musical works lead to the gradual replacement of the scoring system for evaluating performances at the competition. Scores (points) are replaced by admission to the next round. In the last round, those already became laureates of the competition are distributed according to the places won.

As a result, as some experts note, "both on stage and at competitions, the same average-unified play prevails. This is a significant problem for the development of musical art, because play of the artist always goes beyond the average. The artist is more talented, brighter, more powerful. He is an individual" [13]. Often there is a "sporty approach". Instrumental competitions are turning into "some new sport on a global scale" [25]. In addition, "... the chances of scoring more points are also more likely on the side of a correct, more or less impersonal and therefore, in any case, acceptable to all "judges" performance, than an interpretation that is clearly individual and, therefore, controversial, capable of being maybe to delight one or two members of the jury, while extremely irritating the rest. The situation is aggravated by the fact that the majority of the jury is usually made up of musicians-teachers, accustomed by their very profession to be meticulously demanding of the "correctness" of performance, especially intolerant of any kind of artistic 'liberties', deviations from school "canons" [9].

Meanwhile, the work of a performer-musician is as complex and contradictory as that of any artist. It is even more difficult to evaluate this creativity. In this regard, the analysis of the features of the functioning of modern instrumental competitions in the context of performing arts development acquires a very relevant scientific and practical significance.

2 Materials and Methods

A performing music contest as a socio-cultural phenomenon reflects the competitive (agonistic) nature of culture. It is natural that such actions have always been and remain attractive to the media. Some aspects of this phenomenon (more often historical)

have already been subjected to scientific research. The elaboration of this theme is highlighted in the works of art historians Alink, Cline, Kim, and others. At the same time, some aspects of modern musical performance competitions remain poorly studied and problematic. The variety of competitions, their development, the search for new forms, permanently carried out by their organizers, open up promising areas for studying this phenomenon. Musical competition as a phenomenon of modern culture is the subject of consideration in this article.

The angles of analysis include musicological one, as well as artistic and aesthetic. To solve the problems outlined when writing the study, a complex of complementary scientific methods was used. The methodological basis of the work is determined by musicological, genre-stylistic, aesthetic-culturological, and historical approaches. Musical and stylistic approach to the study of instrumental culture is integrated.

3 Results and Discussion

In contests, the competitive function of performing a piece of music is most clearly implemented. Contest event, as a rule, is strictly regulated. The requirements for participants (age, education), the rules for selecting participants (selection by documents or by appointment), the conditions for participation (monetary contribution), the requirements for the program and the time limit of each round, the procedure for drawing lots, etc. are described clearly enough. At the same time, the work of the jury (and this is understandable) remains somewhat closed, and therefore often causes misunderstanding among the participants, the public, and the musical community. Sometimes this misunderstanding develops into discontent, and even into protests.

The results, which become a kind of result of the work of the jury, should reflect the trends in the development of the performing arts. They must be substantiated and motivated, and clearly formulated and predictable criteria for evaluating the skill of the performer can help in this. For example, let us turn to the "parameters" by which the famous American cellist Gregor Piatigorsky evaluated young performers. "I judge a person's talent," he wrote after the contest, "by three main "advantages": 1) head, intellect; 2) heart, emotions, feelings; 3) technical excellence, which predetermines the possibility of implementing any ideas. If one of these three qualities outweighs, this is a serious shortcoming. Keeping this "balance" in the proper form is the most important task" [20].

Of course, the score given by a jury member is a reflection of his own perception, his performing style, experience, his sympathies, etc. It is important to understand that each jury member is, first of all, a living person, and only then a professional. Having their own subjective opinion on a number of professional issues and possessing a certain amount of professional knowledge, skills, as well as professional taste due to subjective factors, each member of the jury is able to accept and recognize one direction, form of performance and not recognize the other in professional activities. The paradox is that this is precisely what constitutes the value of this specialist, since it expresses the subjective, personal in art, in creativity, in a professional approach. In other words, namely the professional subjectivity of assessment is the value here [18].

At the same time, subjectivity cannot and should not become the ultimate truth. In this case, any sense of grading is lost. Only collegiality (the sum of the subjective), as well as the presence of a certain evaluation system, can ultimately lead to objective, reasoned results in the design of the competitive rating scale. For this purpose, and, as a rule, for each specific performance competition, so-called unified evaluation criteria are developed that allow analyzing the strengths and weaknesses of a public performance (for example, the depth of interpretation, style compliance, musical speech, virtuosity, emotionality, intonational expressiveness, etc.). Actually, the presence of such criteria and adherence to them are designed to ensure objectivity

and unity in approaches to determining the assessment, acquiring a very specific material form in the form of a score for playing, and the score in the future in the form of a sum of points determines the rating of the contestants, the position of each participant among other participants in the creative competition. It is obvious that not everyone and not always manages to win the contest.

This is due to the fact that a competitive performance is a complex activity in special extreme conditions that differ significantly from the usual, rehearsal ones. The most common extreme factors that have a negative impact on the nature, content, and quality of directly performing activities on stage are external and internal ones. External factors include, among others, the acoustic imperfections of the concert hall, the imperfection of the technical condition of the musical instrument, poor lighting, noise interference in the hall, etc. Internal (psychological) factors include a high degree of responsibility of the performer, intense attention, the risk of forgetting the text, making a mistake, stop during execution, etc. Let us add here the lack of self-confidence, internal, sometimes unjustified, concern that the opponents are much more 'technical' and better prepared. Being in the epicenter of events, in the stressful atmosphere of a competitive contest, few are able to hear themselves during a performance, as if from the outside, and even more so independently analyze and critically evaluate the performance that has already taken place. Finally, the direct presence of jury consisting of professional musicians, designed to record any performance miscalculations or achievements with the help of a certain amount of points, increases the already nervous tension of most of the contestants.

Nowadays, a direction worth mentioning is clearly marked on the concert stage improvisation of the classical repertoire in pop style. Known from the jazz practice of the 20th century, it gains a second wind in the pursuit of a democratic public in the early 60s in the Frenchmen Jean-Jacques Loussier and Richard Clayderman, the vocal ensembles King's Singers, Swingle Singers. Today, academically educated musicians improvise a "lite" classical repertoire. In particular, Serbian pianist Maxim Mrvica in his "shows" performs with video sequences, lighting special effects, participation of choreographic ensembles, actively using classical "hits". Not a classical, but a variety orchestra, the use of computer effects, synthesized sounds, and the pianist's appearance (youth-style clothing, tattoos, leather bracelets) are performances of a special format. His performance of F. Chopin's etude op. 10 No. 12 represents a kind of improvisation-transcription: a piano original of the text with dubbing in unison by a string orchestra, a rhythmic sound of a bass electric guitar and a drum kit. Mrvica's improvisations on the themes of Edvard Grieg's Piano Concerto are also well known. In general, the composition resembles the production of modern DJs. As in their compositions, which are not called works, but "soundtracks", a short musical turn is repeatedly used, and a rhythmized computer version of the introduction theme sounds in the background.

Another example of the popularization of the works of classical composers in the format of a variety show is the performances of the American violinist David Garrett. An academic graduate of the Juilliard School, who won a composition competition with a fugue written in the style of J. S. Bach, he declared himself as a talented composer. But under the influence of modern trends, Garrett turned to the pop format: along with music of an academic orientation, he synthesizes various styles of mass music of the 20th century rock, jazz, folk, pop. Garrett's show performances, in which he often performs transcriptions of popular classical music samples in modern arrangements, are characterized by an improvisational beginning. His improvisation on the theme of the main part from L. Beethoven's Fifth Symphony, posted on the Web, is very popular' also, the arrangement of A. Vivaldi's concert "Summer" from "The Seasons" in the style of rock music has gained wide popularity.

A striking example of spontaneous instrumental music-making is the phenomenal work of an American, an emigrant from

Kazakhstan, Eldar Dzhangirov. He is widely known as a jazz pianist. However, having received an academic education, he plays music from different historical periods and stylistic trends improvisations on the themes of the classics not in jazz, but namely in academic style. These are brilliant stylizations with a surprisingly subtle sense of form and style, which he builds in different ways, in particular, starting to play not a theme in the spirit of a jazz standard, but rather a significant fragment of the original. His versions of J.S. Bach's works (the Cis-dur prelude from Volume I, The Well-Tempered Clavier) amaze with the elusiveness of the transitions directly from Bach's text to improvisational fantasies. Etude op. 2 No. 1 by A. Scriabin also sounds for a long time in the original (with an impressionistic introduction), passing into improvisation-stylization, in which the individual style features of not only Scriabin, but also S. Rachmaninoff, F. Liszt, F. Chopin are already clearly traced. Improvisation-fantasy in its purest form E. Dzhangirov plays on the theme of the famous "Air" from the orchestral suite No. 3 of Bach in the elusive "aura" of jazz, demonstrating the ability to adapt the music of the past to modern realities.

Glastonbury Festival of Contemporary Performing Arts is a striking example of a modern competition-festival, in the form that the 21st century music community, represented by generations Y and Z, is increasingly drawn to. Almost every year, ten kilometers from the city of Glastonbury, Great Britain, one of the largest and most famous festivals in the country takes place. This Festival is often referred to simply as "Glasto". It has been held since 1970, and the festival got its name thanks to the town of Glastonbury, near which it traditionally takes place. The forerunner of the modern Glastonbury Festival is a series of concerts, lectures, and poetry readings that took place between 1914 and 1926 at one of the city's summer schools. In the 1970s, the UK, like the rest of the world, was swept by a wave of the hippie movement, and namely this movement strongly influenced Glastonbury. The movement of free festivals, which also originated at this time, also made its contribution. That is when Michael Eavis decided to organize something similar in Glastonbury, or rather, on his farm, which is located near the city. Since then, it has become a tradition that the Glastonbury Festival takes place on a farm near Eavis. Initially, the Glastonbury Festival was conceived only as a musical event. Over time, it has changed somewhat, and now for five days one can not only listen to the music of the world's leading artists such as Pink Floyd, U2, Blur, Bjork, Radiohead, Oasis, The Prodigy, Sting, Robbie Williams, Coldplay, Muse, Garbage, Adele, Lady Gaga, but also look at dance, circus and theater performances, admire art expositions.

In 2021, the event was held online due to the coronavirus pandemic. In general, it should be noted that the online format of instrumental performing arts competitions has been gaining increasingly more popularity in recent years. Each competition has its own electronic resource   this is an Internet site that includes several electronic web pages (documents) united by a common theme and linked to each other using links on the site; one can get acquainted with the program requirements, the timing of the competition, age nominations, as well as the criteria by which the musical audio recording (and more often video recording) of participants will be evaluated.

In February 2022, the international online competition "Winter Stars of Dresden 2022" was held in Dresden. All types of musical instruments and genres were allowed to participate in competitions in instrumental creativity   classical music, chamber music, folk, jazz, modern music, modern, pop and other genres, piano, string instruments, woodwind and brass instruments, percussion, folk and national instruments, electronic instruments, instrumental ensembles, orchestras, chamber ensembles, symphony orchestras, etc.

Another online contest is Musicworks Electronic Music Composition Contest. Participants should Compose/submit an experimental piece in any electronic-music genre—acousmatic, electroacoustic, glitch, soundscape, intelligent dance music (IDM), turntable art, video music, etc. The contest is open to

entries from anyone located anywhere in the world and from artists at any age or stage of career.

The unique Digital Composition Contest is organized since 2014 in Tallinn. It has special nomination namely of experimental music.

The undoubted advantage of Internet contests is that they not only significantly expand the geography of participants, but practically do not limit either their number or their age. In addition, participation in an Internet contest, as a rule, significantly reduces the psychological burden of the contestant, since it allows, after making several entries, to select and send the most successful piece of performance. Finally, the recording itself takes place in conditions that are comfortable for the contestant, at a time convenient for him, in a familiar audience and on a familiar instrument. At the same time, the contestant and his teacher are free in their preferences when choosing a contest according to the principle of its thematic focus.

One of the most authoritative and representative professional competitions is the Internet Music Compétition, organized by the "Association of the éducation alists of primary and secondary music schools of Serbia" in Belgrade. The Internet Music Competition is held annually, and seems to be the earliest chronologically among the competitions in which only videos were judged: back in 2010 Belgrade musicians positioned it as the original and the only one in the world.

The main idea of online competitions is the possibility of contacts in the virtual space of all parties involved in the musical competition   the participants, jury and the organizing committee [4; 22]. Applicants within a certain time period send videos with recordings of concert programs to the competition; members of the jury listen to them and set the final scores by the appointed time; the organizing committee ensures coordination of actions, documentation of the results and forwarding of the awarded diplomas.

The transfer of performances to the virtual space completely removes the problem of geographical remoteness, both for the participants and for the jury members. The jury may consist of musicians living not only in different cities, but also in different countries; there is a possibility of introduction of reputable performers into its composition, who, due to huge rehearsal work or other reasons that make it difficult to leave, do not take part in the work of "live" musical competitions.

Another important feature of online contests is their fundamental openness. Video recordings of performances are posted on the competition website or on another pre-specified Internet resource. Accordingly, they are available for viewing to all interested parties. This fact makes the work of the jury absolutely transparent and enables the instantaneous availability of competitive works to a wide audience, thereby contributing to the development of the performing arts. The points awarded by the experts to the contestants are also posted on the site and are available for review by millions of Internet users. In addition, in some competitions, for example, in the New York International Internet Competition, students of the jury members are prohibited from participating, which, of course, increases the objectivity of the assessment results.

Participation in the online competition allows each performer to express himself/herself as brightly as possible. This is due to the fact that, as it was mentioned above, in conditions of recording on a video camera and in a familiar room, stage excitement is much easier to overcome. Musicians a priori get the right to make a mistake and correct it: after all, the competition program can be recorded several times and the best option can be chosen for placement on the site.

Thus, the main advantages of online competitions are:

1)   Mitigation of stage stress and the possibility for the contestant to choose the best recording;

2) Minimization of material costs and independence from the geography of the place of organization of the competition;

3) Openness of the work of the jury;

4) The ability of teachers from different regions to compare the level of training of their students with the achievements of the winners of the competition;

5) The possibility of listening to video recordings by all interested parties at a convenient time for them, which, by and large, is one of the forms of popularization of classical musical art.

However, the transfer of performing arts competitions to the virtual space also has negative sides. Let us list the most obvious ones.

The mass nature and accessibility of musical performance competitions (and not only virtual ones the so-called "musical tourism", for example, is no less a problem), leads to the devaluation of the title of Laureate. The number of laureates in our time is extremely large: they study and work in almost every music school, in secondary and higher musical educational institutions. The status of the title "Diplomatist" is even more reduced. And this problem is by no means new. "Laureatomania" embraced performers and teachers, turned some educational institutions into a kind of "incubators of laureates", distorting the normal paths of the artist's artistic maturation, adapting   often from a very early age   his repertoire, his interpretation, the whole character of performance to the leveling requirements of the future competition [8; 9].

So, for example, the piano culture for China, being introduced from outside, at the moment is more likely to refer to the "culture industry", around which, first of all, financial relations are built (training, competitions, concerts, etc.). International competitions are also considered as a platform for entering the international stage, guaranteeing financial well-being. Partly related to these ideas about pianism is the so-called "Lang Lang effect" [28], when tens of millions of Chinese children dream of an international career and make great efforts to enter and win international competitions.

However, it can be assumed that with such a pragmatic approach to piano culture, it will be very difficult to solve the problem of bringing uniqueness and national identity to pianism, that is, instilling the piano to Chinese culture, harmoniously including this instrument "into the flesh and blood" of the Chinese worldview, it will be very difficult. It should be emphasized that only in the interaction of cultures does their mutual enrichment and development take place.

The results of the competitions, testifying to the preparation of the competitors, the strengths and weaknesses of the schools in which the participants trained, cannot be an objective tool for assessing the talent of pianists and other instrumentalists and their artistic qualities [14]. Programs of the same type for all participants become a "Procrustean bed" for artistic talent, which is always individual and far from 'omnivorous'. That is, the idea that a talented pianist can equally well perform music of various styles or genres is deeply erroneous, which is proved by many examples not only from pianistic practice, but also from other areas of creativity, when later recognized cultural figures failed in various competitions, auditions, and other leveling competitions. It follows that instrumental musical competitions cannot be judged in the same way as sports competitions the quantitative indicators here are significantly inferior to the qualitative ones [15].

The inability to please all the members of the jury at once with own interpretation also limits talented individuality. As a result, as it was mentioned above, as a rule, those performers who impersonally and correctly convey the "correct" for everyone, "canonical", and therefore inherently "school" interpretation, are in a winning position. It is not surprising, therefore, that competitions are beginning to "become younger": "From the competitions of concert artists, which were the competitions of the past, they are increasingly turning into competitions between

students, school-type competitions, which differ little in principle from those that are constantly practiced within music and educational institutions" [21].

Moreover, international competitions are no longer a guarantee of a successful concert career for a performer. The excitement that flared up around the competitions is primarily due to the fact that there are almost no other ways to the concert stage the only indicator of the "artistic value of young performers" is the winners of which competitions they are, and therefore the number of both competitions and their participants grows very fast. There is a kind of "inflation of laureates", that is, the depreciation of this title.

Nevertheless, the positive aspects of international competitions are in the intensification of musical life, in drawing attention to classical music, in creating some external incentives in the process of training young musicians, in organizing the musical community into a single interacting organism, as well as in maintaining the traditionally high standards of musical performance.

Cultural and artistic projects, competitions, popularizing academic art, contribute to the professional development of young artists and their creative self-expression. In particular, for example, the participation of gifted instrumental musicians in the All-Ukrainian contest of instrumental and performing skills "Bellissimo" contributes to the development of the spiritual potential of Ukrainian youth. In 2018, the participants of the competition performed works of the widest range   from Beethoven and Chopin to jazz-rock and melodies from the movie "Schindler's List".

Also in Ukraine, the International Competition of Young Pianists in Memory of Volodymyr Horovyts is the leader of the competition movement in Ukraine, which actively promotes Ukraine's entry into the global cultural space. The repertoire requirements of the Competition, which give each participant the opportunity to show their skill and creative identity, were developed in accordance with the generally recognized international competition standards   from the obligatory performance of classical works to a more free stage, with the performance of works by composers of the 20th century. The organizers of the Competition managed to give new impulses and open new paths for each of the areas of activity, combining them into a single structure where all elements are mutually connected and strengthen the effect of each several times. Gradually, the jury of the Horovyts contest included 89 professors and musical figures from 22 countries of the world. At the same time, during the years of the competition, the social and spiritual life of the country changed radically, and this, of course, affected the history of the competition. Such transformations are typical for contests held in other countries/regions.

Every year in the Italian city of Pesaro, the International Art Festival & Contest "Open Italy" is held. This competition invites to participate individual performers, as well as musical groups and orchestras. The music competition is a unique competition not only for the contestants, but also for teachers. At this competition, much attention is paid to the educational program. As part of the event, master classes, workshops, rehearsals of joint numbers with foreign experts from around the world, whom the organizers of the competition invite to improve the skills of the contestants and additional qualifications of teachers, are held. After the end of the event and the announcement of the results, a round table with the representatives of the jury is held obligatory. As part of the music competition, a master class is also provided. Instrumentalists from all over the world are invited to the event. The founders of this international competition are the Spanish festival committee Fiestalonia Milenio, the association Ad Arte (Italy), the production center for talented performers Fiestalonia International headquartered in London.

Separately, it should be noted that, since the middle of the 20th century, electronic musical creativity has created a powerful foundation for the means of expressiveness of music, penetrating into the space not only of academic genres, but also into the sphere of music for theater and cinema, all kinds of performances in their style. At the turn of the 20th and 21st centuries, a new direction in musical creativity and musical pedagogy arose, due to the rapid development of information technologies and digital musical instruments (from simple synthesizers to powerful musical computers), a new interdisciplinary field of professional activity of a musician, associated with the creation and use of specialized musical software and hardware, requiring specific knowledge and skills music and computer technologies. Being a phenomenon of cyberculture, the idea of virtuality, which finds its logical and artistic interpretation and embodiment in the musical creativity of various genres and styles, is determined today by the inclusion of music and computer technologies (MCT) in the sphere of musical culture and is interpreted as an artificially created medium.

The emergence and development of a modern computer recording studio as an instrument of musical creativity and a phenomenon of modern musical culture contains elements that allow preserving the traditions and mechanisms of cultural inheritance in the context of historical continuity and the translation of cultural values and meanings today.

Modern digital technologies have been used in the music world for a long time these are sound recording technologies, sound and voice processing programs, music editors (Encore, Sibelius, Final, etc.), electronic musical instruments. All this, undoubtedly, opens up wide opportunities for performing musicians, composers, musical teachers, and especially sound engineers.

The search for opportunities to release physical and intellectual efforts through the invention of a tool is one of the vectors that ensure the evolution of man. In turn, the new instrumentation provokes changes in many areas of life, including the art of music. At the beginning of the last century, sound recording changed auditory perception and expanded the techniques of composition (collage, montage, work with musical objects by Pierre Schaeffer, acousmatica of Francois Bayle). By the middle of the 20th century, the computer began to take root in the composer's work (for example, in Yannis Xenakis). New practices seek to reduce or exclude the role of the human factor and eventually come to a stage when electronic technology becomes not only a computing assistant to a person, but also borrows his sensory intelligence (as in the first creative experiments with motion sensors by Merce Cunningham or Myron Krueger). At the end of the 20th century, the era of the development of interactive devices began, allowing interacting with the movement of performers. Musicological analysis of such compositions is complicated by the forced consideration of many elements that were previously neutral in relation to the music itself. One of them is a new approach to understanding the human-machine dialogue, which, in addition to technical aspects, also gives rise to new aesthetic phenomena.

Modern composers, turning to new technologies, are looking for special artistic goals that are impossible without these developments. Here, intuition, which has always played an important role in creative activity, acquires special significance. Digital media, being a new mirror of a comprehensive reality, offer infinity of material (including sound one) and options for its transformation. If the composer does not have a special artistic vision and a developed ability of anticipation, working with new technologies runs the risk of becoming a mere demonstration of the devices themselves [23].

There is also another problem: the illusion of freedom that arises from the interactive nature of these devices. This question was raised almost immediately by one of the pioneers of electronic installation art in Canada, David Rokeby. In his article "Transforming Mirrors: Subjectivity and Control in Interactive

Media" (1995), he gives many examples of works from different arts where interactivity is the basis starting from Lawrence Sterne, who gives a large role to the reader in the humorous novel "The Life and Opinions of Tristram Shandy, gentleman," written back in 1766, ending with John Cage's aleatory or Marcel Duchamp's statement that only the viewer creates the picture. However, at the same time, the author finds a big difference between such works and those created with the help of electronic devices [3].

While in the first case an infinite number of interpretations are possible, directly depending on the performer (viewer, listener, reader), in the second case, a certain illusion of interactivity is created using the configuration of sets of possibilities. Here, the work can be compared to a video game in which the character seems to live a separate life, but in fact it is nothing more than a chain of pre-recorded actions. Interactive digital tools make the work look like unfinished sketches programmed into patterns, like a kind of "apparatus of meanings" that predicts and supports the subjective reading of the performer [29]. On the one hand, the piece creates a feeling of incompleteness, on the other hand, it is the realization of certain possibilities that are in the field between the determinism of technology and the creative resources of a particular composer.

Musical electronics has long and firmly entered the sphere of musical performance in all instrumental and vocal genres without exception: it is impossible to hold a concert in a large hall, and even more so in an open area (open-air), without using microphones, audio amplifiers, a mixing console; audio recordings of performers, in particular instrumentalists', in professional recording studios are processed by sound engineers with the addition of special effects and filters (reverb, chorus, etc.). It depends on the professionalism of the sound engineer how "natural" the timbre of the acoustic instrument will be when building the equalizer. Various musical electric instruments and sound modules, MCTs have long been no longer surprising and are being mastered by both professional musicians and amateurs. Responding to the realities of the time and integrating into the system of show business, musicians change the stage forms of modern concert performance, and work, taking into account, mainly, the tastes of the mass consumer, focused on entertainment. Traditional for modern musical performance is the active use by musicians in their creative and concert practice of minus phonograms, the use of lighting and multimedia equipment in the process of concert performance to create synesthesia perception in the audience, a sense of immersion and belonging to what is performed on stage. All this is today an integral part of many instrumental music competitions.

Moreover, composers of a new generation worked on the splitting of sound, using its elements as the basis for the development of a work. At the same time, the musicians turned not only to the sound of musical instruments, but also to the sounds of industrial origin.

In particular, the work of John Cage can serve as an interesting example of such a search for extraordinary methods of composition. The author often included elements of noise or silence in his opuses: these could be both well-known, natural sounds taken from life itself, and found sounds artificially created by the composer. His musical "experiences", often unpredictable and not always artistic, bring the listener into the very depths of life, making him feel the reality of the world through immersion in an unusual sound environment [5]. Cage created a kind of musical prototype of the "happening" genre: in the process of performing his compositions, extraordinary spontaneous actions of the performers were combined with musical allusions built on the combination of natural, "vital" and experimentally found sounds. His search for a new sound was accompanied by discoveries in the field of electronic music, which, in turn, contributed to the further development of a new composing technique. Musicians of the 20th century are often referred to as the "Generation of Electronic Dreamers": following the discovery of electronic sound, unusual electronic

musical instruments appear, sometimes surprising for a listener brought up on classical musical samples [5].

Scientific and technological progress has undoubtedly influenced the formation of new types of electronic music, relevant for both the twentieth and twenty-first centuries. The experiment goes along with creativity, and composers are constantly looking for new sounds, working with different timbres. In the process of actively mastering the possibilities of electronic technology, electro-acoustic, spectral, synthesizer, and later computer music appeared, based on a peculiar combination of new technical achievements and modern aesthetics.

Electroacoustic music originated in the late 60s of the 20th century, but even today it is associated with experimental and alternative areas of creativity, the key idea of which is the transformation and cloning of sound. Fronzi emphasizes that the searches for a new sound should not become an end in itself, they should work to reveal a certain musical idea: the composer must organize the sound structure of his work in such a way that the sounds, harmonizing with each other, fit into the composition, reflecting the main idea of the author [11].

Several years ago, one of the representatives of the world of music, a British composer Ash Koosha, created an image that later received its own name   Yona. She was a digital singer whose appearance, "personality" and music were written by artificial intelligence. As it turned out, the software developed by Koosha made it possible to use different styles in the "creativity" of this computer character. They could also be combined. Moreover, the developer ensured that artificial intelligence took into account (very approximately, of course) the semantic content of the lyrics when writing music [10]. There are many unclear points here, as the developer did not fully disclose all the know-how, but it was still a breakthrough. Music and songs were very unusual. In general, all this is no worse than that of most modern performers.

Very close to the 20s of this century, another cultural and digital phenomenon appeared, which also received its own name   Lil Michela. At first, the authors of the computer "singer" decided not to talk about the fact that this is not a person. They started an Instagram account, added songs to Spotify, and collaborated with major companies as an influencer. And it 'worked' brands entered into million-dollar contracts. In 2018, when it became known that the singer is not a person at all, the name and songs associated with it became even more popular [22]. The difference from the previous "AI artists" is that the texts and music for the virtual artist were written by people. However, it becomes clear that for a successful musical project it is not at all necessary that the artists be real people. Digital personalities can be successful too.

Thus, the increasing popularity of online competitions leads to radical changes in the standard composition of participants and the inclusion of artificial intelligence products in the set of the evaluated musical works. Accordingly, this has an impact on the further development of the performing arts. On the one hand, this influence is positive, as it promotes differentiation, a greater variety of performing techniques and instruments. On the other hand, the combination of live creativity and improvisation of a person and products of artificial intelligence and digital technologies in the composition of performers is a factor of the "washing out" of artistic creativity from instrumental performance, turning it into an industry or sport, with purely "technical" quality parameters.

Also, in the context of the success of performers in instrumental performance competitions and the subsequent development of their activities, it should be noted that the financial success of a creative project does not at all reflect the artistic value and is not a guarantee that after many years it will not lose its relevance. The art of the digital century is a representation of a fundamentally new aesthetics of the information age, where it is presented in the form of a gigantic database. The loss of 'aura' as an integral feature of the modern process of artistic creation,

noted by Walter Benjamin in his famous essay "The work of art in the era of its technical reproducibility" in 1936 [21], is an actual feature of modernity. The process of virtualization, the emergence of artificial reality is a kind of imitation of the impact of objects on the subject and the latter's reaction to the impact. The art of technological modernity, which began with the invention of photography and the advent of sound recording, put an end to uniqueness and established the principle of reproduction. The next step was digital technology, which brought the principle of reproducibility to unprecedented proportions. The Web is becoming an integral part of the realm of art, and the artist today is focused on the Web as a tool for replication and self-presentation. The social phenomena of network art and contemporary art in the information field of the global Internet network are reflected in the methods of the advertising campaign of neo-conceptualism.

The younger generation of composers not only actively uses media technologies, but also proclaims a new era of conceptual art, where the idea is primary in relation to the performance. It is significant that with the development of individual systems and author's composing technologies, at some point, the need for bright original ideas arises again, which do not always require adequate implementation. One of the directions in the new music of the 21st century is neo-conceptualism, and the conceptualization of composer thinking is a general trend of new music in general. The dominant points of the advertising campaign of neoconceptualism are: firstly, the use of the Internet as the main platform for self-presentation, and secondly, the coverage of certain socio-political and economic problems through the mediation of a bright conceptual idea that can turn an ordinary life situation into an object artistic creativity and aesthetic pleasure from the originality of the concept [17]. This phenomenon poses new challenges for performers and not only complicates the competitive landscape, but also introduces an element of entropy into it.

Musical sound and noise, which previously seemed fundamentally different both axiologically and semantically, radically changed their positions in the 20th century, becoming equivalent and equivalent, and in some cases they even changed places. The era of noise music began in the early 20th century. In the Noise Manifesto of 1913 by the Italian futurist Luigi Russolo, the phrase was heard: "Today Noise triumphs and reigns supreme over human feelings" [1]. Years later, in 1937, John Cage, in his manifesto The Future of Music: A Creed" argues that noise is the future: ("I believe in the use of noise"). The "vicious circle" of pure sounds is now broken, open to the conquest of an infinite variety of "noise sound", and noise has become a by-product of technological progress in real life and a source of creative inspiration in the field of composing practice [16].

The attitude towards the interaction and the question of the primacy of noise and the so-called musical sound in the 20th and 21st centuries is still ambiguous, and in many cases it becomes the starting point of aesthetic discussions. In the new music and composer practice of the last third of the 20th century, noise gained unconditional primacy, essentially displacing musical sound to a secondary position. Silence and soundlessness came out of "non-existence" and materialized in the composer's work.

Each composer in his own way defines the nature of the relationship between noise and silence, cultivated (musical sound) and amusical sound. Electronic and noise music theorist and practitioner Trevor Wishart (1996) characterizes noise as an "enharmonic and non-periodic" phenomenon. He establishes clear boundaries between harmonic and enharmonic, non-periodic and periodic characteristics of sound, suggesting the possibility of transformations of one sound quality into another. Noise sound objects, says T. Wishart, are usually considered out of a certain context as material generated from simple oscillators. At the same time, there is no clear division between periodic and non-periodic oscillations. Wishart argues that the sound "grain" loses its properties if it is presented in the idea of pulsation and then accelerated to 20 Hz. In this case, the

individual impulses merge into a common sound mass. Separate "grains" are felt as an overall "grainy" sound texture. A multidimensional sound continuum can be organized through the fusion of a large number of diverse individual sound impulses [27].

In the work of Peter Ablinger, an Austrian composer who today is one of the most original innovators in the field of new music, the basis of the creative method is the interaction of various noises with spatial structure, spectral modeling/transcription, and with the very perception of sound. As the author of orchestral compositions, operas, along with various kinds of installations, in a number of cases, related more to sound art than to academic new music, in each new work he reverses listener stereotypes and seeks to renew perception. At the heart of his method, there is the study of the differences between reality and our perception of sound as a mirror of reality. Listening to noises, defined by the composer by the German word "Rauschen" (noise (German)) for Ablinger, becomes a creative dominant not only in his compositional works, but also in theoretical ones [1]. Ablinger's work with noise/rauschen is multifaceted: to a large extent, this is due to the material itself, which carries a lot of different sound data. The listening position implies active interaction with these data: the construction of certain auditory patterns, pseudo-melodic figures that form inside the "unstable static noise" [29].

Ablinger's art aims to transform perception. "Basically what I'm working on is that what you see or hear is not what you see or hear at all. This is a kind of reverse art," the composer claims. Thus he distinguishes art from craft, where evidence is craft that whose outer boundary describes what is seen or heard. Art, he suggests, is exactly where the visual or audio signal stops" [1]. In this respect, his position coincides with the aesthetic vision of the essence of art by Adorno, who argues that the beauty of nature lies in the fact that "it seems as if it is able to say more than what it knows, to give more than what it has. To tear this "more" out of the realm of chance, to master its illusory appearance, to define itself as appearance and to reject it as unreal, constitutes the idea of art" [7].

It is quite obvious that the performance of such works requires new competencies from the performer, which are not yet fully taught in music schools. Even in the most advanced of them, "alternative" music is considered rather in a descriptive way, without working out the practical skills of its performance. However, at the same time, the new concepts described above often take classical works as the basis of the musical "fabric", and may well be performed within the framework of competitions with a free program.

So, for example, in several compositions from the "Quadraturen" cycle, P. Ablinger uses the piano — an instrument that has a certain established musical history and tradition. However, it is used in a completely unusual capacity: it becomes a repeater of human voices and creates in the recipient the effect of the familiar and alien at the same time, the effect of a simulacrum. The idea of reproducing a "phonograph" with the help of acoustic instruments, with its established history of instruments, is related to photorealistic painting by its documentary art, and at the same time, for Ablinger, it becomes the one that most accurately describes the technology: the use of a grid to convert photographs from a digital image to an analog one. When using tools, the grid must be zoomed in (slowed down) to allow time for playback. Thus, the result of the transformation is not so much a reproduction of the original, but rather a new approach or situation of comparing instrumental sounds and the sound source. The implementation of this idea in the cycle is different: in one case, it is a sound installation, in the other — it is a computer-controlled piano.

There are eight movements in Quadraturen III ("Wirklichkeit"). Quadraturen IIIa is based on the text of the Hail Mary prayer, which is little recognizable, as it falls apart, according to the single idea of the cycle. Unlike the previous part of the cycle, the piano is used here, however, in a completely special quality. In Quadraturen IIIb (Fidelito/Revolution and Women), the sound

material consists of eight sides of four phonograph records of Fidel Castro's speeches, including applause and sounds of jubilation (primarily female audience) from his speech during the Congress in 1974. These sounds are integrated into piano sounds. Ablinger seeks to emphasize the three-dimensionality of sound and liken it to a 3D image. The piano literally spoke with a human voice. To do this, the author had to install an intricate technical system. This instrument was built by Winfried Ritsch in Graz after Trimpin's "Vorsetzer", a key play structure based on 88 "electromagnetic fingers" (Hubmagneten) that can be attached to any normal piano or grand piano. The specificity of this computer-controlled piano (more precisely, not the piano itself, but the key player who plays the "Vorsetzer", the player who makes up the structure that is controlled by the computer) is the ability to play all 88 keys simultaneously, each with different dynamics and, secondly, to reproduce such polydynamic attacks with fast sequences. The basis of all five parts of Quadraturen is frequency analysis   that is, a series of sequential static analyses. The hidden musical meaning of speech is "declassified": the more accurate the "resolution" of a sound photograph, the more certain human speech sounds [7]. When the content of the oral text becomes clear, the listener experiences a qualitative change in the perception of aesthetic signs: the piano sound is no longer pure sound or music, it means something else. In this interaction of two symbolic worlds   music and language   there is a revision of the levers of perception of music and speech, music as speech and speech as music. Thus, the occasional intelligibility of spoken or rather "played" texts is perceived as hallucinations   the decoding of words bypasses the purely musical technique, pushing it into the background.

In this context, it is not surprising that at the turn of the 20th and 21st centuries, an interpretive direction was determined in musical performance, which put a number of new problems of a general artistic, aesthetic plan on the agenda [13]. Developing as a socio-cultural phenomenon that was gaining ever wider public recognition, the activities of artists-interpreters of musical works were strongly influenced by the most diverse types of artistic creativity   literature and poetry, painting and architecture, especially theater as an art synthetic in nature. It is easy to see that in the contests "environment" the most developed are the problems of the formation of performing skills (moreover, in its rather narrow, instrumental and technical understanding), as well as some issues of the rational organization of the process of studying a piece of music, the practice of classroom and homework, building a repertoire, and a number of others. But still open are the problems related to the artistic and poetic side of the performing arts: the expressiveness of intonation, the identification of stylistic trends in the eras of composing and performing music, the style of the author, as well as the construction of the compositional form of the work, its focus on the perception of listeners. In other words, precisely the issues that relate to the artistic and meaningful interpretation of the performed musical work are not sufficiently developed. Moreover, namely the cornerstone questions of the objective and subjective order, the creative realization of the idea, design and artistic conception of the performed composition have been little studied. In this regard, the experience of major performers-interpreters of the past, who worked in an era relatively not far from us, is completely insufficiently represented in the education of a modern musician. For example, the legacy of Alfred Cortot, an outstanding French pianist of the first half of the last century, includes not only recordings of his interpretations of piano music masterpieces, but also a number of theoretical and methodological works devoted to this problem. In a word, an artistic and creative attitude to what is being performed should be laid down at the very beginning of training, when a novice musician plays the simplest song and dance melodies, simple pieces. Here, an important methodological role is played by the implementation of the requirement of continuity in the professional training of a performing musician, which ensures the fundamental nature of the subsequent stages of its formation and allows taking part in a wide range of competitions of various formats and "themes".

International competitions are an effective form of communication between European instrumental schools and

schools from other regions, and at the same time a platform for confirming the status of heterogeneous schools in the world music school. However, the researchers conclude about the rule-making function of competitions for regional instrumental schools expressed by [6; 24; 28]:

1) The regulation of interpretations;
2) Attention to the embodiment of strict academic traditions of instrumental (primarily piano) performance;
3) Adaptation to the traditional values of Western instrumental culture (for example, preference for the traditional (romantic) repertoire).

The musical culture of the West is distinguished by an unprecedented variety of styles. Here is the so-called new-Vienna school, which developed a strictly regulated system of atonal music, and neoclassicism in its various modifications. In the 1950s, composer creativity was represented by various currents of musical avant-garde, cultivating concrete and electronic music, sonoristics and aleatorics. However, regional music can be fundamentally different from it.

For example, by its nature, Chinese music is distinguished by gentle sounds, reminiscent of the murmur of a stream or the singing of birds. Many medieval Chinese musicians specially imitated the sounds of nature, thereby creating a harmony of music and nature. Unlike the European music, Chinese melodies are melodies of one sound and its variations. Musicians can play the same sound for several hours in different keys and on different instruments, while it will seem to listeners that they are hearing a full-fledged melody from several different sounds. The music of China, like everything in this specific and highly interesting country, is built on the balance of "yin" and "yang", which personify minor and major sounds – the main components of Chinese traditional music. One of the most amazing types of Chinese music is drumming. In ancient times, military parades and campaigns were accompanied by drumming. Very often, a certain drum rhythm was used to intimidate enemies. Today, the sound of drums can be heard during traditional Chinese holidays, when the procession of drummers turns into a real theatrical performance. The jury and viewers of the "global North" instrumental contests may find this music primitive, while music in China is inextricably linked with Chinese philosophy.

At the same time, unconsciously or consciously, the West will draw lessons from communication with such a peculiar culture of Asia, "open itself" in front of "the face of a stranger". In the composer's work of the 20th century, the course of musical Japonism revealed the vector of a gradual change in the model of the "Eastern" that developed in the era of romanticism. Conventionally-programmed exoticism, copying and emphasizing the bizarre details of the non-European original, gives way to the method of adaptation of the deep principles of the Japanese artistic tradition in the new European writing. The established Japanese school of composers solved the problem of "national self-expression in the system of European music" and "came to create an original musical phenomenon – the release of the mechanisms of specific national musical thinking stored in the subconscious" [26].

The radicalism of the search for European composer professionalism in the post-war stage of development contributed to the deepening of ideas about the nature and resources of the "non-national". With regard to Japan, the desire to master the specifics of the pitch and fret structures of traditional genres of music and the stylization of the timbre colors of Japanese instrumentation was enriched by the principle of "reconstructing the norms of musical thinking" of this culture, modeling the entire complex of its parameters [23]. A new approach to foreign models is concentratedly demonstrated in the work of O. Messiaen, who worked with different models of Orientalism. Impressed by a trip to the "Land of the Rising Sun", Messiaen wrote the cycle "Seven Haiku" ("Japanese Sketches", for piano, xylophone, marimba and orchestra, 1962), trying to capture the landscapes and voices of Japanese birds, architectural monuments, and the sound of traditional national music. The

name of the cycle can be explained by the popularity of the Japanese poetic genre "haiku" in Europe and by following its norms. Messiaen determines the composition of his work in accordance with the structure of this kind of versification. The symmetrical framing of the introductory and concluding (inversion of the initial material) pieces highlights the block of five program parts. The emerging "circular form" of the cycle helps to overcome the vectorial nature of musical time, makes the musical process non-directional, "contemplating", dissolving the present into the eternal. Such convergence in music writing and performance is to a large extent facilitated namely by contests.

4 Conclusion

Music is a special kind of art capable of simultaneously expressing with sounds a whole range of feelings and emotions, speaking in the language of metaphor, "both the concreteness of experience and the generalization of thought". The peculiarity of music is that, being fixed in a specially organized sound complexes, it can really exist only in performance, sound, embodiment. The musical text as a source of informational, emotional impact is endlessly transformed, since each of its sound incarnations depends on a specific interpreter-performer, his knowledge, their volume, and professional orientation. Subjective factors also determine the difference in the perception of both the content of a musical work and the means of its expression, which is especially pronounced during a competition performance. At the same time, it is necessary to understand that there are no and cannot be universal, mathematically verified criteria for evaluating a contest performance, but there can be universal directions in evaluating a performer, which should always be in tune with the trends and prospects for the development of modern performing arts.

The scale of the current competitive movement, the contests "boom" excites the imagination. However, the quality of competitions and their effectiveness require, in our opinion, a continued search for new, more open, democratic forms. Conducting competitions for performing musicians should have clearer goals and objectives.

With all of the above in mind, it seems that it is quite possible to talk about a large-scale revival of the traditions of instrumental music making – and not only about the revival, but also about revising them through the prism of modernity, their increasing actualization, adaptation to the requirements of modern society, about a new look at traditional forms of instrumental performance. It is about new directions for applying the creative efforts of musicians-performers in the realities of our time. At the same time, the issues of the role of music and the musician, their place and significance in our century, and development prospects are most relevant in the realities of today.

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Primary Paper Section: A

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INTERDISCIPLINARITY AS A MODERN GLOBAL TREND OF PROFESSIONAL TRAINING OF HIGHER EDUCATION GRADUATES IN THE FIELD OF CULTURE AND ART

[a]OLENA TRYHUB, [b]MARIIA BILIANSKA, [c]SVITLANA SHULIAK, [d]ANDRII MANDRA

[a] Separated Subdivision of Mykolaiv Branch of Kyiv National University of Culture and Arts, 17, Dekabrystiv Str., 54017, Mykolaiv, Ukraine, Kyiv National University of Technologies and Design, 2, Mala Shyianovska Str., 01011, Kyiv, Ukraine
[b]Kyiv National University of Technologies and Design, 2, Mala Shyianovska Str., 01011, Kyiv, Ukraine
[c,d]Separated Subdivision of Mykolaiv Branch of Kyiv National University of Culture and Arts, 17, Dekabrystiv Str., 54017, Mykolaiv, Ukraine
email: [a]etryhub82@gmail.com, [b]m.mbilianska@gmail.com, [c]shuly1ak@ukr.net, [d]mandraandrew@gmail.com

Abstract: The article examines modern culture and art as an area of interdisciplinary knowledge and practices, in the context of both evolutionary and philosophical-anthropological understanding, and pedagogy of higher education. Based on a review of the literature and available evidence of university practices in various regions of the world, the vectors of development, possibilities and potential of interdisciplinarity in professional training of higher education graduates in the field of culture and art are outlined, in particular, with the consideration of STEMAC (Science, Technology, Engineering, Mathematics for Arts & Culture) educational paradigm.

Keywords: interdisciplinarity; higher education; culture; art; STEMAC.

1 Introduction

Modern society requires higher educational institutions to train specialists who are capable of not only reproducing acquired knowledge, but also creatively using it in everyday professional activities, freely handling information, and being able to predict the further development of their field of activity. Creative self-realization contributes to the formation of a personality capable of meeting the requirements of modern times. The formation and development of initiative and independence of specialists in the field of culture and art is one of the leading tasks of professional creative education [18]. In the implementation of this task, a significant place belongs to interdisciplinary connections and an interdisciplinary approach.

At the turn of the 20th and 21st centuries, theoretical and methodological studies of many sociocultural phenomena began to be carried out within the framework of an interdisciplinary approach, which has become one of the characteristic features of modern humanities. The "leading paradigm" of this type of science is anthropocentrism, where a person becomes the center of active comprehension of all social processes, including sociocultural ones.

It should be noted that interdisciplinary and transdisciplinary trends in the development of art studies also reflect the objective processes occurring in modern contemporary art. By the second half of the 20th century, the relationship between art and other local forms of culture became increasingly active. This process is noted by philosophers and art theorists as one of the key trends of the postmodern era. While in traditional classical fine arts it was possible to clearly distinguish the local area of activity of the artist - painting, sculpture or graphics, then by the second half of the 20th century not only the intraspecific boundaries in the fine arts, and not only the boundaries between fine arts and other types of art were blurred, but also the boundaries between art and philosophy, art and other forms of culture (rites, spiritual practices, scientific experiments, etc.).

A number of genres and even types of art have emerged and are actively developing, in which transdisciplinarity becomes decisive. These are, for example: performance, happening, installation, video art, land art, etc. According to the artists themselves, a representative of contemporary relevant art "does everything"; he "articulates a certain type of human behavior and fitting into society. He represents an adaptive sociocultural model" [21]. And, creating such a model, the artist uses in his art projects the expressive capabilities of all forms of art and culture, which are able to fully reveal the idea that excites him. At the same time, he is least concerned about observing the 'interspecies' boundaries of art and culture. In other words, by the beginning of the 21st century, both art criticism, in its desire to understand art as "artistic-imaginative human knowledge", and art, in its desire to remain "self-consciousness of culture", are in search of a commonality of "anthropological foundations", including along the paths of trans- and interdisciplinarity. This kind of search, of course, involves the structures of art education in its orbit. In this regard, the new standards of higher education suggest the possibility of introducing interdisciplinary approach to the study of art - and on this basis, the development of transdisciplinary integrative disciplines in order to try to solve the task set by the time: "to teach future specialists to use a interdisciplinary approach to solve complex problems of nature and society" [2].

Contemporary art is a complex and difficult subject for scientific study and for students to master. On the one hand, in order to comprehend the author's intention, it is necessary to have encyclopedic knowledge of the history of art, since turning to historical heritage and playing with existing images and styles has become a common place in modern art practice. A separate issue is determining the novelty of an artistic gesture, the fine line between a legitimate quotation, author's reinterpretation and outright plagiarism, opportunism. Therefore, mastery of a variety of methods of modern scientific analysis, combined with fundamental knowledge, is an important element in the training of an artist, art critic-curator, or art scientist. On the other hand, masters of modern art often turn to understanding issues that are relevant here and now, to sociocultural reality, and not to the eternal and sublime, which requires a sociocultural, philosophical, psychological approach. This applies to both themes and forms of contemporary art. Since the avant-garde era, mastery of artistic materials, knowledge of the basics of classical art, and craft artistic skills have also ceased to be a prerequisite for recognizing a particular author as an Artist. For art practice, such things as speed and sociocultural recognition become important. It can be argued that the issue of speed is the main issue of our millennium. The same can be said about art. An artist does not have time to create a work for a long time, especially one dedicated to a super-relevant, quickly becoming obsolete topic. He strives to be relevant here and now, rather than to relate his work to eternity or the transcendent. Speed has become one of the most important cornerstones of modern culture. Acceleration of production and speed of communications force modern people to look for new, quick ways to present a creative idea [19].

Another important aspect is the development of new forms of communication, in which art becomes a tool for creating information flows and a platform for personal self-realization. Artists more often try to gain fame by using advertising and marketing strategies from non-artistic fields, fearlessly promoting themselves to different target audiences with varying degrees of success. If a modern author wants to be in demand, he must know the aspirations of his target audiences or be able to attract managers and curators who will be his agents.

The entire culture of mankind, like nature, has become both a material for assembling art objects and a theme for their creation. Cultural problems, cultural stamps, cultural heritage, ready-made natural forms have replaced paint for most artists. The desire to be understood by many determines a return to the languages of art of the past. Methods for contextualizing the old are deconstruction (J. Derrida), irony, intertextualization, double coding (U. Eco). Within the framework of these processes, the content of the concepts of "art" and "creativity" changes and is clarified. Here, postmodernist discourse turns out to be connected with the modernist understanding of creativity, the romantic recognition of art as a special cognitive process that

actualizes personal, individual experience. The modern artist "is in the state of a philosopher," since he is not looking for an event as such, but is looking for rules for what will happen, since creation is an event that does not obey pre-established rules [28].

Interdisciplinary integration in higher education should be determined not only by the traditional combination of academic disciplines into blocks, complexes, or modules based on interdisciplinary connections. Its new essence is substantiated by modern sociocultural conditions of globalization, informatization, scientific convergence and interdisciplinarity, socio-economic integration, labor market dynamics, etc. Interdisciplinary integration in the modern understanding consists in coordinating in the logic of the applied orientation of all components of the educational process (goals, results, content, forms, and teaching methods) and is characterized by the content-technological relationship of educational disciplines with the content and technologies of professional activity of future specialists, with current scientific and applied problems, as well as the unity (coherence) of the processes of training and education [10].

The pursuit of transdisciplinary linkages is a driving force in modern science. The intricacy and diversity of modern art are addressed via an interdisciplinary approach. The synergetic paradigm is not the sole way to foster interdisciplinary discourse; its accomplishments can be beneficial in a number of areas. The system approach in conjunction with synergy serves as the primary means of facilitating interdisciplinary discourse, which is critical for maintaining consistency in the application of methodologies from other disciplines rather than from a mindless transfer of concepts and ideas from one field to another. Using a synergetic approach within the context of an interdisciplinary paradigm allows viewing contemporary art as a self-organized, nonlinear system that incorporates many trends from both other areas of human endeavor and art history.

In particular, synergetics makes it possible to combine the achievements of reductionism and holism, to search for general laws of self-organization of complex and super-complex self-developing systems, to study the processes taking place in culture and art, taking into account patterns, without losing sight of the unique, random. The synergetic paradigm is also a bridge between the exact sciences and the humanities. The influence of technological advances on modern culture and art is difficult to underestimate, therefore their use in humanitarian research is adequate to the complexity of the phenomenon being studied.

A synergetic approach combined with a systematic approach in such a situation acts as a generalizing strategy that allows for interdisciplinary dialogue, which is important for the consistency of the use of methods from different disciplines, and not for the blind transfer of concepts from one to another. With the right methodological approach, the field of contemporary art becomes a platform for creativity for the researcher, because today an author's commentary or personal view can easily become an independent work of art. The use of a synergetic approach within the framework of an interdisciplinary paradigm makes it possible to consider contemporary art as a nonlinear self-organized system, which contains many trends related both to the history of art itself and to other spheres of human existence: culture, politics, sociology, religion. Within the framework of teaching disciplines related to the art of the second half of the 20th century and current artistic practices, the introduction of elements of a cultural approach, a body of philosophical, sociological knowledge and the achievements of psychology becomes significant. It is justified to build a course based on the study of the transformation of artistic ideas at various stages of art of the period under study, comparison with the paradigms that existed in the understanding of art earlier. For example, from the point of view of synergetics, the culture of postmodernism is more open both externally and internally compared to the modernist project. Modernity represents, from this position, a multitude of nonlinear processes taking place in an aggravated mode, which leads to unprecedented pluralism, on the one hand, and to an increase in conflicts, on the other [26].

The use of synergetics within an interdisciplinary approach when working with contemporary art has several directions. The first direction is theoretical. Synergetics allows building interdisciplinary bridges when analyzing the artistic process as a whole, the work of a particular artist, or in the study of various aspects of a work of art. The second direction consists of practical work on creating projects for presenting products of current relevant artistic practice. The third, methodological direction, implies the use of a synergetic approach in the formation of strategies for the presentation of educational material, the development of practical assignments for courses related to the art of the 20-21st centuries.

Comprehension of modernity in all its diversity is a difficult task for both the researcher and the student. In the post-information era, knowledge becomes a special value, part of power strategies, so it is necessary to find points of interaction, scientific methods that can describe the complexity of the processes taking place in modern culture and art.

In addition, as a result of the expansion of the scope of application of information technologies, digital culture is emerging as a variety of practices in the use of information technologies in the material and spiritual spheres of society. The strengthening of techno-discourse in culture was accompanied by the emergence of new forms of convergence of socio-humanitarian knowledge and information technologies. Directions for the development of digital culture represent diverse practices in scientific knowledge (Digital Humanities, contextual epistemology), in education (Art-&-Science, gamification), in art (post-digital art, video installations).

With the development of various areas of analysis of digital culture as an area of interdisciplinary research, various methodological approaches have emerged. Representatives of these approaches strive to express the essence of changes caused by digitalization processes in culture as a whole or in its individual area, based on their value orientations (humanitarian or technocratic) and analysis methodology.

The interdisciplinary level of digital culture research is represented by a variety of digital culture paradigms formed at the intersection of social sciences, humanities and information technologies. In the interdisciplinary field of digital culture, various areas of research into its individual sublevels have emerged, which can be considered as subject-based practices.

Genuine digital art is characterized by such qualities as nonlinearity, openness, nonequilibrium, chaos, entropy, indeterminateness, dissipation; it can be noted that the same properties are inherent in synergetics, which signifies "the rejection of the image of the world as built from elementary particles - bricks of matter - in favor of picture of the world as a set of nonlinear processes" [14].

All this determines the need to integrate interdisciplinary approaches into the professional training of higher education graduates in the field of culture and art, the basis of which should be a comprehensive study and benchmarking of modern world trends and best practices in this area.

2 Materials and Methods

The methodological basis of the research was philosophical, epistemological, scientific theories about the unity of scientific and practical knowledge, pedagogical research in the field of interdisciplinary interactions, works on art history and aesthetics, and modern concepts of modernization of education. Based on an integrated approach, we consider the main problematics of research within the unity of philosophical, general scientific, and special scientific knowledge.

3 Results and Discussion

The need for interdisciplinary integration in the educational process has always been recognized. Most often, in pedagogical practice, one encountered such an approach as adjusting the

content of individual courses in accordance with the content of other humanities disciplines studied in parallel. This approach made it possible to more fully solve the problem of overcoming fragmentation in the study of individual courses.

But by the beginning of the 21st century, the feasibility of closer interdisciplinary integration became increasingly clear. Thus, in the text of the "World Declaration on Higher Education for the 21st Century: Approaches and Practical Measures", adopted by the participants of the International Conference on Higher Education, held in October 1998 in Paris, at UNESCO Headquarters, it was recommended: "Innovation, interdisciplinarity and transdisciplinarity ... to be encouraged and strengthened in programs with a long-term orientation to social and cultural goals and needs" [26].

Of course, the essence of the interdisciplinary approach cannot be called completely new. Features of interdisciplinary integration can be noted both in the works of art historians and cultural historians, and in the works of philosophers who addressed the problems of culture and creativity even in the process of forming the above-mentioned disciplines. And this is no coincidence. Indeed, despite the fact that there was an active development of cultural studies, history and philosophy of art as independent sciences with their own scientific methods for solving various research problems, among representatives of these independent spheres of humanitarian knowledge there was an understanding of the inseparability and commonality of the processes occurring in different spheres of art and culture. There are many examples of this.

One of the first grandiose systems of historical retrospective of the development of art was the philosophy of Hegel's three world eras of art. It also became one of the textbook examples of interdisciplinary integration. In particular, reflecting on the essence of art, Hegel notes: "one can speak, for example, about the state of education, science, religious feeling, as well as the state of finance, legal proceedings, family life and other private phenomena. But all these sides are in reality only forms of the same spirit, the same content..." [14].

In the first half of the nineteenth century, not without the influence of the Hegelian concept, a certain tradition of interdisciplinary research in the field of art history as part of world history developed. A range of similar works include: "Handbook of Painting - German, Flemish, and Dutch schools" (1833) by G. Waagen, "Handbook of Art History" (1842) by F. Kugler, the eight-volume "History of Fine Arts" (1843-1879) by K Shnaaze, and others. All these researchers are united by the desire to comprehend the development of art and its history as part of the historical process in the context of universal history, in the context of the spiritual coordinates of a particular era. The desire to understand the role of art in the social life of society has led art historians to the need to use interdisciplinary approaches.

The appeal to methods of interdisciplinary integration in the study of art and culture continued in the works of historians and philosophers of art in the second half of the 20st century. H. Taine, as one of the initiators of the cultural-historical study of art, as well as other representatives of the cultural-historical school - E. Fromentin, J. Burckhardt, and others - proceeded from the need to recognize the serious influence of general cultural attitudes on the development of art. He argued that "at all times" works of art arise "in the necessary correspondence and close connection between them and the environment" [26]. Moreover, the "environment" in Taine's understanding is not only geographical conditions, climate, but also the worldview of a certain era, morals, etc. - that is, everything that is the subject of the study of cultural history. In other words, trying to identify the patterns of development of art and create his own system of philosophical understanding, Taine resorted to methods of interdisciplinary integration.

Today, the desire to develop a universal interdisciplinary mechanism for studying art is becoming one of the leading trends. A number of major art historians, noting the multifaceted nature of art and the impossibility of its single-line study, tended to use in their research extra-artistic concepts of various humanities disciplines: philosophy, cultural history, psychology, sociology, linguistics, etc. Each of them built a logical hierarchy of research tasks in their own way, but in many of their works features of interdisciplinary integration can be noted.

The presence of mathematical and technical disciplines enhances the appeal of electronic music composers to the theory of sets, probabilities, information, chaos, used in the creation of algorithmic music, created by the computer executing a predetermined sequence of rules - algorithms written in a programming language. Programming uses numerical mathematical theories and operations as the basis of programming techniques. The probabilistic method, widely used in creating algorithmic compositions, is associated with the elements of the game, such aspects as random selection in the presence of certain rules [9].

New generation computer monitors are capable of displaying millions of colors and shades. Along with others, these technological breakthroughs contributed to the emergence and development of digital painting. Thanks to the unlimited color range, the possibilities for implementing the artist's artistic vision have expanded significantly. The digital platform allows embodying an idea without traditional tools, brushes, paints, etc. Unlike traditional painting on a stretcher, when creating his virtual works, the digital artist does not know in advance what size his work will be after visualization. That is why, when working on a composition, the artist is forced to create an image that would retain its artistic and aesthetic qualities within a fairly wide scaling range. Thus, in contrast to the clearly established size of the stretcher in traditional painting, the digital artist builds a composition in relative quantities [8].

The emergence and development of digital painting technology has had a strong influence on many areas of modern fine art. However, modern fine art and technology are developing in conditions of mutual influence and interdependence. The dialectics of the development of culture and art stimulates the improvement and further development of digital technologies in artistic creativity and their software [20; 23; 24]. Accordingly, this determines the need to include modules dedicated to this evolution in its interdisciplinary context in the curricula of universities that train graduates in the field of culture and art.

In general, a powerful leap in the development of computer technology and digital technologies has had an unprecedented impact on artistic culture as a whole, on all types of classical, traditional art and stimulated the emergence of the latest hybrid varieties of art [3]. Fundamentally new types of digital art have emerged, not only new art languages are being formed, but also an artistic consciousness of the newest type.

A noticeable property of digital art is precisely its interdisciplinarity, which involves the joint influence of individual parts of the system, leading to its self-organization, which corresponds to the scientific tasks of synergetics. Studying the interaction of digital art with the exact and natural sciences will inevitably lead to the "transplantation" of such methodological aspects, both from the field of synergetics and other sciences, which is necessary for its comprehensive study. A prerequisite for synergetic research is mastery of mathematical tools, which include the theory of dynamic systems and mathematical modeling [28]. Synergetics allows combining such complementary ways of comprehending the world as "comprehension through an image and through a number" [6].

In recent years, there has even been a shift from the concept of STEM to STEAM. The difference between STEAM and STEM is just one letter A (Art), but the difference in approach is very big. Recently, namely STEAM education has become a real trend in the USA and Europe, and many experts call it the education of the future. Today, Art has been actively introduced into STEAM technology. The implementation of integrative connections makes knowledge practically more significant and applicable, which makes it possible to apply knowledge in a

specific situation, also in the course of considering particular issues of educational and extracurricular activities, in the further industrial, scientific, and social life of graduates.

Moreover, a new transdisciplinary and interdisciplinary field emerges in culture and art pedagogics today – STEMAC. Arts coupled with Science, Technology, Engineering and Mathematics (STEM) is the STEM with Arts (STEAM). It introduces educators and students to a classroom that uses a holistic approach. Wonder, critique, inquiry, and innovation take the place of constraints when using STEAM [25]. STEMAC represents further step toward embracing culture. This is a new and undoubtedly integrated reapprochement known as STEMAC (Science, Technology, Engineering, Mathematics for Arts & Culture), which strengthens the shaky connections and general lack of coherence between the natural sciences, engineering, and technology, as well as the humanities (art and culture) (see Figure 1).
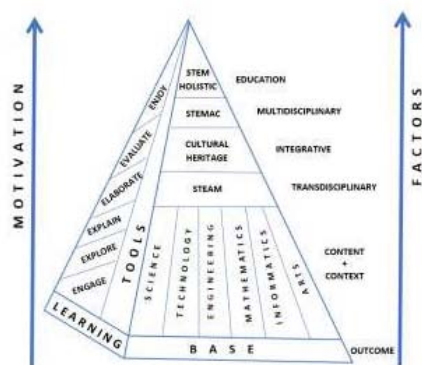

Figure 1. STEMAC: Motivation, tools, factors [16].

STEMAC "aids the transculturation via STEM in a globalized society preserving the cultural roots and interrelated the beginnings and common traits of humanity, diversified from various environmental factors" [17]. The introduction and execution of educational programs that combine the various left and right brain functions - from STEAM to STEMAC - satisfies the established effective learning procedures. One can begin working with STEAMAC and on numerous archaeological, anthropological, artistic subjects, monuments, tangible and intangible cultural heritage concerns by using software from computer sciences and maths (PHP programs, online games, Java script programming, and other algorithms and software).

It is sometimes difficult for an art student to switch to understanding current artistic practice after several years of studying ordered classical art, with a clear system of styles, hierarchy of genres, and evaluation criteria. Most often, the first step for a student is to try to use the already existing art historical tools: the biographical method, iconology, iconography, and formal stylistic analysis. Students feel dissatisfied with the result; they feel like they missed something important. Similar dissatisfaction is felt by students of cultural studies who master generalizing strategies, but have gaps in the skills of art historical analysis [29]. Therefore, it becomes extremely important to search for a methodology for teaching contemporary art that corresponds to its nonlinearity and integration into the sociocultural environment. At the same time, it is unacceptable to lose the necessary skills of art historical analysis for accurate verification and reliability.

However, interdisciplinarity from the perspective of synergetics makes it possible to comprehensively identify the principles of self-organization in open systems subject to external influences, marked by nonlinearity of internal processes that do not obey the laws of thermodynamic equilibrium, which explains the attention to the phenomenon being studied from the standpoint of the synthesis of knowledge from different sciences: physical and mathematical, technical, natural science cycles, humanitarian ones.

In particular, for example, in digital musical art, interaction with physical, mathematical, and technical disciplines is increasing. It is no coincidence that the word "digital" appears in the name of art, since computers were initially interpreted as computer technology that works with arithmetic operations. Over time, computer programs began to become more complex and imitate both mental and creative processes.

Due to the fact that the sound production of electronic music is associated with electroacoustic transducers, instruments implemented in hardware or software, and computer music programs, the importance of acoustics in digital musical art is growing - an interdisciplinary science of sound, which studies, among other things, processes from the perspective of physics. In acoustics, various transformations of sound and its synthesis are becoming widespread, the methods of which are constantly increasing, thanks to the improvement of numerical modeling methods necessary for solving equations that calculate the acoustic parameters of sounds.

Electronic compositions contributed to the expansion of the serial method, thanks to the electronic comprehension of the structure of sound, the building of acoustic and rhythmic structures of varying complexity, allowing the construction of a serial organization at all levels of composition. As an example, let us mention the work of K. Stockhausen *Studie I*, where parameters such as timbre, interval, volume, and sound microstructure are serially built. The series row was calculated by the composer based on the frequency parameters of the sinusoidal signal. The initial value was taken as the tone frequency, calculated in Hertz, which changed proportionally throughout the series in relation to both low and high frequencies.

The nonlinearity of contemporary art also manifests itself at the level of analysis of the work of a particular master. If we do not consider artists whose style was transformed throughout their lives (D. Hockney), the work of many authors contains traces of various styles and trends. D. Jones is a pop art artist whose work also includes an appeal to primitivism, ready-mades, and elements of expressionism. Using the example of the work of these authors, different in style and artistic tradition, such ideas of postmodernism as repetition, the "death of the author", the interaction of the elite and the mass, the death of metanarrations, the commercialization of art, and consumer culture are clearly visible [6].

Another manifestation of the interdisciplinarity of art is its involvement in social systems. Communication emerged as an independent object of research in the social sciences precisely in connection with the development of technical means of transmitting information. Combining in itself the knowledge of such socio-humanitarian, natural science, and scientific-technical disciplines as cybernetics, computer science, semiotics, communication acquires an interdisciplinary character.

For example, turning to the consideration of painting from the point of view of sociology, one can talk about the sociology of painting - a related field of sociology and art history, the subject of which is the social functions and dependencies of painting. In a broad sense, the sociology of painting is the study of certain interdependencies between the state of society as a whole (or social institutions) and painting as a form of fine art [6]. More specifically, the sociology of painting is a branch of sociology that studies, using a set of sociological research methods, the impact of painting on the audience, social mechanisms and means of distributing works of painting, the artistic taste of the public, its differentiation, its impact on artistic production.

Currently, the influence of painting as a form of fine art on human psychology is also being studied. Psychology can use works of art in studying the mechanisms of action of consciousness, memory, will, emotions, imagination, intuition, innate and acquired abilities, etc. The motives of creativity can be explored using concepts such as need, inclination, attraction, desire, motivation. The psychology of artistic creativity allows shedding light on the difficult-to-explain processes of birth,

gestation and implementation of an artistic idea [3]. The influence of a work of art is determined not only by the properties of the finished work of art, but also by the nature of its perception. Numerous interpretations of a work of art show the influence of objective and subjective factors on the process of artistic perception. To understand the nature of artistic perception, it is equally important to grasp the relationship between fantasy and emotion. The study of social and psychological issues of perception represents the coexistence in the same culture of different types of perception of painting, which is very important for the formation of the competence of a modern specialist in the field of culture and art.

As a result, universities can no longer prepare graduates to handle every problem that arises in the present or in the future from a single discipline. Using interdisciplinary (ID) approaches to teaching and research is crucial to meeting the changing needs of today's college students.

Among the most influential organizations advocating higher education ID activities, there are the Association for Interdisciplinary Studies, American Educational Research Association, Association for the Study of Higher Education (ASHE), National Academy of Sciences, National Art Education Association, Association des États Généraux des Étudiants de l'Europe and Interdisciplinary Research Group in Organizational Communication at the University of Ottawa, Canada. "While these organizations have specific structures in place to advance ID within higher education, the increase in ID research, instruction and degree programmes will undoubtedly lead to future support of ID higher education activities among other leading academic associations in virtually every discipline" [11].

According to Jacob [11], Big Data technology can be applied to all facets of industry and stimulate the rapid advancement of all spheres of life due to the influence of the internet. The complete integration of big data technology into digital media art has the potential to enhance the instructional approach and advance the process of teaching technology's digitization. Initially, students majoring in digital media should have been able to fully benefit from the internet's big data. However, because of a variety of factors, including teacher structure, leadership theory, management style, and inadequate equipment, big data application technology is either behind or not applied deeply, and the interdisciplinary skills needed to use it are not able to be taught at the professional or academic levels. The aforementioned symptoms of digital media art education indicate that the growth of digital media art is being hampered by individuals and the big data media technologies they are proficient in, regardless of the interdisciplinary, curriculum, or technological interaction.

Regular courses are not the same as interdisciplinary cutting courses. Interdisciplinary courses are more linked to and expanded upon other professional specialties than regular courses, which have a more separate professional framework [28]. Multidisciplinary education is a crucial component of all forms of art. Majors differ in what their fundamental requirements are. The integration and penetration of diverse knowledge, methodologies, and research techniques are facilitated by interdisciplinary education centered around each major. The particular way that multidisciplinary curriculum directivity manifests itself is: Basic interdisciplinary courses are those that have similar teaching contents but are more basic in nature. For instance, a "Design Drawing" class opened to industrial design majors should emphasize the sketching object's structural performance; similarly, a class opened to graphic design majors should emphasize the sketching object's key performance; a class opened to environmental art design majors should emphasize the relationship between each sketching object and the environment as a whole [22]. The art and design disciplines also offer interdisciplinary courses where the system of competence creates comparable questions, which are finally resolved by the features of the professional organization. Adding more knowledge and technology to the specialization through new ideas, approaches, and organizational frameworks is the answer. For instance, "virtual reality" design courses are offered

in the professional curriculums for digital media art, interior design, and product design. Virtual reality technology is applicable to many other fields and sectors. However, virtual reality should tilt toward the virtual process and virtual details in digital media art, and toward the virtual environment scene and the display of product details in interior and product design specialties [27]. Interdisciplinary-practice courses, or just cross-practice courses, are those that combine design practice. As a result of practice projects, it takes the form of multi-professional technical cooperation challenges that are investigated and implemented. Multidisciplinary practice is far more difficult than the previous two. The duration of study, the breadth of the multidisciplinary scope, the quantity of participants, and the intricacy of the process can all be used to assess a student's overall quality and aptitude for art and design.

Universities in China and South Asia are currently working hard to advance the practice of teaching specialists in culture and art in multiple disciplines. The percentage of class hours in cross-curricula at Daye University of Taiwan and the Chinese University of Hong Kong is significantly higher than that of regular courses. Similarly, the percentage of class hours in practice cross-curricula is higher than that of basic and professional interdisciplinary curricula. The percentage of class time for each of the four courses, as indicated in Figure 2, is favorable to students' thorough, in-depth, and comprehensive adoption of diverse knowledge and technology.
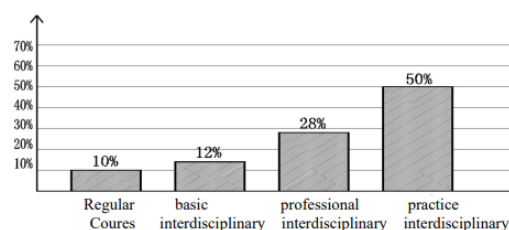

Figure 2. Proportion chart of class hours of four courses in Chinese University of Hong Kong and Daye University of Taiwan [27].

A description and actual efficiency of the interdisciplinary technique in art instruction are presented by Leonido et al. [15]. In order to create artistic, cultural, pedagogical, and didactic events in European, Luso-Brazilian, Luso-African, and Hispanic American territories, the Interdisciplinary Method of Musical Literacy, Education, and Artistic Awareness (MILMESA) was developed and is primarily used in higher education (artistic, cultural, and teacher training courses). It also fosters effective endogenous (interarts) and exogenous (artistic and other non-artistic areas) interconnection of an inter and pluridisciplinary matrix. It was developed, tested, and assessed over the course of five consecutive quadrennia (2002–2023). It was continually expanded upon, altered, and adjusted in response to the realities that were observed, deepening new concepts and models of intervention in these areas (such as expressive and proximal didactics).

The objectives of the Art&Culture disciplines presuppose the presence in it of at least five main sections, reflecting, respectively, the philosophical-aesthetic, cultural, philological, communicative, and religious aspects of modern art history [12]. This, as mentioned above, also includes elements of mathematics, physics, and IT disciplines. Thus, modern interdisciplinarity of higher education in the field of culture and art represents the integration of Humanities and STEM.

Anna Karasi argues that in practice, an interdisciplinary approach can be implemented in two main formats, scenarios, or approaches. In the first format, the most common one, interdisciplinarity figuratively builds bridges between different sciences, informally unites them without violating their individuality, uniqueness, and originality. Here, pluralism and differentiation of sciences are preserved and may even increase, and interdisciplinarity is built on, connects, and unites them in the methodological and instrumental dimensions. In this format,

for example, the academic discipline "Evolution of artistic styles in art" "builds bridges" with such disciplines as: philosophy, historical sciences, foreign language, general psychology, cultural studies, sociology, artistic culture, aesthetics. In another format, interdisciplinarity is presented as a real tool for unifying sciences, the emergence of integrated products, projects, interdisciplinary research objects, the further mastery of which is fundamentally important for both science and education. In this format, "The Evolution of Artistic Styles in Art" provides for an organic combination of disciplines: history and theory of music, theater, ballet, history of art, philosophy, artistic culture and literature, analysis of musical form, choir class, musical psychology, instrumental studies [13, p. 62].

The principle of interdisciplinarity in modern humanitarian knowledge is usually understood as the simultaneous presence in a specific scientific study of different methodological paradigms, responsible for their "subject" of the general "field" of research, which expresses a tendency towards the integration of scientific knowledge (as opposed to tendencies towards its differentiation). In art history, such a "field" is the entire artistic practice, which includes at least three aspects: the work of art itself, the process of its creation, and its subsequent use, that ensures the inclusion of related disciplines in art history [29]. The "field" of interdisciplinary research in the structure of modern art criticism is very extensive: from sociology and psychology to semiotics and linguistics [7]. Such complexity predetermines difficulties in mastering this subject area through scientific and pedagogical practice. Related disciplines may be different, in some cases these are archaeology, local history, history, source studies, statistics, demography, natural sciences, etc. It all depends on the need to clarify the meaning of a work of art, the history of its creation and understanding. As we can see, there is a very wide range of disciplines that can be included in the context of the study. Traditional sciences and research areas close to art criticism are philosophy of art, aesthetics, cultural studies, sociology and psychology of art, semantics and semiotics of art, including literary, religious, and hermeneutical approaches.

The flexibility of meaning in the arts has been compromised by post-structuralism, making inference, intuition, and creativity essential abilities. The author should not be the exclusive source of meaning for student readers. Rather, it is their duty and obligation to deduce, sense, and conceive. Teachers might encourage readers to experience pleasure, even joy (jouissance), by actively and freely engaging with, and even re-enacting, the text, as Barthes [1] advises in "*The Pleasure of the Text*," rather than sending them on a treasure hunt for the golden nugget of meaning. Critical thinking, creativity, cultural awareness, and contextualization can all be fostered by the interdisciplinary turn by utilizing Dewey's spinning and weaving, Eoyang's sifting and sorting, Lyotard's imagination, and even Barthes' ecstasy [5].

In the twenty-first century, many visual art departments have reorganized into interdisciplinary clusters: "Expanded Practice", which encompasses all art forms; "Two-Dimensional Art", which includes painting, printmaking, photography, and other media; "Foundations", which establishes fundamental art principles and practices that apply to all media; "Expanded Practice", which encompasses all art forms, and "Three-Dimensional Art", which includes woodworking, sculpture, and ceramics, among other mediums. Some dance, film, and theater institutions have combined to provide students training and possibilities in a variety of artistic fields. While there may be some efficacious claims in these cases, the true objectives are to foster multidisciplinary creativity and collaboration.

This approach provides interesting perspectives of interdisciplinary practice as Carp [4, p. 17] stated: "The creative process as seen through the eyes of an artist gives the course its authentic foundation". Carp thus underlined how critical thought on artistic processes may be used by artists to foster students' creativity in an interdisciplinary setting. Carp [4], for example, went deeper into the work of artist-teacher Henk Schut, who was among the pioneers in establishing Interdisciplinary Artistic Collaboration as a platform for artistic study that graduate

students from a wide range of art education fields could use. According to Carp [4], this method of experiential education taught research skills through the use of scaffolding, critical reflection, and group creation of research topics and experiments. Through group work and collaborative reflection, participants in this program were able to gain new perspectives and exchange skills. Students were free to draw connections between their experiences and theoretical frameworks, apply ideas, and come to their own conclusions because the approach was inductive.

The new student body that is forming has the power to bring about change, just as student activists did in the 1960s when they called for radical reform, the abolition of academic departments, and real-world research. Interdisciplinarity can be a progressive force for creativity and change both now and in the past. Many of the earlier proposed improvements are still unfulfilled, but many of the aspirational aims, objectives, and visions have motivated many professors of today. Even with the continuing power of disciplines, interdisciplinarity proponents would be well to pursue such unattainable objectives. The current interdisciplinary trend in the humanities and arts is made feasible by these options.

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Primary Paper Section: A

Secondary Paper Section: AM

THE ROLE OF COMMUNICATIVE COMPETENCE FOR INTERNATIONAL BUSINESS RELATIONSHIP DEVELOPMENT IN THE MULTICULTURAL CONTEXT

[a]SVITLANA MEDYNSKA, [b]TETIANA KRAMARENKO, [c]LIUBOV MELNYCHUK, [d]IVAN OSADTSA, [e]MYKOLA DIEDKOV

[a]*Alfred Nobel University, 18, Sicheslavska Naberezhna Str., 49000, Dnipro, Ukraine*
[b]*Dnipro State Agrarian and Economic University, 25, S.Yefremova Str., Dnipro, Ukraine*
[c,d]*Yuriy Fedkovych Chernivtsi National University, 2, Kotsiubynsky Str., 58012, Chernivtsi, Ukraine*
[e]*National University Zaporizhzhia Polytechnic, 64, Zhukovskoho Str., Zaporizhzhia, Ukraine*
email: [a]medynska @duan.edu.ua, [b]kramarenkot_28@gmail.com, [c]lmelnychuk@chnu.edu.ua, [d]iosadtsa@chnu.edu.ua, [e]konzeptl608@gmail.com

Abstract: The article examines the essential features and role of communicative competence in modern international business. The increasing influence of cultural, historical, geopolitical factors and national security considerations on the landscape of international business and the interaction of existing and potential partners is described. The study also touches on the phenomenon of glocalization and its impact on international business and cross-cultural communicative competence. A three-dimensional model of cross-cultural communicative competence in international business, covering factors (dimensions) of globalization, glocalization, and national security is proposed.

Keywords: international business; cross-cultural communicative competence; globalization; glocalization; multicultural landscape.

1 Introduction

In today's increasingly linked and globalized world, cultural competence has become a must-have talent for worldwide enterprises and organizations. Cross-cultural competence is the capacity to comprehend, communicate, and engage effectively with people from various cultural origins. It entails not just understanding diverse cultures, but also the capacity to adapt and appreciate cultural differences.

In a globalized world, the connection between culture and communication has become more apparent, which has caused an increase in interest in this topic from the business community. The dominant elements of different national cultures in the process of intercultural communication influence each other and sometimes provide mutual integration, while in other cases - rejection.

Considering the above, as well as increased attention to cosmopolitanism as a philosophy of modern man, expectations for greater standardization and unification of the communication process among the world community have increased. However, globalization and the increase in the number of intercultural contacts have not yet led to the formation of universal rules of communication acceptable to all cultures, nor to the formation of a culturally homogeneous society.

International businesses face the reality of adapting both their products, their management approach and the way they do business to the cultures of the countries in which they operate. In addition, international business operating in countries with different cultures, in order to succeed, must know the current economic, social, and legal situation in each country and predict the future situation well, which is also an important component of multicultural communicative competence in the modern world [8].

Against the background of the war in Ukraine, relations with a number of countries have become significantly more complicated, thus the more urgent is the development of intercultural dialogue with strategic partners, improving mutual understanding and interaction, as well as increasing intercultural communicative competence in order to be ready to build new business relationships.

Once separated by vast oceans, our world's populations are now incredibly mobile and more connected than ever before in history. Leaders manage teams composed of representatives of different countries and cultures, located in different parts of the globe, speaking different languages, having different worldviews, beliefs, values, lifestyles and customs. But even in this interconnected world, people do not always understand each other and cannot always be understood in the process of intercultural communication. The less similar cultures are, the greater the influence culture has on intercultural communication. Therefore, knowledge of the most characteristic features of communications of different cultures can improve the effectiveness of communication in international business.

The current reality is that international business is fraught with many threats, to which TNCs are exposed much more often than firms operating only in national markets. In the theory of international business risks, first of all, it is about country risks [25]. Within the country risk, commercial risks are distinguished, namely economic, financial, currency, and political risks. The latter are divided into local, regional, international, global and special. Special political risks, in turn, are divided into macro risks and micro risks.

However, today analysts warn that due to political and economic instability in the world, the number and degree of risks changes every year. As a result of research in the field of business risks, many factors have been identified that either already threaten the activities of international corporations or may threaten them in the future [2; 3; 24]. Thus, the credit crisis, non-compliance with legal requirements, deepening recession, radical greening, cost reduction, personnel policy, strengthening the role of the state in the economy, and so on were called at one time significant risks that led to negative consequences [10; 12; 13; 17; 19]. However, a number of experts today emphasize that it is also worth paying close attention to such a factor as intercultural business communication and including it in the list of possible risks of TNCs activities [22].

Well-known economic theories have recently begun to cause distrust for the simple reason that in Asian economies these theories often conflict with cultural characteristics. This in turn can lead to completely different results than those implied by the theories. Language, as it is known, is closely related to culture as "the socially inherited set of practical skills and ideas that characterize our way of life" [18]. The use of language in speech in most cases depends on sociocultural background knowledge, and communicative connections are established between texts of business culture and everyday culture. Namely the communication process generates the rules of economic behavior [14].

Back in 2012, the British research and consulting company Economist Intelligence Unit (EIU), together with the international educational center for teaching English EF Education First, published a comprehensive study, "Competition without Borders," which was conducted among 572 executives of commercial and non-profit organizations around the world. The study showed that almost half of respondents (49%) believe that inaccuracies in translation and misunderstandings in communication not only interfere with the conclusion of international transactions, but also lead to large financial losses [1].

All these realities determine the need for a comprehensive consideration of issues of communicative competence in international business in a multicultural landscape.

2 Materials and Methods

The methodological basis of the study represents several theoretical approaches, which together make it possible to cover in detail and comprehensively the phenomenon of intercultural

communication being studied - theories of the relationship between geopolitics and economics, the theory of glocalization, cultural dimensions. The research is partly interdisciplinary in nature and accumulates scientific achievements in various fields of knowledge: communication theory, management, Political Science and World Affairs.

The work is based on laws, categories, and principles of dialectical logic. To solve the research problems, such general scientific methods as scientific abstraction, deduction and induction, systemic and comparative analysis were used.

3 Results and Discussion

Researchers have repeatedly resorted and are resorting to attempts to comprehensively describe the ethnocultural style of intercultural communication among representatives of different nations. Various criteria for the typology of cultures have been proposed. In general, the behavioral styles of representatives of different cultures are considered according to such markers as sociocultural, axeological, sociolinguistic, and psycholinguistic. A special place is occupied by intercultural communication, which studies all manifestations of culture in the course of communication from linguistic to non-verbal.

Intercultural business interaction occurs in the environment of different cultures with their inherent characteristics. Effective management of international constructive communication and negotiation requires reliance on adequate theoretical solutions and effective organization of practical communication work. Communication between representatives of different cultures in the global world creates additional difficulties in assessing the negotiation skills, business interaction skills of communicating subjects and in modeling strategic decisions. All this suggests the need to find modeling approaches that focus on cross-cultural compatibility and better knowledge of the context of cross-cultural business interactions.

At business meetings, Americans primarily focus on the problem and strive to discuss not only general promising solutions, but also the immediate details associated with signing the agreement. Also, the high level of professionalism in the communication style of Americans is noted. In a group of American entrepreneurs, it is difficult to meet a person who is incompetent in any matter, so they demand the same professionalism from their future international partners [1].

As for the Asian region, business people in China remain reserved and do not show strong emotions and enthusiasm in any situation. Intense gestures, hugs, kisses, pats on the back and even light touches are unacceptable for them in business. In this regard, the assertive American style can be seen as very unprofessional in Eastern business culture. Also, familiar American language patterns and various idiomatic expressions will be unacceptable, such as: *Let's get going; Who wants to start the ball rolling?*, etc.

Before signing a contract, Chinese businessmen prefer to establish trusting relationships with business partners, and this takes time, so often several meetings are required before the deal is completed. Also, in China it is very important to maintain a hierarchy when entering a conference room or meeting place, so the head of the delegation must be at the head of the delegation; it is important to remember that the first person to enter the room will be perceived by the Chinese side as the leader of the group.

One should understand that the process of intercultural communication is more than just the interaction of several people, but the meeting of different cultures. The first condition of communication is the understanding that all elements of communication, from utterances to unspoken words, from facial expressions to body movements, are formed by comparing the interpretative frames of different worlds.

Communication styles also vary significantly across cultures. Their knowledge is important both for understanding the value systems of the national culture of business partners and for

eliminating cultural communication barriers. Similar communication styles in intercultural contacts promote mutual understanding, since the behavior of business partners is understandable and, to a certain extent, predictable. If the communication style of business partners is not known or understood by representatives of another culture, then behavior that differs from what is expected may be assessed as "wrong."

EIU research project leader Abik Sen attributes differences in communication skills among residents of different regions to their political and geographical characteristics. Moreover, he notes than when entering international markets, companies try to facilitate the international integration of personnel, and therefore they consider it especially important, first of all, to teach them foreign languages. 47% of managers admitted in a survey that language training is not fully organized in companies. This significantly affects the process of communication with foreign partners and leads to communication problems. About 40% believe that when recruiting personnel, insufficient attention is paid to experience and skills in working in international business circles [25].

It is difficult to disagree with this. For example, when externally observing memorized cross-cultural "prescriptions" regarding business etiquette, all the subtleties associated with the regional affiliation of the communication partner are often not taken into account. Meanwhile, it is important to understand, for example, that the Arabs consider themselves the heirs of the great civilizations of Sumer, Egypt, Babylon, Carthage, although, to put it mildly, is not entirely true, while, however, in fairness it must be said that they are the descendants of the great Arab civilization, which included elements of ancient civilizations, made an invaluable contribution to the entire human culture and brought to this day numerous monuments of history and culture of the ancient world. The history of the victorious march of the troops of the first Arab caliphs across countries and continents, moreover, richly embellished by the rich eastern imagination, contributed to the development in the minds of the Arabs of a complex of their own superiority in relation to the peoples around them, "whose ancestors were slaves of the descendants of Muhammad and Abu Bakr". This superiority complex still exists today, although it is carefully hidden and used by Arab rulers mainly for domestic political purposes [6].

But, on the other hand, the Arabs are burdened by a different complex. Firstly, it is the historical period associated with humiliating colonialism, three hundred years of subjugation to the Turks, British and French, and secondly, the existing lag of the Arab East from the post-industrial West. Infringement, on the one hand, gives rise to admiration for the power and prosperity of the West, and on the other, hostility, developing into hatred, which sometimes takes the most extreme forms of expression [15]. This fact also manifests itself in business communication with Arab partners, but lack of its knowledge can lead to critically erroneous conclusions and, accordingly, harm to business relations.

The speed of decision-making is also more a cultural feature than a characteristic of professionalism. An interlocutor who hesitates to answer is regarded by Americans as secretive, because only a reliable person is capable of answering quickly and directly. The Japanese trust those who thoroughly think through what they hear and are not in a hurry to respond. Therefore, long pauses do not bother the Japanese, while Americans always strive to fill a long pause in a conversation.

The state of uncertainty in life and business situations is understood and interpreted differently in different cultures. Thus, the British, Swedes, and Danes welcome a minimum number of laws, norms, and rules that can somehow limit the scope of the situation. These cultures are characterized by low levels of fear of uncertainty, and people feel quite comfortable in loosely structured environments. In contrast, representatives of the Portuguese, Greek, and Japanese cultures, where there is a high level of fear of uncertainty, strive to establish clear rules. This helps them avoid the emotional discomfort associated with a situation of uncertainty.

Cultural differences are also evident in the definition of social roles. The business card of a Japanese entrepreneur not only shows his or her position in the company, but also clearly defines the degree of respect that should be shown to him or her. Asian and South American countries have high power distance scores. This is expressed in the fact that the authority and correctness of the boss are never challenged, while in the USA and Western European countries it is customary to erase the status barrier. There, organizations prefer not to demonstrate power, not to emphasize official inequality and to more encourage the initiative of subordinates.

To achieve understanding, it is imperative to take into account the filter of values and perceptions of the addressee, as well as the context and interference of communication. The latter refers to national stereotypes, good or bad relationships, emotions, differences in goals, vision of the subject and the influence of the external environment. The individual behavior of communicants is also influenced by other participants in communication and the media. Accordingly, the reaction of the message recipient will not necessarily correspond to the intention of the sender. In order to transform the improbability of communication into its probability, it is necessary to take into account not only linguistic and cultural diversity, but also other factors, such as the individual and group interests of communicants, their preferences and motives. Therefore, it makes sense to increase the costs for communication participants to prepare for interaction, which can significantly help reduce the risk of communication failures.

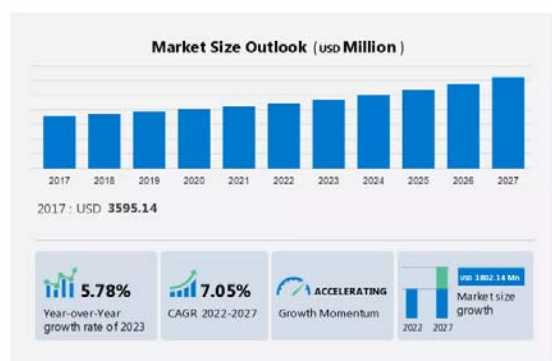It is interesting to trace the dynamics of size of the cross-cultural training market (see Figure 1).

Figure 1. Size of the cross-cultural training market, with forecast [8].

As can be seen from the diagram, the size of the cross-cultural training market is showing strong growth, and this trend is expected to continue in the near future. At first glance, this should lead to improved cross-cultural interactions in international business. But the problem is that existing training programs are too "linear" and do not take into account the latent factors influencing the international business landscape. Graduates of these programs are well acquainted with the cultural dimensions of Hofstede, trained in the intricacies of business etiquette in international business, but do not think about the existence of hidden "pitfalls", the peculiarities of the history of a particular nation and ethnic group and the traces of conflicts stretching for centuries, do not know how to think systematically and perspectively, taking into account all the nuances of the situation in the field of geopolitics and national/regional/global security. Managers and owners of international businesses are forced to learn these skills only through practice and common sense management flourishes here, that has no theoretical basis or algorithms of action, which, naturally, often leads to mistakes detrimental to business.

Many large economies are closely interconnected, and since there is no expediency to wait for the end of uncertainty in the global economy, companies must be more erudite in the field of risk management, take a broader view of problems and

constantly predict the risks of future changes. In this regard, international companies should pay attention to the issues of intercultural business communication, which is often not considered by firms as a threatening factor.

As evidenced by the results of a 2016 McKinsey survey of top managers of large corporations on the topic of globalization, geopolitics is increasingly putting pressure on business. Today, top managers are more concerned than ever about the negative impact of geopolitics on the global business climate. Over the past two years before the survey, the number of respondents who consider geopolitical instability to be an important factor influencing the corporate world has doubled [15]. Managers are worried about the growing geopolitical tensions. 84% of managers are confident that this factor will have a direct impact on the commercial world in the next five years. In a previous McKinsey survey, only 61% of respondents thought so [15].

According to the majority of respondents, corporations do not make adequate efforts to reduce geopolitical risks, although they understand the scale of the threats. Only 13% of top managers said with confidence that their companies are actively addressing problems associated with growing global tensions. Analysts attribute this inaction to the lack of appropriate mechanisms in corporations: geopolitics is still not given enough attention when drawing up a company's development strategy [21].

Today, geopolitical risks for business have increased even more. Perfect intercultural communication skills and intercultural competence play in such a turbulent environment one of the most important roles that determine not only the success, but sometimes the very survival of a business [7]. The ability to balance, to find an approach to representatives of different cultures, avoiding "sharp corners", knowledge of the attitude towards geopolitical conflicts that is inherent in specific cultures - all these are necessary components of communicative competence in today's international business. At the same time, it is worth remembering how quickly the picture of the world is changing and being prepared for new challenges.

It is essential that business leaders understand the context in which they exist. This is the only way they can learn to adapt to today's conditions. In turn, the most important component of this context is culture, which, under the conditions of glocalization, has again acquired great weight.

Modern researchers of the phenomenon of globalization talk about the complex process of intertwining global trends in social development and local features of cultural development, defining this phenomenon as 'glocalization'. The term "glocalization" was first used in the writings of Roland Robertson and entered scientific use at the end of the 20th century, by combining the two words "globalization" and "localization". It implies that the global culture is accepted, but with significant local modifications. This model describes the mixing of cultures and peoples as the generation of cultural hybrids and new global cultural networks. Social movements and associations are growing, initiatives are being put forward, even political programs and bills are being developed in defense of folklore, one's own local traditions, languages or dialects [26].

The glocal reorganization of physical and social space provokes the genesis of "glocal ethics" and creates conditions for the formation of the "ethos of glocal citizenship" against the backdrop of the moral crisis of the modern era. "Glocaloethics responds to the challenges of the era and demonstrates to an energetically globalizing world a new ethical matrix, which involves not so much a compilation of different cultural and anthropological models of morality (a kind of postmodern "moral pate"), but a cognitive perspective and cultural identification possibility that is fundamentally innovative for all classical ethics – 'docking' - the coexistence of rational morality and real mores" [26]. This is especially evident, in particular, in the revival of Islamic ethics.

It is also important to note that "government leaders have ceased to be ashamed of their connections with business and are not

emphatically distancing themselves from the business class. Some of them themselves came from the entrepreneurial environment (Trump, Macron), others have always been closely associated with it (Berlusconi, Sarkozy), while others prepared "reserve airfields" and went into business after government service (Schroeder, Blair). In modern conditions, it is considered good form for civil servants to cooperate with representatives of big business and finance, and top managers of large corporations. Rotation of personnel between the public sector and private enterprise has become the rule" [24]. The world has entered an era when the state lives not by ideological "isms", but by the interests of national business and puts all its resources and influence at its service [6; 20]. The intensified competition between the great powers in this area, which resulted in unexpected results for the adherents of liberalism, caused a protracted crisis of globalization and an aggravation of interstate contradictions. It is not surprising that today's representatives of international business have to master the communication competencies of not only businessmen, but also politicians and diplomats. The cross-cultural component in such competencies comes to the fore.

Of course, the majority of transnational businesses do not need political upheaval, especially the ones that disrupt markets, destroy decades-long partnerships (supply chains), impose tariff barriers, introduce prohibitive sanctions, and start full-scale trade wars. However, they have to survive in this landscape.

Cross-cultural management and ethics help to take preventive measures and solve existing problems, often anticipating them. The main task of cross-cultural management and business ethics in business is the adoption of effective solutions to problems that are most adapted to situations. Various cross-cultural aspects include approaches to standards, business practices, laws of different countries, national ethics, culture, customs, management system, and socio-economic system.

In addition, today there is an increasingly close convergence of industrial espionage and political espionage, and the so-called "magic weapon" [5] is being increasingly successfully used by China. The strategy of "magic weapon" is to buy up the assets of high-tech companies (especially those that are at least indirectly related to the military-industrial complex), energy and infrastructure companies abroad, with the aim of acquiring political influence through economic leverage. China is now even stronger than it was before the pandemic, and is now one of the fastest growing economies in the world [27], which allows the "magic weapon" strategy to be actively practiced. Some countries, including New Zealand, have already recognized this problem and have taken unprecedented measures. In particular, in December 2018, the GCSB (Government Communications Security Bureau) prohibited PRC telecoms firm Huawei from participating in the 5G setup for New Zealand's largest telecommunications provider, Spark, citing national security concerns [4].

In October 2023, the Five Eyes alliance's domestic intelligence chiefs warned firms of a "sharp rise" in hostile state attempts to steal intellectual property. MI5 director general Ken McCallum, along with his counterparts from the Australian Security Intelligence Organisation (ASIO), the Canadian Security Intelligence Service (CSIS), the Federal Bureau of Investigation (FBI), and the New Zealand Security Intelligence Service (NZSIS), warned that "across all five of our countries, we are seeing a sharp rise in aggressive attempts by other states to steal competitive advantage" [16].

The occurrence and rising dominance of trade blocs is reducing the typically deep and fast-growing trade routes between China and the United States and the European Union. Five growing global trade dynamics will shape the globe in the next decade. As the global economy responds to chronic economic and geopolitical pressures and shocks, the conventional trade routes that defined the world map are being rebuilt, with trade blocs playing an increasingly important role. Furthermore, total global commerce is rising at a slower rate than the global economy, signaling a fundamental change away from the trade-led

globalism that has prevailed since the Cold War's conclusion. According to a new BCG report, worldwide commerce in goods is expected to rise at an average pace of 2.8% per year until 2032, compared to a projected 3.1% growth rate in global GDP during the same time (See Figure 2) [11].
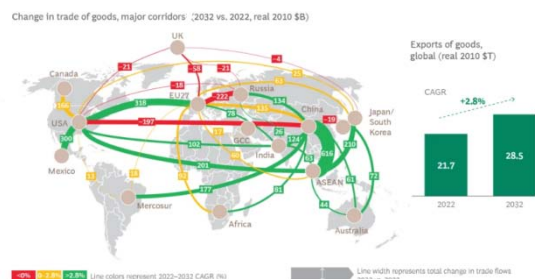

Figure 2. Forecast on trade flows reshaping by 2023 [11].

Of course, in such conditions, the complexity of the task of effective and safe intercultural interaction and communication in international business increases significantly, acquiring a multidimensional character, where national security becomes one of the dimensions. Schematically, cross-cultural communicative competence in international business today can be represented as a coordinate system (Figure 3).
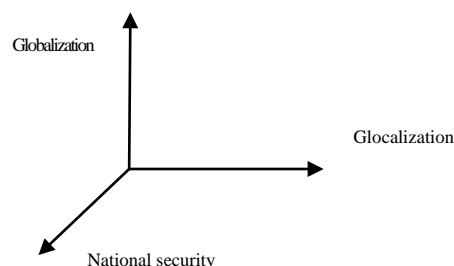

Figure 3. Dimensions of cross-cultural communicative competence in international business

Cohen distinguishes two paradigms of negotiations and business interaction: American and Eastern [1]. In addition, negotiations and various meetings and gatherings form the basis for cross-cultural business interactions.

The American culture of business interaction and negotiation is based on a verbal, explicit, low-context communication style. Cultures with low contextuality are characterized by: 1) direct and expressive speech; 2) limited attention to the use of nonverbal forms of interaction in communication; 3) a clear and accurate assessment of all topics and issues raised; 4) interpretation of reticence as insufficient competence or lack of information; 5) open expression of dissatisfaction [1]. This paradigm is based on the principles of "I can do" and "Give and take." In business interactions and negotiations, representatives of the American paradigm, seeing the benefits of 'give and take', can do many things that were not fully included in the business meeting agenda, as well as negotiate things other than what was originally intended. During negotiations, solutions are constantly sought with the negotiating partner, since it is believed that both parties should be motivated to solve problems just as they are interested in making a profit. Time for representatives of this paradigm is always of real value, especially for representatives of the United States.

The Eastern paradigm of negotiations and business interaction is based on various negotiation characteristics. It is dominated by an internal, high-context communication style. High contextual cultures are characterized by: 1) unexpressed, hidden language, multiple pauses with multiple meanings; 2) orientation towards non-verbal communication and the ability to "speak with eyes"; 3) accurate, detailed transmission of information; 4) avoiding open display of dissatisfaction and anger in various conditions. The Eastern paradigm is characterized by the fact that business interaction,

negotiations, and decision-making occur to a much greater extent on the basis of collective opinion rather than personal attitudes. Establishing and strengthening personal relationships during business interactions and negotiations is considered a very important aspect of communication. In this paradigm of intercultural communication, great importance is attached to history, flow of the meeting, atmosphere, patience and tolerance. An agreement can only be reached after good relations have been established and without rushing to complete negotiations. This paradigm is represented by countries such as Japan, China, etc. [27].

Today, against the backdrop of the processes of globalization and glocalization, there is a convergence of these paradigms, including and especially under the greatly increased influence of geopolitical factors and "hybrid peace". However, this process has not yet received proper scientific understanding.

Johnson et al. back in 2006 rightly claimed that "despite the mounting volume of academic research on cultural issues in international business, firms appear not to be doing enough to prepare managers for the international business environment" [14, p. 526]. The same authors stress that, despite the apparent relevance of cross-cultural communicative competence in the study of international commerce, there is no consensus on what constitutes cross-cultural communicative competence. Second, there are very no in-depth examinations of this competence in international business.

According to Devenyl, "the concept of cultural intelligence refers to "a person's ability to adapt effectively to new cultural contexts" [9, p. 57].

It seems that in order to solve the accumulated problems and contradictions, it is possible and advisable to use a transcultural approach that expands the framework of traditional liberal doctrine and is more responsive to the realities of "behavioral" economics. This transcultural approach requires a rethinking of established methodological foundations and the development of a fundamentally new conceptual apparatus for studying the problems of globalization. In our opinion, it can be most fully and adequately implemented within the framework of a relatively new scientific direction - synergetics. Namely the transcultural approach most fully reveals the real determinants and mechanisms of national competitiveness, since in addition to the macroeconomic or microeconomic parameters itself, it takes into account its most important components such as institutional culture, national business culture, and management ideology. Cross-cultural integration is carried out both at the national (compatibility of national business cultures) and corporate (compatibility of organizational cultures) levels. All integration transactions are based on one general principle - obtaining a synergistic effect when integration brings additional value to the company.

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Primary Paper Section: A

Secondary Paper Section: AE, AD

MODERN TOOLS TO ENHANCE THE EFFECTIVENESS OF DISTANCE LEARNING IN CONDITIONS OF DIGITALIZATION

[a]VIRA KUROK, [b]IRYNA KASHUBIAK, [c]LIUDMYLA MAKSYMENKO, [d]IRYNA PUSHCHYNA, [e]TETYANA CHUMAK

[a]*National Academy of Pedagogical Sciences of Ukraine, Oleksandr Dovzhenko Hlukhiv National Pedagogical University, 24, Kyivska Str., 41400, Hlukhiv, Ukraine*
[b]*Lesya Ukrainka Volyn National University, 13, Voli Ave., 43025 Lutsk, Ukraine*
[c]*Sumy State Pedagogical University named after A. S. Makarenko, 87, Romenska Str., 40002, Sumy, Ukraine*
[d]*National University Zaporizhzhia Polytechnic, Zaporizhzhia, Ukraine*
[e]*National University of Bioresources and Nature Management, 15, Heroes of Defense Str., 03041, Kyiv, Ukraine*
email: [a]virakurok@gmail.com, [b]iryna.kashubiak@gmail.com, [c]lyshher@gmail.com, [d]pushchyna@zp.edu.ua, [e]tchumak27@ukr.net

Abstract: At the stage of reorganization of the external and internal policies of educational process in Ukraine, there is an active search for the country's rightful place among the international community, the construction, and strengthening of new relations in Europe which leads to the need to address issues and create conditions for the quality preparation of future educators capable of utilizing digital technologies in distance education. The aim of the research is to analyze and practically implement the methodological component to enhance the levels of digital competence of specialists in the conditions of distance education, prepared to carry out future professional activity. The research utilized methods such as analysis, comparison, systematization, classification, generalization, and experimentation, as well as methods of mathematical statistics. The concept of "digital competence" has been defined, its structural components have been identified, and a methodology for forming the digital competence of future professionals in the pedagogical sphere has been developed and implemented. During the research at the Oleksandr Dovzhenko Hlukhiv National Pedagogical University, at the Faculty of Technological and Vocational Education, a methodological toolkit has been developed for forming digital competence, namely: the implementation of its components with selected methodologies for their formation, allowing the improvement of the educational process in Ukrainian higher education institutions. Following the research, prospective directions for improving the methodology of forming digital competence by developing its components have been formulated. The prospects for further research involve studying the possibilities of applying digital technologies in the preparation of specialists, starting from preschool educational institutions and ending with higher education institutions.

Keywords: higher education; future educators; distance education; digitalization; digital technologies; digital competence.

1 Introduction

The rapid pace of technological innovation has led to the widespread adoption of digital technologies worldwide. Global digital trends are forming how modern education is reformed. The globalization of higher education necessitates the active integration of digital technologies into the educational process for preparing future specialists. The peculiarities of the development of the modern digital generation is its integration into the global space. The development of digital competence is a crucial direction today, influencing the quality preparation of highly skilled specialists. In the context of today's digital society, there is a daily utilization of a vast amount of information, including "big data," artificial intelligence (AI), virtual and augmented reality technologies (VR, AR), quantum technologies, and "distributed ledger systems" [1; 18].

The digitalization of higher education holds a significant place on the path to the effective development of the digital society and digital economy in Ukraine and worldwide. The relevance of this issue is substantiated by legislative documents at the national level, namely, "Ukraine 2030E – a country with a developed digital economy" and others. The Ministry of Education and Science of Ukraine has presented the project "Concept of Digital Transformation of Education and Science for the Period until 2026" for public discussion, which serves as a comprehensive strategic vision for the digital transformation of the education and science sectors in the future [20; 27; 12].

Today, an increasing number of professions requires high levels of digital competence from specialists and proficiency in cutting-edge technologies. Therefore, the issue of qualitatively updating the content of higher education becomes highly relevant. Higher education should take a proactive stance and explore new ways of preparing future specialists by incorporating digital technologies [4].

As distance education has actively developed worldwide, there has been a significant acceleration in the growth of the EdTech sector, which constitutes a part of the educational system that evolves in the direction of a symbiosis between traditional online education and the utilization of simulation methodology. The use of electronic tools and distance learning platforms impacts the quality of the educational process and requires higher education institutions and academic staff to possess relevant competencies in employing digital technologies for remote learning of highly qualified specialists [21; 25;16].

The aim of the article is to explore the relevance and prospects of implementing modern tools to enhance the effectiveness of distance education based on digitalization principles in today's context.

The tasks that need to be solved in the process of conducting the research are substantiated:

1. Conduct an analysis of the current state of the methodology for organizing distance education in higher education institutions in Ukraine in the context of digitalization.
2. Develop a methodology for improving distance education in the conditions of digitalization.
3. Identify the components of forming the digital competence of professionals.
4. Implement the methodology for enhancing the effectiveness of distance education in the conditions of digitalization.

Solving these tasks in the research process will enable the construction of the educational process in Ukrainian higher education institutions in a distance format more effectively, taking into account the requirements for specialists in the pedagogical field in the labor market.

2 Method

In the process of experimental research, the following methods have been used: analysis, synthesis, comparison, systematization, classification - to conduct a theoretical analysis of problems aimed at researching the use of modern digital technologies in the conditions of distance education, as well as philosophical, psychological, pedagogical and methodical literature based on state general conditions binding standards of higher education, educational programs for training future specialists in the field of pedagogy; working curricula, educational and methodological complex of professional disciplines for various specialties; summarizing the experience of using digital technologies in institutions of higher education; experiment: ascertaining, formative and control to check the proposed methodological system aimed at increasing the levels of formation of digital competence in the conditions of distance education in institutions of higher education.

The experimental research has been conducted at the Glukhiv National Pedagogical University named after Oleksandr Dovzhenko during the academic years 2022-2023. The sample size consisted of 86 prospective educators. The control group included 42 respondents, while the experimental group involved 44 participants, comprising 46 females and 40 males. The results of the experimental research have been evaluated based on high, medium, and low levels.

At the declarative stage of the experiment, a cohort of respondents was identified, all of whom were in similar

conditions (course of study, educational program, etc.). A survey was conducted to diagnose the awareness of future educators regarding digital technologies and their utilization. An analysis of literature sources on the research problem was carried out, and a methodological toolkit was selected to support the idea of incorporating digital technologies into the educational process, the best practices in the methodology of applying digital technologies were examined.

A comparative analysis of the scientific foundation related to the research problem was conducted, involving the systematization, classification, and synthesis of theoretical data. A methodology for fostering the digital competence of future specialists in the context of distance education at higher education institutions was developed. Its components were identified as motivational, cognitive-operational, informational, and reflexive.

At the formative stage of the experiment, specialized methods of forming digital competence components were implemented in the experimental group in conditions of distance education in institutions of higher education at all stages of the experiment.
Based on the analysis of experimental data, it can be concluded that during the formative stage of the experiment, the levels of digital competence among future specialists in the context of distance education at higher education institutions increased, which allows us to assert the effectiveness of the outlined methodology.

At the control stage, an analysis of the obtained results was carried out, and qualitative and quantitative indicators of the pedagogical experiment were processed using the Wilcoxon-Mann-Whitney criterion, results were generalized, conclusions were drawn, and prospects for further research were outlined.

3 Results and Discussion

The implementation of Industry 4.0 principles in Ukraine contributes to the active digitalization of education. The necessity of digitalizing education is driven by the formation of the digital economy, as its active development depends on having specialists prepared to operate within contemporary ideologies and technologies. The digitalization of education aims to ensure its continuity and individualization (Framework of digital competences for citizens of Ukraine, 2023).

In accordance with the demands of the modern labor market, employers put forward new requirements for the content and process of professional training of future specialists, who must possess deep professional knowledge and skills, be capable of creatively solving tasks, strive for self-improvement, and be ready to find ways to solve problems regardless of individual circumstances , to work with various forms of labor organization and production in tough conditions of competition, the ability to develop a special strategy of professional thinking, behavior and activity [20].

The concept of "digital competence" encompasses the ability to navigate the information space, conduct searches for necessary information, and utilize it according to personal needs and the requirements of the modern high-tech information society [14].

Digital competence is essential for individuals not only in their professional activities but also in everyday life, as demanded by both digital society and the economy.

The preparation of future specialists with a high level of digital competence is a necessary component of professional training, enabling them to perform their professional duties more effectively by aligning with the demands of the labor market and the digital society [23].

Ensuring the development of digital skills in future specialists in the field of education is a primary requirement for the advancement of Ukraine's digital market. Digital skills serve as the foundational prerequisite for the development of all other priorities in harmonizing digital markets between EU countries

and Eastern Partnership, as outlined during the ministerial meeting on the topic of the "Digital Community."

The framework for digital competence, established in 2013 and updated since then, encompasses 21 learning outcomes across 5 domains: information literacy, including content management; communication and collaboration, as well as societal participation; creation of digital content, incorporating ethical principles; security; and problem-solving [5].

To determine the levels of development of digital competence in future educators, the project "Description of the Digital Competence of a Pedagogical Worker" serves as the foundation. This method for assessing the levels of digital competence for pedagogical specialists has been developed in accordance with the Concept of Development of Pedagogical Education, European framework documents on digital competence – DigComp 2.1: The Digital Competence Framework for Citizens with eight proficiency levels and examples of use, Digital Competence Framework for Educators (DigCompEdu); Report developed by participants of the Erasmus+ project "Modernization of Pedagogical Higher Education by Innovative Teaching Instruments" (MoPED). It is based on the assessment of indicators of information, computer, communicative literacy, media literacy, and attitudes towards technology.

The digital competence of an educational professional is described across five directions:

1. Educator in the Digital Society.
2. Professional Development.
3. Utilization of Digital Resources.
4. Teaching and Assessment.
5. Formation of Digital Competencies in Education Seekers. [3; 28; 13].

By utilizing digital technologies in the context of distance education, higher education learners have the opportunity to acquire 21st-century soft skills necessary for their future professional activity. These skills include critical thinking, communication skills, leadership qualities, emotional intelligence, positive thinking, teamwork, and self-organization.

To ensure the competitiveness of specialists in the labor market, it is essential to cultivate technical, soft, and social skills that can adapt to the evolving demands of the workforce. Investments in skill development are a critically important factor for a country's economic growth and competitiveness. At the same time, a persistent challenge for governments in many countries is striking a balance between specific and foundational skills tailored to particular professions. Qualified and mobile workforce stands as a key element in the competitiveness of any company and plays a crucial role in the economic growth of a country [8].

The OECD 2030 Educational Compass distinguishes between three types of skills (OECD, 2018) [27]:

- Cognitive and metacognitive skills, encompassing critical and creative thinking, as well as self-regulation.
- Social and emotional skills, covering empathy, self-efficacy, responsibility, and collaboration.
- Practical and physical skills, involving the application of new information.

Among the key skills that a modern specialist in the field of education should possess are: comprehensive problem-solving, critical thinking, mobility, creativity, leadership qualities, time management, coordination with others, emotional intelligence, judgment and decision-making, service orientation, negotiation skills, and cognitive flexibility.

The most effective system of the 21st century aimed at training and continuous support of highly qualified specialists is distance learning. It is a global telecommunications infrastructure designed to create systems for mass continuous self-learning and

universal information exchange (Geng; Law; Niu, 2019; Hermann; Pentek; Otto, 2019).

Distance learning models include: externship-based learning, autonomous educational institutions, autonomous learning systems, informal and integrated distance learning.

Elements that ensure the quality functioning of distance learning include: distance courses; websites and web pages; email; forums and blogs; chat and ICQ; tele- and videoconferences; virtual classrooms, and more [16].
Since distance learning in the era of digital technologies is gaining popularity, in the future it can take a separate place as a form of education among full-time, extramural, evening and externships.

Today, distance education built on digital technologies has several advantages, namely: accessibility, low cost, convenience, democratic "teacher-student" communication, use of comprehensive software and leading educational technologies, individualized learning process, and the ability to choose one's own pace of learning [10; 2].

In Ukraine, the organization of distance learning is regulated by the Order of the Ministry of Education and Science of Ukraine dated April 25, 2013, No. 466, "On the Approval of the Regulation on Distance Learning." Distance learning should be understood as a learning process based on an individualized approach to acquiring professional competence. It relies on the interaction of participants in the educational process who are located remotely from each other in a specialized environment. The functioning of this environment is carried out through the use of modern digital technologies.

The concept of "distance learning" encompasses a system of technologies through which students can acquire the necessary professional, specialized, and digital competencies. It is aimed at ensuring interactive interaction between higher education learners and educators, as well as fostering independence in the learning process. Distance learning technologies in education contribute to cost reduction for conducting training; simultaneous education of a large number of higher education learners; improvement of the quality of education through the use of modern tools, extensive electronic libraries, and the creation of a unified educational environment [15; 25].

With the help of distance learning, higher education learners have the opportunity to utilize unconventional sources of information, enhance the effectiveness of independent work, create new conditions for creativity, and acquire professional skills, and educators can implement fundamentally new forms and methods of teaching.

The study proposes to include the following aspects in the concept of "digital competence of the future professional":

- Understanding the essence and impact of digital technologies on the development of the educational process in the university;
- Mastery of modern software tools;
- Knowledge of algorithms and mechanisms for the application of digital technologies;
- Ability to carry out and evaluate one's activities using digital technologies [24; 17].

Based on the theoretical analysis of literary sources, it has been established that the digital competence of future professionals consists of the following components:

- Motivational;
- Cognitive-activity;
- Informational;
- Reflexive.

The motivational component includes interests, needs, understanding of the purpose of digital technologies in the

educational space, motives for the professional activity of the future specialist in the pedagogical field, which is oriented towards the goal, process, result of improvement and self-development in the field of digital technologies, interest in current trends.

The cognitive-activity component provides for the completeness, depth, and systematicity of the future specialist's special knowledge of digital technologies, which make it possible to ensure the organization of the educational process with the use of digital learning tools; the possibility of applying skills and abilities regarding the use of digital technologies in professional activities; it is a means of knowledge, development of digital competence, self-improvement, as well as an opportunity to establish communication between all participants of the educational process in the institution of higher education and beyond.

Informational component involves fostering the development of information culture in future educators, the ability to navigate in the information space, and utilizing digital technologies in the process of searching and processing information.

Reflexive component involves the ability to self-regulate and self-assess one's own activity.

In order to determine the levels of formation of components of digital competence among future specialists in the conditions of distance education, an experimental study was conducted during the academic years 2022–2023 at Hlukhiv National Pedagogical University named after Oleksandr Dovzhenko on the Faculty of Technological and Professional Education.

During the ascertainment stage of the experiment, a set of methodological tools was designed, aimed at increasing the levels of formation of digital competence of specialists in the pedagogical field at different stages of the experiment. The author's methods were implemented in the experimental group by creating artificial conditions for conducting the experiment.

A comparative analysis of the scientific base on the research problem, systematization, classification and generalization of theoretical data has been carried out; modeling the methodology of training specialists in the pedagogical field according to the outlined components, namely: motivational, cognitive-activity, informational and reflective.

The sample size was 86 future teachers. 42 respondents were involved in the control group, 44 respondents in the experimental group, including 46 women and 40 men.
At the ascertaining stage of the experiment, an analysis of literary sources on the research problem was carried out, best practices in the application of digital technologies were studied, and object-oriented software was selected to support the idea of using digital technologies in the educational process.

During the exploratory experiment, a group of respondents in similar conditions (course of study, educational program, etc.) was identified. Surveying was conducted, based on which the awareness of future educators regarding digital technologies and methods of their use was diagnosed. The results of the conducted research allowed obtaining objective data on the levels of formation of digital competence among future educators. The level of formation of digital competence is understood as an indicator describing the ability of future educators to actively apply digital technologies in the educational process.

The study proposes to correlate competencies at three levels of experience in accordance with the scored points, namely:

- High (67-100 points - 3rd level) - characterized by the ability to apply digital technologies in full scope (including creating a digital product);
- Medium (34-66 points - 2nd level) - possesses knowledge of digital technologies but applies them only partially;

- Low (0-33 points - 1st level) - has knowledge of digital technologies but cannot correlate knowledge components with professional tasks.

We conducted a survey to check the awareness and use of digital technologies in the educational process by students and future teachers. The processed results have the following indicators: adaptive learning (12%), virtual classroom (9%), MOOCs (8%), synchronous and asynchronous learning (7%), blended learning (6%), flipped classroom (flipped learning) (5%), self-directed learning (8%), learning management system (4%), "Cloud" learning (5%), mobile learning (5%), course management system (CMS) (9%), e-Learning (7%), 1:1 technology (4%), gamification (9%).

The obtained results of the study demonstrated the need for the development of students' digital competence. Synchronous and asynchronous learning, mobile learning, "cloud" learning" and blended learning are very convenient tools for organizing the educational process.

An important role in the study of the disciplines of the professional cycle is played by project activities, which make it possible to develop a set of skills for using digital technologies: information search, communication, synchronous and asynchronous communication, organizing joint activities, exchanging information and materials, conducting online surveys, creating a web portfolio and multimedia presentation of project results, creation of an electronic educational resource as a product of project activity.

To determine the levels of formation of the components of digital competence, a survey was conducted according to the author's questionnaire, which included four blocks of questions according to the outlined components, namely: motivational; cognitive-activity; informative reflexive.

In general, the data of the conducted survey show that students positively evaluate the possibilities of using digital technologies in education.

The results of the research at the ascertainment stage of the experiment are presented in Figure 1.
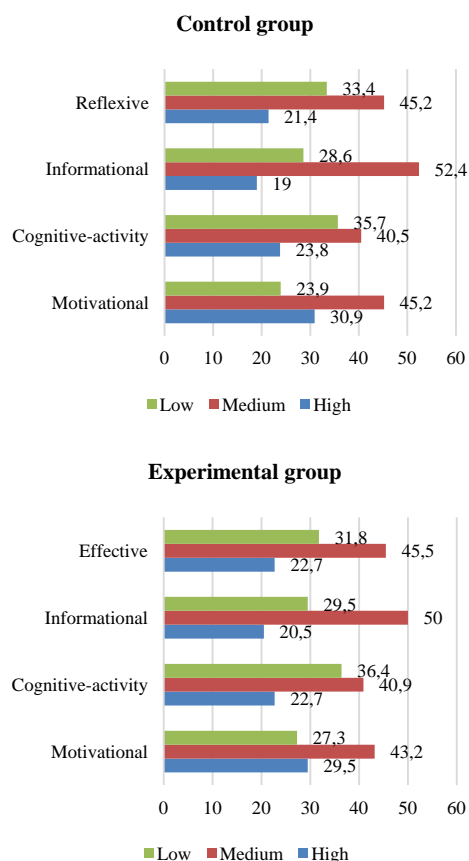
"Source: compiled by the author"

Figure 1. Results of diagnostics of the levels of formation of digital competence of future specialists in the field of pedagogy in the conditions of distance education in institutions of higher education at the ascertainment stage of the experiment in the control and experimental groups.

According to the results of the survey, it can be concluded that the respondents who belong to the first level - low, scored the lowest number of points. They realize that digital technologies have a high potential and want to learn them for further application in their future teaching practice, and they also occasionally use digital technologies in classes. Respondents belonging to the 2nd group (medium level) possess digital technologies at an average level. Students of the 3rd group showed a high level of mastery of digital technologies. They have a whole set of digital strategies and know how to choose the best of them for a particular situation, and they are always up to date with innovations.

At the formative stage of the experiment, specialized methods were implemented in the experimental group for the formation of digital competence components at all stages of the experiment.
To determine the features of the formation and development of the motivational component of the digital competence of future specialists in the field of pedagogy in the conditions of distance education in higher education institutions, the degree of motivation, the desire for self-development and self-improvement, the author's questionnaires and clarifying interviews were used.

It is proposed to activate the potential of using digital technologies by specialists in the pedagogical field, namely by introducing: integration trainings (reflective, with elements of digital innovation); the use of doping methods aimed at forming the ability to maintain confidence during the use of innovations in the educational process (lecture, open class, etc.); the use of methods and techniques for the development of pedagogical self-

presentation skills (development of pedagogical portfolios, improvement of one's own pedagogical skill based on the use of digital technologies, etc.) [22].

The formation of the cognitive-activity component of the digital competence of future specialists in the field of pedagogy in the conditions of distance education is proposed to be carried out according to the method of posing problematic questions, by developing the author's special course "Digital technologies in education", which includes interactive methods; digital and multimedia technologies; hypertext and Internet technologies; technologies of virtual information space; cloud technologies; Web technologies; telecommunication technologies; SMART technologies. The definition of the content of the tasks took place taking into account the principle of complex differentiation for groups of students and was based on the implementation of indicators of the formation of digital competence of future specialists in the field of pedagogy in the conditions of distance education in higher education institutions.

In order to exclude randomness in the assessment of the levels of the studied definition in conflict issues, there was a need to conduct an interview, during which students of education must answer questions and perform tasks, based on the results of which conclusions can be drawn about the level of development of each component.

The informational component of the formation of digital competence of future specialists in the field of pedagogy in the conditions of distance education in higher education institutions is proposed to be implemented through the development by future specialists in the field of pedagogy of a package of methodical materials for the chosen discipline of professional direction using digital technologies (lectures, practical work, tasks for independent work, etc.).

The implementation of the reflexive component is envisaged through the active development of students' ability to self-analyze, control, and evaluate the levels of their own professional culture, which ensures self-regulation of the educational activity of pedagogical specialists.

It is proposed to use the method of writing self-reviews, training activities, development of lateral (non-standard) thinking; use of strategic self-improvement techniques; method of problem-reflective dialogue and polylogue, reflexive-business games, as well as the method of positional discussion.

The obtained data results at the formative stage of the experiment are presented in Figure 2.

Control group

Experimental group
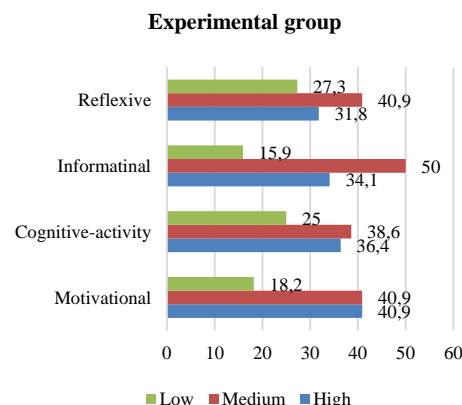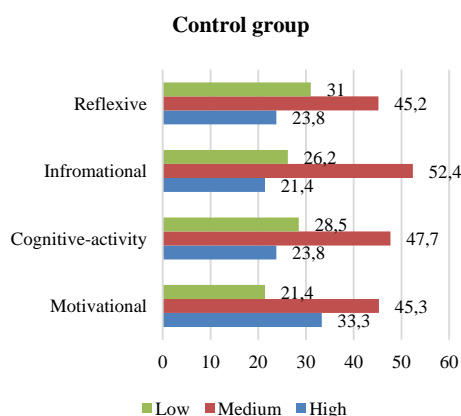
"Source: compiled by the author"

Figure 2. Results of diagnostics of the levels of formation of digital competence of future specialists in the field of pedagogy in the conditions of distance education in institutions of higher education at the formative stage of the experiment in the control and experimental groups

As we can see from Figure 2, after providing a formative influence in the experimental group, the group of 3rd level learners experimenting with digital technologies in different contexts and with different goals, integrating them into everyday life, purposefully selecting digital technologies and materials for specific situations, and trying to understand has significantly increased in the experimental group with the advantages and disadvantages of different digital strategies.

Therefore, in the course of researching the levels of formation of digital competence of future specialists in the field of pedagogy in the conditions of distance education in higher education institutions, we can state that the majority of respondents have formed its average level. This level of digital competence of future teachers characterizes the adequacy of the use of digital technologies in the educational process and contributes to its effectiveness. However, the research revealed certain problems that hinder the effective use of digital technologies by teachers in the educational process. First of all, these problems are related to the low level of material and technical equipment of classrooms (computers, tablets, interactive whiteboards, stable access to the Internet, specialized software) and the lack of systematic provision of the educational process with modern methodical materials.

According to the results of the analysis of experimental data, it can be concluded that at the formative stage of the experiment, the level of formation of the components of digital competence of future specialists in the field of pedagogy increased under the conditions of distance education, which allows us to speak about the effectiveness of the outlined methodology.

Thus, the use of blended and distance learning allows the educational process to be carried out at a modern level, taking into account the requirements of today.

4 Conclusion

In the course of the study, it was concluded that the qualitative formation of digital competence of future specialists in the field of pedagogy in the conditions of distance education in higher education institutions should be based on the principles of using digitalization tools.

The concepts of "digital technologies" and "digital competence" were defined. Prospective directions for improving the process of raising the levels of digital competence of future specialists in the field of pedagogy in the conditions of distance education in higher education institutions have been formed.

In the process of conducting the experiment, it was established that the level of formation of digital competence in the conditions of distance education in higher education institutions is mainly at medium and low levels.

Such a tendency requires the creation of the necessary methodological toolkit, which will serve to increase the effectiveness of training specialists in the pedagogical field, as a result of which they will develop digital competence.

The components of digital competence in the conditions of distance education are determined, namely: motivational, cognitive-active, informational and reflexive.

In the process of research, the organizational and methodical models of distance education were singled out, namely: externship-type education; autonomous educational institutions; autonomous educational systems; non-formal, integrated and distance learning.

The generalized data of the results of the experiment after the application of the proposed methodology allow us to draw conclusions about the effectiveness of the implemented methodological tools. In this regard, the policy of educational institutions of Ukraine should be aimed at updating the methodology of training specialists in the pedagogical field on the basis of digitalization of higher education.

We see the direction of further research in the development of modern educational programs of an international level for specialists in the field of pedagogy, which provide for the possibility of improving qualifications abroad and implementing the results of own research. Scientific research, as well as the conclusions formulated on its basis, can be used as an effective basis for improving the training of specialists in the pedagogical field in higher education institutions on the basis of digitalization, finding ways to increase the level of their digital competence, using the experience of foreign countries, introducing digital resources for the organization of scientific - research projects in the context of higher education, conducting professional activities at a high level, taking into account the requirements of the labor market; deepening the study of the structure of digital competence of educators in professional training.

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Primary Paper Section: A

Secondary Paper Section: AM

SELF-EDUCATIONAL COMPETENCE AS AN INDEX OF PERSONAL AND PROFESSIONAL MATURITY OF A FUTURE PRESCHOOL EDUCATION SPECIALIST

[a]OLENA KONONKO, [b]NINA PYKHTINA, [c]ANTONINA ANISHCHUK, [d]SVITLANA MATVIENKO, [e]LILIIA BOBRO, [f]OKSANA LISOVETS

[a-f]*Nizhyn Mykola Gogol State University, 2, Grafska Str.,16600, Nizhyn, Ukraine*
email: [a]kononkoll@ukr.net [b]npykhtina@ukr.net,
[c]anishchuk_1965@gmail.com, [d]masvet.9@gmail.com,
[e]1i1iya250492@ukr.net, [f]ksuvik.2@gmail.com

Abstract: The article discusses the issue of developing auto-pedagogical competence in preschool education specialists. The problem is relevant for several reasons: the scarcity of domestic and foreign theoretical-experimental studies in this direction; the significance of the researched phenomenon as a component of the life competence of a future educator; the importance of implementing a systemic approach to the development of auto-pedagogical competence in preschool education specialists; the demand for pedagogical practices in diagnostic procedures and the formation of the investigated quality. The content and structure of the leading category are specified, criteria and indicators for assessing auto-pedagogical competence are developed, an author's typology is characterized, and pedagogical conditions for the effective development of the desire for self-improvement in preschool education specialists as individuals and professionals are substantiated. The purpose of the article is to elucidate the essence of the auto-pedagogical competence phenomenon, characterize the metrics for assessing its level of development, describe the author's typology of auto-pedagogical competence in preschool education specialists, and theoretically substantiate the pedagogical conditions for its effective development in higher education institutions.

Keywords: auto-competence; auto-pedagogical competence; self-development; reflection; subjective position; educational strategy; conditions for optimizing the educational process.

1 Introduction

The present day forces the student youth to solve life challenges of high novelty and complexity, actualizes the necessity to behave competently in a multivariate world to differentiate life events based on their significance, safety, and utility. This increases the importance of timely formation in future preschool education professionals of a conscious attitude towards life, the profession, and oneself; constructing an adequate worldview and self-concept; creating favorable conditions in higher education institutions for the formation and development of auto-pedagogical competence, the need for self-development, and self-improvement.

The problem of forming auto-pedagogical competence in future professionals of the preschool education system is one of the fundamental and insufficiently developed issues in domestic science. The main emphasis in this process should be placed on creating conditions for independent learning, self-development, and self-improvement of students. Such extensive work involves the implementation of a comprehensive approach, the development of specialized educational programs and methodologies, and the utilization of modern information and educational technologies and resources.

In the modern educational landscape, the requirements for the quality of education and professional competence of educators are constantly increasing. New achievements and technologies emerge daily, making it crucial for the student youth to adapt to them, learn quickly, develop their skills, and achieve personal and professional goals. One of the important components of a teacher's competence is auto-pedagogical competence, which involves the development of self-education and self-development skills, the ability for reflection, critical analysis of one's own activities, and continuous improvement of personal qualities and professional skills. They allow teachers not only to work effectively but also make them valuable and in-demand in the professional environment throughout their careers.

The transition in higher education from external regulators of behavior and activity of students to internal ones is connected with the processes of socialization of the individual and their moral development. The weakening and displacement of external forms of regulation occurs faster than the establishment of internal, value-based regulators of behavior and activity in the student youth. This results in the emergence of a spiritual-moral vacuum in their consciousness which causes the inability to reconcile personal interests with group interests and individual strategy with social position. The primitive nature of needs and values, the depletion of their spiritual component, diminish the dignity of the individual, hinder their harmonious development, and impact auto-pedagogical competence.

Currently, there is a need for intentional self-improvement in the formation of future educators. No external system of influence is able to ensure the full formation of the personal and professional competence of modern youth. As individuals capable of self-development, it is essential to actualize their potential, recognize the importance of self-support and self-influence, and take an active position towards themselves as a future professional.

The key task of a higher education institution in modern Ukraine is to prepare a professional of a new formation capable of self-realization in the conditions of rapid social and economic changes, uncertainty of perspectives, high competition, and intensification of life. The formation and development of a personally and professionally mature educator is a complex and long-term process that necessitate the harmonious combination of the traditional focus on the culture of utility in higher education institutions with an increased emphasis on the culture of dignity.

The culture of utility, aimed at ensuring the functional suitability of the future professional, is pragmatic and adaptive in its nature, reduces the individual to functions, prioritizes knowledge, skills, and abilities. The culture of dignity focuses on the valuable vector of personality development of the future educator, actualizes the importance of taking into account the history of their individual development, unique personal experience, subjective position, basic moral and spiritual qualities, auto-pedagogical competence as a component of professionalism.

2 Literature Review

The theoretical foundations of our research are based on the works of both domestic and foreign specialists who specialize in the issues of professional competence of educators, self-education, self-development, and reflection, which are actualized in the educational activity. The analysis of scientific sources proves that in psychological-pedagogical literature, considerable attention has been devoted to the problem of preparing pedagogical personnel, the professional and personal development of future specialists. Numerous studies by domestic psychologists and educators, including H. Ball, V. Bondar, H. Belenka, M. Boryshevsky, I. Dychkivska, N. Havrysh, M. Zabrodsky, Ye. Holoborodko, V. Yevdokimov, O. Kyrychuk, V. Kremen, S. Maksymenko, S. Musatov, I. Onyshchuk, O. Ostapchuk, V. Rybalka, M. Savchin, V. Semichenko, T. Yatsenko, and others, are dedicated to the theoretical justification and technological modernization of approaches to its solution.

According to M. Barchii and M. Voronova, the problem of professional development of personality requires the development of professional consciousness among educators. This involves professional knowledge structured in specific programs of professional actions and an individual's knowledge about themselves as subjects of professional activity. Professional consciousness, in addition to the ability for reflection, is characterized by the subject's capacity for value-oriented self-determination and reflection as a way of their existence. This implies that the genuine mechanism of human development as a professional is the reflective ability for self-determination [2].

V. H. Kremen rightfully points out: traditionally, the educational process of a higher education institution is oriented towards the acquisition, at best creative, of a certain amount of knowledge.

This function remains one of the important ones but is not the only one. The main tasks of modern higher education include teaching young people to independently master new information, to apply acquired knowledge in their practical activities. To remain effective in the diverse field of communication and influences, an individual must be self-sufficient. For this purpose, it is necessary to abandon strict regulation of the process of formation of the future professional, to start helping them construct and implement an optimal path of learning and development based on their individual essence [10].

As noted by H. Ball, to develop as a personality, a student should make independent efforts for their own growth, self-development, realization of their essential forces, nurturing mechanisms of self-improvement, the ability to acquire more and more certainty to satisfy their basic individual and social needs. This entails incorporating a humanistic approach into the higher education educational process, which requires the utmost encouragement of youth towards personal freedom, inseparably linked with responsibility [1].

Among the various aspects of studying the issue of personal and professional development of an educator, the question of developing auto-pedagogical competence in student youth remains one of the least defined. It is indirectly touched by the researchers who investigate the issues of developing professional-valuable self-attitude, subjective position, the ability for self-development, personal and professional development, and personal-professional maturity in students.

In particular, V. Yevdokimov defines personal-professional development as the unity that includes both the development of professional activity and the development of the individual's professionalism. According to the author, the leading tendencies in personal-professional development are the development of subjectivity and the individual unique, creative potential. V. Yevdokimov emphasizes that the personal and professional development of the future educator is, on the one hand, the process of forming the personality, and on the other hand, the process of revealing and self-creation of personal and professional qualities, methods of activity, and pedagogical interaction. Personal and professional development of the educator involves gaining experience in overcoming obstacles on the way to achieving successful individual results in professional growth [20].

A considerable amount of work by domestic and foreign experts is dedicated to defining the content, structure, and factors of forming valuable self-attitude in future professionals. For instance, T. Bilan emphasizes the crucial role of positive self-attitude, adequate self-assessment in professional self-identification and self-development of an individual, in managing one's own behavior, and in shaping their demands. The author operates with the concepts of "adequate" and "inadequate" attitudes toward oneself, stating that the maximum adequacy in self-attitude is evidenced by a high level and moral content of self-esteem.

T. Bilan emphasizes: a necessary condition for the progressive development of valuable self-attitude is the youth's awareness of their virtues and flaws. The author notes that the attitude toward oneself is formed through self-awareness, based on the attitude towards oneself as an object of perception. The criterion for self-esteem, according to the expert, involves comparing oneself with others, and emphasizes the indirect nature of an individual's attitude toward oneself, influenced by external evaluations from authoritative figures and personal successes and failures. The author highlights the crucial role of reflection in professional development, the ability to analyze and assess adequately [3].

One of the most crucial factors in the formation of a spiritually oriented, creative, and independent educator is their internal activity an important determinant of which is adequate self-attitude. Foreign researchers such as A. Maslow, C. Rogers, G. Allport, V. Frankl, and E. Fromm emphasize the dependence of self-attitude on the socio-cultural environment. Representatives of humanistic psychology reveal the content and meaningful invariants of personality and the process of self-actualization.

Highlighting the concept of self-actualization, A. Maslow expresses an optimistic view of human nature, emphasizing the significance of scientific knowledge about the reserves of the human spirit, the possibilities of personal growth, maintaining and restoring psychological health [12]. Continuing this idea, C. Rogers identifies external and internal factors and mechanisms of self-actualization, characterizes the qualities of a mentally healthy personality and justifies a higher level of self-actualization functioning [15].

A number of domestic experts emphasize the direct connection of self-attitude with personality development, its system of values, and fundamental qualities (O. Ball, M. Zabrodsky, O. Kononko, O. Reinpolska, and others); they highlight its subjective nature, rooted in the readiness to reflect on one's actions – to analyze, assess adequately, and make necessary corrections in pedagogical activities (I. Bekh, M. Boryshevsky, V. Oleksiuk, M. Savchin, V. Tatenko, and others).

Characterizing self-attitude as a personal phenomenon, M. Boryshevsky describes it as a specific activity of the subject directed towards one's own "self," evidenced by internal actions, emotional specificity, and objective content, representing a general feeling of being "for" or "against" oneself. The author notes that the basis of self-attitude is the process of evaluating one's traits and qualities in the context of satisfying or dissatisfying the need for self-realization. According to M. Boryshevsky, self-attitude is not confined to self-awareness but is linked to the real life activities of the individual. This expert emphasizes that the emotional and evaluative system of self-attitude is based on self-respect, self-sympathy, a sense of dignity, self-support, and maintaining a stable level of self-acceptance. [4].

Given that the issue of self-attitude is considered in the context of the professional activities of student youth, it is appropriate to focus on a concept closely related to the previous one, namely "professional-valuable self-esteem." Most experts qualify it as an integral characteristic of professional self-awareness, as a type of emotional experience, as feelings directed towards one's own "self," as an awareness of one's own value, and associate it with the position of the future educator as a whole.

V. Tatenko's approach indicates that a significant outcome of the process of self-awareness is the internal position of the doer: on the one hand, a professional doer, and on the other, the author of their inner world, their own personality. Professional-valuable self-attitude is qualified by this author as a position of an individual in relation to himself in professional activity, as an assessment by a future professional of their qualities and achievements. This position defines the complex attitudes of the future educator towards various aspects of their "self" in professional activities, constituting a unity of self-awareness, experience, and actions regarding oneself. According to V. Tatenko's definition, a positive internal professional position serves as an objective indicator of the dynamics of their professional-valuable self-attitude. The dynamic structure of this position vividly characterizes changes in the future educator's attitude toward themselves as a professional at all levels of their existence in the profession. [17]

S. Kharchenko identified leading groups of socially significant problems that, on a personal level, pose challenges to self-realization in professional activities. Three groups of problems have been identified: the problem of professional skills, the issue of interpersonal relationships in the pedagogical process, and intrapersonal problems - difficulties in self-feeling, self-regulation, and self-organization. Given that the framework in this approach involves assessing manifestations of "self," the young individual's awareness of themselves and their attitude toward themselves as an educator, a need to interconnect oneself and the profession, personal and professional issues, individual tasks, and values with professional ones is actualized [8].

Ye. Holoborodko emphasizes: a young person's attitude toward various aspects of their "self" is formed thanks to comparing their own perceptions of themselves (real and ideal) and considering evaluations from significant individuals. The complex of these perceptions is directly related to the professional and personal growth of the teacher, their self-realization, and self-improvement. The professional-valuable self-attitude of the future teacher determines their attitude towards themselves in professional activities, the process of their professional development, self-realization, and self-development [6].

Professional-valuable self-attitude is connected with the personal and professional maturity of the future teacher. The issue of professional maturity is devoted in the works of N. Didyk, O. Kononko, O. Lukasevych, L. Ovsianetska, L. Potapchuk, L. Rybachuk, V. Semichenko, H. Sukhobska, V. Tsyna, I. Shevelyuk, and other experts.

L. Ovsianetska considers maturity as a state of complete development of the personality, their spiritual and intellectual abilities. Among the main characteristics of a mature personality identified by the expert are responsibility, the ability to actively interact with the environment, effective use of knowledge and skills, a creative approach to life, constructive solution of the complex problems on the way to self-realization, and dynamics of changes in leading motives and interests. Therefore, the author considers the maturity of the individual to be the total state of high development of the physiological, intellectual, volitional, moral and social parameters of a person. L. Ovsyanetska attributes to the main characteristics of a mature personality: a developed "self-concept", a formed value-meaning sphere of life, the ability to establish social ties, the ability to make responsible decisions and analyze their effectiveness, creative abilities, moral qualities, a formed outlook, aspirations for self-realization, the ability to overcome life crises [13].

Characterizing the individual maturity of a person, V. Haluziak includes in it the ability to: independently predict one's behavior, obtain the necessary information and analyze it, constructively solve life problems, reflect on achievements and mistakes, draw conclusions from one's own behavior, and adequately assess the results of one's own efforts. The main structural components of personal maturity identified by the author include: conscious life goals, high social status, leadership qualities, independence, confidence in one's capabilities, creativity, a desire for self-realization, achieving high results, adequate self-assessment, a friendly attitude towards people, moral and spiritual qualities, striving for self-improvement, awareness of the meaning of life, and satisfaction with it [5].

V. Tsyna interprets the concept of "personal and professional maturity" of the future educator as an integrative characteristic of the individual, evidenced by their civic, life-professional, spiritual, social, psychological, and motivational maturity, self-development and the formation of key competencies. According to the author, this complex determines the individual's readiness for professional activity and the fulfillment of a subjective pedagogical position [18].

Summarizing the scientific achievements on the mentioned issue, it can be stated that most authors note that maturity is the apogee of development, and a mature personality is characterized, above all, by a high degree of constructive independence, adequate self-concept, internal determination of behavior, conscious attitude towards life, high productivity, and moral and spiritual development. The ability to actively respond to life changes, to competently solve professional problems is connected with self-determination, the subjective potential of a future specialist.

As V. Vikhrushch emphasizes, by demonstrating independence, creativity, and the ability to take responsibility, a young person creates themselves, enriches the experience of self-analysis, and outlines paths for self-improvement. Despite the fact that the issue of reflection is one of the current topics in domestic and foreign pedagogy, the features of its development throughout the professional path, in the process of the specialist's development as a subject of reflection, remain insufficiently explored to this day. Scientists have noted a paradoxical inconsistency: on the one hand, pedagogical activity is reflective by its nature, professional reflection determines the intensity of a teacher's self-determination, contributes to their rethinking of mastery, and the ability for creativity; on the other hand, reflection as a pedagogical phenomenon becomes the subject of attention for a limited circle of researchers [19].

The phenomenon of reflection is considered in the context of various types of individual activities, analyzed within the framework of the specialist's individual experience, and actualizes the definition of factors, conditions, and methods of formation of pedagogical reflection. The works by T. Bilan, I. Bekh, S. Vaskovska, V. Vikhrushch, O. Dubaseniuk, N. Huzii, D. Humeniuk, L. Khoruzha, and others are dedicated to the issue of professional self-awareness.

According to D. Humeniuk's research, the reflective competence of a professional involves a thorough understanding of the pedagogical situation for the formation of the author's strategy (the ability to think in new, original ways), and therefore, the development of pedagogical reflection. The latter guides the specialist not only towards self-adiscovery of the essential characteristics of their professional work but also towards self-analysis of the results of its implementation. Pedagogical reflection, the ability to analyze and adequately evaluate achievements and miscalculations, respectively ensures the exploration of new non-standard ways of solving pedagogical tasks [7].

As O. Kononko points out, improving the preparation process of a future professional actualizes the need to an increase attention to the purposeful regulation by students of their emotions and behavior in personal and professional spheres of life. The author notes that most educators find it challenging to cope with tasks related to the need for predicting, constructing, and determining a course of actions. This is explained by insufficient independence, a lack of relevant experience, self-doubt, and a dependence on consciousness and behavior primarily influenced by external determinants - instructions, prescriptions, and the control of authoritative people. Furthermore, the absence in the content of professional training of higher education institutions lacks a focus on the development of auto-psychological competence among student youth as an important index of professionalism of a graduate of higher education institutions.

Characterizing auto-psychological competence as an integrative category, O. Kononko emphasizes the need to optimize the educational process, the formation of qualities important for professional activity in student youth - efficiency, accuracy, reliability, stability, self-confidence. According to the author, important indicators of the formation of auto-pedagogical competence include a valuable attitude towards the profession and oneself in pedagogical activities, high labor productivity, and positive socio-personal characteristics [9].

T. Kremeshna emphasizes: the essence of the process of forming a student's valuable attitude towards themselves and their professional activity is manifested in the transformation of professionalism as a socially significant value into a personal one, the realization in practical activities. Transforming into a personally significant value, professionalism begins to act as an internal regulator of pedagogical activity. Receiving information about the essence of professionalism, the future specialist as an active subject of educational activity analyzes it on the cognitive and emotional levels, selects what is necessary for pedagogical practice, and satisfies their need for creativity.

This specified expert associates the effectiveness of developing auto-pedagogical competence with the formation of the future professional's: creative pedagogical individuality; knowledge at theoretical and methodological levels; use of modern educational technologies; cultivation of the student's subjective position; development of their creativity; cultivation of a system of needs and values; rejection of rigid regulation of the educational

process; granting youth the right to choose; utilization of the psychophysiological potential of the individual and enrichment of individual experience. T. Kremeshna includes methods of self-education, self-organization, self-control, and self-awareness as criteria for evaluating the productivity of pedagogical activity [11].

According to the research of V. Semichenko, self-awareness as a component of auto-pedagogical competence significantly influences the overall professional orientation of a future educator. The researcher notes: spontaneous formation of professional self-awareness hinders the adaptation of young professionals, slows down the process of their self-development, and reduces motivation for further improvement themselves as a personality and a professional. The expert actualizes the need to pay more attention to the student as an individuality and a subject of the educational process, fostering their ability for self-regulation, self-realization, self-development, and reflection. The author underscores: subjectivity is a decisive characteristic of auto-pedagogical competence, manifested through the young individual's aspiration for self-realization, positive changes in themselves and the educational environment, creative solutions to pedagogical tasks, and satisfaction with the process and results of professional activity [16].

Experts note that successful realization in a profession is impossible without the development of the semantic, cognitive, behavioral, and emotional aspects of personality. Successful continuous personal and professional growth is largely determined by the degree of development of auto-competence. Thanks to this, the full disclosure of personality in professional activity takes place, acquiring an individual professional style, activating its resources, reflection, self-improvement, and self-regulation. In the structure of a teacher's auto-competence, the following components are crucial: self-control, behavior in conflict, manifestations of empathy, willingness to collaborate, ability for self-analysis, modeling and forecasting, and acmeological support.

As emphasized by O. Dubaseniuk, professional activity not only satisfies the individual's needs for development and realization of potential, achieving a certain status, but also, due to the specificity of the activity, can lead to various types of professional disruptions, professionally conditioned accentuations, professional fatigue, and decreased efficiency. By professional disruptions, the author means changes in both activity and personality that negatively affect work productivity and interaction with others. This occurs during an unproductive exit from crisis, evidenced by a negative professional stance, decreased activity, deteriorating interaction with colleagues, and etc. O. Dubaseniuk notes: significant work experience is not always an indication of high professionalism: with age, an educator may enter a state of stagnation, be subject to stereotypes, and halt their progressive movement. The author emphasizes: focusing on something else can isolate the educator from their own personality and from professional self-preservation.[14]

Therefore, to develop auto-pedagogical competence in student youth, it is important to balance internal and external vectors, harmoniously combine the development of individuality and social orientation.

3 Methods

Analysis and synthesis of the philosophical and psycho-pedagogical literature on the researched problem; observation and individual interviews with the subjects to obtain empirical data regarding the specifics of auto-pedagogical competence in future educators were used in this study.

4 Results and Discussion

This research is aimed at studying the phenomenon of auto-pedagogical competence, defining its content, structure, assessment criteria, typology, and pedagogical conditions for optimizing the formation process of the investigated

phenomenon. Auto-pedagogical competence is understood as an integrative characteristic of the professional activity of a teacher, which includes the skills of self-education, self-development, self-analysis, and reflection, as well as the ability for independent improvement and adaptation to the changing conditions of the educational process.

During the research, authors proceed from the understanding that a stable positive attitude of a student towards themselves as the subject of future professional activity indicates their personal maturity, the completion of the process of professional self-determination of a preschool education specialist, the awareness that the chosen profession has a personal meaning for him, acts as a prerequisite for the formation of self-pedagogical competence. Auto-pedagogical competence of a preschool education specialist is considered as an integrative characteristic of their personality in professional activity, with the structural components being:

- a system of conscious, broad, and deep self-knowledge as an individual prepared for pedagogical activity.
- valuable self-attitude in the context of the profession of a preschool education specialist.
- personal and professional activity demonstrated through productive subjective position, the ability to act adequately to a situation, a creative approach to educational activity and interaction, and the constructive resolution of pedagogical problems.

The auto-pedagogical competence of a preschool education specialist is a process and a result of a conscious and managed process focused on self-awareness, self-reflection, self-improvement, the development of an individual style of activity and behavior, and the formation of fundamental personal qualities relevant to the profession.

Table 1 presents criteria for assessing the level of formation of auto-pedagogical competence in preschool education specialists and indicators for each criterion.

Table 1: Criteria and indicators for assessing the level of formation of auto-pedagogical competence in preschool education specialists.

CRITERIA	INDICATORS
Self-determination	Independently chooses a profession; defines the goal, motives, means of activity, and behavior; consciously influences their outlook, subjective position, self-attitude, and attitude towards the surrounding world, lifestyle; constructs, adjusts, and realizes professional perspectives; determines their activity in various spheres of life, trusts their self-assessment; seeks to manifest their individual characteristics externally, present their own capabilities, achieve high standards of quality; realizes the meaning of their personal and professional life.
Self-organization	Organizes their life activity; acts purposefully and constructively, always brings what has been started to completion; analyzes their actions, their effectiveness, and the consequences for themselves and others; correlates prognostic assessments with real results; controls and regulates emotions, behavior, judgments; adequately evaluates achievements; acts rationally, organizes their time correctly, does not get distracted by extraneous matters, focuses on the main tasks; recognizes and corrects mistakes, if necessary, adjusts results and actions.

Problem-solving	Recognizes the existence of a problem; feels like an active subject of life; acknowledges the right to make mistakes; approaches problem-solving with honesty, without deceit or exploitation of others; makes responsible and independent choices, selects constructive ways of action, and moral forms of behavior; demonstrates initiative, self-confidence, and optimism; selects the most appropriate alternative from several, implements their intentions in life; is aware of the consequences of their decisions and their impact on others; works on self-improvement, accumulates the necessary resources, stimulates creativity; guided by conscience and life principles that have personal meaning.
Reflection	Internally determined, capable of self-reflection on personal achievements and miscalculations; observes oneself, analyzes and evaluates own actions, qualities, and behavior style; recognizes the correctness and incorrectness of own deeds, the quality of learning, and work methods; knows what comes easier and what is more difficult; draws adequate and well-founded conclusions; constructively experiences various events in personal and professional life; acknowledges own virtues and flaws; reevaluates achievements and strives to move forward; prefers comparing oneself to one's past self rather than to other people.
Self-development	Open to new experiences, seeks to gain new knowledge, and improve as a person and professional; flexible and adaptable, capable of reassessing one's point of view, reevaluating values under the influence of undeniable facts; trusts intuition and individual experience; makes thoughtful, considered decisions; strives to break free from harmful habits; seeks positive changes in personal and professional life; gracefully handles both victories and losses, self-critical, humorously deals with mistakes, calmly corrects them, not prone to unhealthy self-blame; aims to unfold and enrich one's potential; actively engages with the surrounding world, seeks harmony with oneself and the environment.

Components taken into account during the analysis of empirical data that characterize the type of self-education competence of students include:

1. *Motivational* (interest in self-education, desire for self-development, and willingness to self-improvment).
2. *Cognitive* (theoretical knowledge in the field of pedagogy, psychology, and teaching methods; understanding of personal virtues and shortcomings; adequate self-concept).
3. *Operational and Activity-related* (skills and abilities in the implementation of self-educational activity; proficiency in relevant methods and technologies; solving pedagogical tasks and addressing professional issues).
4. *Reflective* (ability to analyze and evaluate one's own activity; the capacity to adjust and optimize professional skills).

The criteria and indicators for the development of self-education competence in future preschool education professionals, as described in Table 1, served as the starting point in assessing the investigated phenomenon during the conducted exploratory experiment. The previously highlighted structural components of the studied phenomenon were taken into account. A total of 108 students from Nizhyn, Pyriatyn, and Drohobych participated in the experiment.

The main research methods included observation and surveys. Observation of the manifestations of self-pedagogical competence was carried out during the students' pedagogical practice in preschool education institutions in the process of choosing and performing tasks of a pedagogical nature. Each participant in the experiment underwent three observations, totaling 324 sessions. The observation protocols documented: independence in self-determination, organization in space and time, adequacy of response to obstacles, constructive resolution of pedagogical problems, the nature of self-analysis and evaluation of personal achievements and miscalculations, efforts for self-realization, striving for success, and improvement of results.

During the observation, it was revealed that only about a third of future preschool education specialists were characterized by high indicators of the development of self-pedagogical competence, stability in their manifestations, balanced consciousness and behavior, optimism, self-confidence, adequate self-assessment, and the desire to achieve success. At the same time, approximately two-thirds of the participants in the experiment, in situations of self-determination, mostly struggled, showed lack of self-confidence, required assistance and support from the teacher, exhibited inadequate self-assessment, highly unstable behavior, and impulsive emotions.

In order to identify the features of the development of future preschool education specialists' auto-pedagogical competence, they were asked to answer the questions of the thematic questionnaire. It consisted of eight open-ended and closed-ended questions, challenging respondents to, on the one hand, make choices from several provided alternatives (options), and on the other hand, independently formulate their own judgments about themselves as an individual and a professional. The response options from the participants are presented in Table 2.

Table 2: Quantitative distribution of response options from future preschool education specialists to the questionnaire "Me in the Profession."

QUESTIONS	RESPONSE OPTIONS	NUMBER OF RESPONDENTS (IN %)
1. Ideal of a person	Intellectual qualities	24
	Social-moral qualities	34
	Volitional qualities	18
	Physical qualities	8
	Not oriented towards an ideal	4
	No response	12
2. Ideal of an educator	Intellectual qualities	14
	Social-moral qualities	24
	Volitional qualities	12
	Physical qualities	10
	Prefessionalism	34
	Not oriented towards an ideal	4
	No response	2
3. Correspondence of profession to abilities	Fully corresponds	64
	Partially corresponds	20
	Does not correspond	10
	No response	6
4. Self-confidence	Confident	24
	Self-assured	12
	Not confident	32
	Varies	22
	No response	10
5. Reflection	Usually independently analyze, critically	26

Question	Response option	Count
	evaluate my achievements and miscalculations	32
	Occasionally reflect	18
	Rarely analyze my work, more often rely on the assessments of authoritative people	10
	Never reflect, just follow the requirements	14
	No response	
6. Conscientiousness	Always act conscientiously	18
	I try to behave conscientiously, but sometimes it turns out to be difficult	26
	I am guided more by external demands rather than a sense of conscientiousness	34
	Conscience makes it difficult to achieve desired outcomes	12
	No response	10
7. Your virtues	Intellectual qualities	24
	Social-moral qualities	38
	Volitional qualities	16
	Physical qualities	10
	No response	12
8. Your flaws	Intellectual qualities	20
	Social-moral qualities	32
	Physical qualities	24
	Domestic issues	18
	No response	10

The analysis of the response options of the future specialists made it possible to make a number of generalizations.

The respondents' responses to the *first question* related to the definition of the characteristics of an ideal person showed that the most important characteristics by which the students of the experimental group distinguish such a person from others are: socio-moral qualities (kindness, honesty, justice, responsibility, etc.); intellectual characteristics (knowledgeable, well-informed, thoughtful, creative); and willpower (endurance, perseverance, independence, confidence). Physical qualities (height, weight, appearance, clothing) proved to be significantly less essential. Interestingly, 8% of students avoided answering, and 4% indicated that they do not orient themselves towards an ideal because it does not actually exist.

Somewhat different from the previous ones were the responses to *the second question*, which concerned the image of an ideal educator. Respondents placed professionalism in the first position, understanding it as an integral characteristic of personality, their ability to systematically, effectively, and reliably perform complex teaching activity. Some respondents clarified that this refers not only to achieving high performance indicators but also to professional motivation, the meaning of work for the individual, and their professional outlook. This highlights the issue of the student youth's moral values towards themselves, teaching activities, the profession, and the world. Over a third of the respondents preferred professionalism over other qualities and attributes. Among the characteristics important for an ideal teacher, moral qualities were identified - humanity, justice, responsibility (24%). Intellectual, volitional, and physical characteristics were intermediate and received from 10% to 14% of the votes. A singular response was "I do not orient myself toward ideals" (4%), indicating the desire for independence.

Almost two-thirds of the respondents (64%) stated that they consciously chose a profession that corresponds to their abilities and preferences. At the same time, almost a third of the respondents admitted that the profession only partially (20%) or not at all (10%) corresponds to their inclinations and intentions. They acknowledged that they entered the university on the advice of their relatives or counting on the support of acquaintances. A small number of students (6%) avoided the need to answer the question, indicating a likely uncertainty on this matter.

Anxiety-inducing are the responses of the respondents to the *fourth question*, which concerned their self-assessment of the ability to feel confident in the educational process. Only about a quarter of the experimental group (24%) affirmed that they usually behave confidently, overcome obstacles on the way to their goals, and bring what they start to completion. Concurrently, 54% of students, or more than half of the respondents, indicated their uncertainty (32%) or the instability of confident behavior (22%). Uncertainty most often correlates with undesirable qualities for a future teacher, such as a low level of independence, conformity, inability to establish harmonious relationships with peers, alienation, a habit of doubting everything, risk avoidance, and inadequate self-assessment. 12% of students acknowledged themselves as self-confident, and 10% avoided answering.

Considering that auto-pedagogical competence presupposes a high level of reflective development, *the fifth question* aimed to elucidate the self-assessments of the respondents. It was revealed that slightly more than a quarter of those surveyed are capable of independently analyzing the process and results of their activity, critically assessing it, and making corrections if necessary. Almost a third of the participants were satisfied with the answer "It varies," which is equivalent to "from time to time" and indicates uncertainty in judgment. Additionally, 42% of students admitted that they rarely engage in reflection (18%), simply fulfill requirements (10%), or do not have a definite answer (14%).

Usually, a future educator who strive for self-realization and self-improvement is a conscientious person capable of internal self-regulation of behavior and activity. Conscience serves as an internal ethical authority for them. Authors were interested in how future educators relate to their conscience. It turned out that only 18% of respondents always act conscientiously, guided by fairness and common sense. This is a very low result for a future educator! 82% of students either behave conscientiously from time to time (26%), acknowledge the priority of external demands (34%), believe that conscience complicates life (12%), or simply avoid answering altogether (10%). Thus, during the formative stage, it is essential to pay due attention to the development of conscience in the respondents.

Orientation towards one's virtues and shortcomings is an important condition for the formation of auto-pedagogical competence. Concerning their virtues, more than a third of respondents (38%) primarily included moral qualities: kindness, honesty, justice, responsibility, self-criticism, sensitivity, tolerance, which can be considered a positive result. Regarding their significant virtues, 24% of students included intellectual qualities: setting achievable goals, having plans to achieve them, enjoying reasoning, quickly memorizing new information, being attentive, learning easily, dealing with abstract concepts, effectively using acquired knowledge, having problem-solving skills, being inquisitive.

There is a certain underestimation by students of the volitional qualities and their role in the formation of self-competence. Only 16% of respondents paid attention to them and attributed independence, perseverance, self-confidence, determination, and self-control to their virtues. 10% of future educators included pleasant appearance, neatness of hairstyle and clothing, a beautiful voice, and a cheerful demeanor in their virtues. 12% of respondents left the question unanswered, which is a negative factor indicating a lack of adequately formed self-assessment.

32% of respondents admitted moral shortcomings ("Insufficient sensitivity," "Rarely show kindness," and "Often act irresponsibly"). At the same time, 20% of the student yuoth complained about their intellectual qualities, including the ability

to memorize, think independently, make mistakes, and be inattentive etc. 24% of respondents attributed some physical characteristics to their shortcomings, such as "Overweight," "Clumsy," "Unpleasant appearance," and "Quiet voice." Interestingly, 18% of those surveyed classified their shortcomings not as personal qualities but as domestic issues ("Unemployment," "Lack of money," "Inability to buy clothing," "Housing problems," "Conflicts with neighbors," "Technical malfunctions," etc.) The same 10% of respondents couldn't identify their shortcomings.

Based on the observation and survey data of future specialists in preschool education and relying on identified criteria, indicators, and components, a typology of auto-pedagogical competence has been developed. It includes four main types: *creatively-personified, pragmatically-personified, destructively-personified, and reproductively-depersonified*. Each type is characterized in Table 3.

Table 3: Qualitative-quantitative characterization of types of moral position in older preschool children

Type of self-pedagogical competence	Peculiarities of consciousness and behavior of representatives of each type	Quantitative Composition (in %)
Creatively-personified	Distinguished by a harmonious combination of a value attitude towards oneself (*dignity*), towards peers (*respect*), and towards collective activities (*responsibility*). Strives to satisfy both personal and group interests, achieve success, and attain high-quality standards. Business communication is balanced with personal interactions. Acts independently, purposefully, persistently, and confidently. Creative, resourceful, conscientious. Aims for success, oriented towards high-quality standards. Has a defined circle of friends while engaging constructively with any peer, establishing humane relationships, justly distributing roles, coordinating positions, considering partner's possibilities and interests. Recognizes personal virtues and flaws, acknowledges the achievements of partners. Friendly, sincere, honest. Aware of rights and responsibilities, guided by moral norms in behavior. Communicative activity is extensive and productive; communication means are diverse, with a preference for dialogue over monologue. Inclined towards reflection, self-assessment is adequate, mostly positive, dependent more on real achievements than external judgments.	24
Pragmatically - personified	egocentric interests dominate, as well as narcissism, a desire to achieve success at any cost, and demonstrate achievements and abilities to others. Takes moral norms and social boundaries into account. The character of joint activity is determined by the partner's authority: the more influential and higher the status in the social group, the more the child takes them into consideration. Activity manifests situationally, usually higher at the beginning than at	36
	the end. When facing difficulties, easily loses confidence and readily seeks help. Acts cautiously, avoids risks, primarily follows familiar algorithms. Towards a more authoritative peer, behaves cautiously, obsequiously, tries to be helpful, pleasing, willingly complies with their demands and requests. In interactions with those weaker, may show hostility, intolerance, aggression, attempts to dominate, exploit others for personal gain. Makes deals with the partner for success, seeks advantageous conditions, resorts to cunning. Emotions are unstable, communication style varies from harmonious to conflictual depending on the satisfaction of own interests. Self-assessment is inadequate, inflated, demands are higher than the contributions of personal efforts to shared achievements.	
Destructively - personified	Demonstrative type inclined to various forms of antisocial behavior. Engages in practical and verbal actions aimed at the destruction of constructive content and harmonious interaction. Abuses rudeness, violates basic moral norms of behavior, and ignores rules and limitations. In interactions with peers, often conflicts, shows aggression, humiliates, criticizes, insults, mocks failures, and threatens. Distrustful, impulsive, internally insecure, and externally conscious violator of social norms, prone to counterproductive actions and unwillingness to fulfill the social role of a companion or a humanely oriented partner. Emotionally unstable, inconsistent in expressions and behavior. Spends some time alone, communication with peers is brief, joint activities are short-lived, and interactions often involve differences and misunderstandings. Communicative abilities are weak, and the toolkit is poor and monotonous. Eagerly asserts "rights" and at the same time easily forgets about duties and promises. Monologue dominates over dialogue. Self-assessment is undefined, unstable, and demands are unjustifiably inflated.	28
Reproductively - depersonified	Social orientation predominates over valuable self-attitude. Tries to adhere to social norms and requirements in interaction with others. Friendly but non-initiative, lacks self-confidence. More often responds to proposals to interact than initiates them. Seeks not so much to achieve success as to avoid failure. Tries not to attract attention, to remain "in the shadows." Behavior depends on the control and guidance of authoritative people – adults or	12

	more skillful peers. Avoids any problems, conflicts, and the need to solve them. Usually acts according to a pattern, chooses simple familiar tasks, avoids risks. In joint activity, almost never suggests ideas, does not make independent decisions, does not stand up for positions, is satisfied with average qualitative and quantitative indicators. In communication, acts as an executor of decisions and proposals of peers. Does not feel upset about it, feels comfortable. Does not take offense at criticism, does not take a refusal to communicate personally, easily switches attention to something else or remains an observer. Poorly orients in own virtues and flaws. The circle of communication is undefined, situational. Self-esteem is inadequate, low, and demands are low. Judgments about oneself are determined exclusively by the opinions of authoritative people.	

In order to form the auto-pedagogical competence of preschool specialists, it is advisable to:

- *work with personal goals and motivation* (students' determination of their learning goals and motivations will help to understand how to achieve them and develop professional skills);
- *use innovative learning technologies* (interactive whiteboards, computer programs, multimedia presentations);
- *growth in the specific weight of independent work* (students' independent study of the material, conducting research, data analysis, formulating conclusions);
- *constant development, enrichment of personal experience* (pedagogical practice, internship, participation in conferences, seminars, master classes, online courses, webinars, electronic library, educational platforms and social networks).

Overall, the formation of auto-pedagogical competence in future preschool educators involves creating conditions conducive to the development of self-organization, self-analysis, reflection skills, as well as providing access to various sources of information and educational resources.

Based on the analysis of scientific sources provided at the beginning of the article, we have developed and substantiated pedagogical conditions for optimizing the process of forming auto-pedagogical competence in future preschool education specialists. These include:

1. Approaching the content of education with the realities of today; ensuring a balance between the activity of students' inner world and their external behavior.
2. Cultivating self-organization, self-analysis, self-assessment, and reflection skills among student youth; shaping specific, measurable, achievable, time-bound personal goals.
3. Creating a developmental environment within higher education institutions for active exchange of experiences among students, discussion and analysis of professional issues, finding ways to solve them, and receiving feedback from both tutors and students.
4. Implementing distance and mixed learning formats for education of student youth, developing and utilizing modern information technologies and resources.

The implementation of a complex of the specified pedagogical conditions into the educational practice will contribute to optimizing the educational process and developing in future specialists in the preschool sector the ability to purposefully self-define, make independent and productive decisions, realize their potential, self-improve, and assert their dignity and personal boundaries.

This will shape auto-pedagogical competence, enhancing the ability of student youth to independently learn, regulate behavior and actions, and adequately evaluate achievements. It will help prepare highly qualified specialists capable of adapting to the rapidly changing world and effectively addressing professional challenges.

In the long-term perspective, the development of auto-pedagogical competence in future secialists in the preschool sector will contribute to the improvement of the quality of the educational process in higher education institutions, professional mobility, and self-realization of student youth. This, in turn, will modernize the educational process, introduce a systematic approach to personality development into pedagogical practice, be based on the principles of the humanistic paradigm and the principle of subjectivity, and meet society's needs for creative specialists.

5 Conclusion

The research is dedicated to the phenomenon of developing auto-pedagogical competence in future specialists in the preschool sector. By this, we mean an integrative characterization of personality, evidenced by the ability of student youth for self-organization, goal-setting, self-regulation, self-analysis, and reflection. It refers to the future educator's capacity for self-improvement as both an individual and a professional. Criteria, indicators, and components were identified to characterize the degree of formation of auto-pedagogical competence in students. An author's typology of the investigated phenomenon was developed and justified, including creative-personified, pragmatic-personified, destructive-personified, and reproductive-depersonified types. Pedagogical conditions for optimizing the process of forming auto-pedagogical competence include: 1. Aligning the content of education with the realities of today; ensuring a balance between the activity of the inner world and the external behavior of students. 2. Engaging student youth in the manifestation of self-organization, self-analysis, self-assessment, and reflection skills; formation of specific, measurable, achievable, time-bound personal goals. 3.Creating a developmental environment within higher education institutions for active exchange of experiences among students, discussion and analysis of professional issues, finding ways to address them, and receiving feedback from both instructors and students. 4. Implementing distance and blended learning formats for student education, developing and utilizing modern information technologies and resources.

Prospective directions for further development of auto-pedagogical competence in preschool education specialists involve expanding the geographical scope of diagnostic procedures, creating a model for effectively fostering students' aspirations for self-improvement in both personal and professional qualities, and developing methodological support for this specific area of work.

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INNOVATIVE TECHNOLOGIES FOR THE TRAINING OF CIVIL SERVANTS IN UKRAINE

[a]IVAN LOPUSHYNSKYI, [b]YAROSLAV ARABCHUK,
[c]OLEKSANDR BILOTSKYI, [d]IRYNA OZMINSKA,
[e]NATALIIA STRUK, [f]VASYL ANDREEV

[a-e]*Ivano-Frankivsk National Technical University of Oil and Gas, Karpatska Str., 76019, Ivano-Frankivsk, Ukraine*
[f]*Chairman of the Trade Union of Construction and Construction Materials Industry Workers of Ukraine, 2, Maidan Nezalezhnosti, 01001, Kyiv, Ukraine*
*e-mail: [a]doctordumeta.ua@meta.ua,
[b]yaroslav.arabcchuk@gmail.com, [c]bilotsky.s@ukr.net,
[d]ira.dzvinka@ukr.net, [e]struk.np@gmail.com,
[f]vasyl_andreiyev@ukr.net*

Abstract: Modern conditions for the development of statehood place high demands on the formation of a highly professional corps of state and municipal employees. One of the priority areas is the innovative education of high-quality, highly qualified and competitive young personnel. The innovative orientation of personnel policy in the public service system involves the development of professional qualities of the state personnel corps in order to bring them into line with the renewed tasks of the state in managing transforming social relations. The article examines the problems and challenges in the field of training civil servants in Ukraine. Based on analysis of the experience of developed countries, as well as taking into account modern realities and prospects for the civil service, directions for improving pedagogical technologies for training civil servants in Ukraine are proposed.

Keywords: civil servants; public service; management; professional training; computer technologies.

1 Introduction

At the end of the 20th and beginning of the 21st century, the volume and complexity of tasks that government bodies have to solve have increased significantly. As a result, a crisis arose, generated by the failure of the bureaucratic system. In addition, there has been a de-professionalization of the civil service to some extent: enterprising-minded professionals are leaving for commercial structures, and their place is often taken by random people who have not previously had anything to do with the civil service. Hence the need arises to train a new generation of specialists who understand the most important principles and methods of managing economic, social, political, and other processes.

The information society, to which many countries of the world are already moving today, has two important characteristics: firstly, a change in management processes due to the ability to use complex information and communication systems, as a result of the transformation of new "intelligent technology" into a key tool for system analysis and adoption theory solutions, secondly, the widespread use of developed technologies of information interaction in the mechanisms of organization and self-organization of society. This entails a revision of approaches to the organization of effective administrative management and organization related to the readiness of organizational structures for innovation, the use of intellectual technologies in official activities, as well as technologies for partnership interaction with social structures.

The development of the civil service and the training of qualified personnel for it are organically interconnected. Modern Ukrainian society needs talented statesmen with a special type of professional consciousness, focused in their activities on a real person and his life problems, focused on mastering productive forms and methods of working with people. This is accessible to people who are comprehensively educated, well-oriented in matters of human knowledge, and have high spiritual values and moral qualities. In this regard, the logic and technology of professional education and development of civil servants acquire great importance. Updating its content and structure focuses on a fundamentally different teaching methodology: technologization of human knowledge, mastering the mechanisms of influencing people's consciousness, mastering specific technologies of professional activity [2; 3]. A holistic system for the development of professionalism of civil servants must take into account the fundamental stages of changes in the life of society, and be correlated in its content and practical implementation with the structure, functions, and specifics of the activities of civil servants. At the same time, there is a need to update and enrich training programs with innovative interactive technologies that increase the efficiency of mastering theoretical material, developing practical skills, abilities, developing intellectual abilities and social qualities of the personality of a future specialist.

In modern conditions of development of Ukrainian society, the activities of civil servants represent a multidimensional phenomenon, manifested in two constantly interacting dimensions - objective and subjective. It can be considered both as a science and as an art of managing relationships, implementing interests, as well as conquering, using power and pursuing the line of a subject of activity, which at the same time acts as a "calling" and "profession". As a historically established type of social activity, the activities of civil servants are not a 'frozen' formation and are subject to contradictions and changes. The subject of activity of civil servants is the life support of people, possession of state power, participation in its implementation, determination of prospects and directions of social development, management of socio-economic processes.

The activities of civil servants are divided into theoretical and practical. Being relatively independent, they are interdependent: the theory becomes effective and efficient when it is based on the practical experience of people and coincides with their true needs and interests. While basic definitions corresponding to any forms of human spiritual activity - cognitive, prognostic, value-oriented - are sufficient to characterize the theoretical activities of civil servants, the practical activities of civil servants are characterized by an extensive list of features reflecting its specificity.

State and municipal management requires the training of specialists with systems thinking, economic knowledge, managerial and legal culture, psychological stability, the ability to work in crisis, extreme situations, characterized by a concentration on increasingly new opportunities, and a desire for continuous professional development. The knowledge and skills of civil servants required for modern governance are not isolated to one area, but are universally needed to influence public policy and implementation in a global society. That is why it is important that civil servants have fundamental knowledge in a wide range of new areas of knowledge (digitalization, modern management methods, leadership, etc.). Gaining leadership and management experience is important for every employee. Civil servants often do not have enough information and knowledge to respond to a specific situation, so training is vital for civil servants in such circumstances. In particular, public servants should be capable of speaking 'common language' with business. Donahue and Zeckhauser [10] emphasize that "private engagement in public missions - rightly structured and skillfully managed - is not so much an alternative to government as the way smart government ought to operate. The key is to carefully and strategically grant discretion to private entities, whether for-profit or nonprofit, in ways that simultaneously motivate and empower them to create public value".

The reorientation of executive power to manage more complex social processes and various objects of the socio-economic and cultural sphere places higher demands on the professional training of state and municipal employees [1; 8]. Multi-level training of specialists in state and municipal administration, proper use of human resources in this area, and the formation of a modern, highly effective state and municipal service are now considered one of the priority national tasks. Its solving determines whether the economic, political, and socio-cultural reform of Ukraine will take place in the process of European integration, its establishment as a truly democratic European state governed by the rule of law.

2 Materials and Methods

The methodological basis of the study is the dialectical method, which allows taking into account the numerous relationships and interdependencies of the phenomena under consideration, and objectively assessing the need for professionalization of civil servants as a condition for increasing the efficiency of the public service. The basic methodology of the article was the general theory of systems within the framework of the analysis of systems of social nature from the perspective of the category "social management", which makes it possible to identify the modern general system of social management. Also, the methodological basis of the study was the theory of self-organizing systems, principles of consistency, methodological pluralism, philosophical concept of the information society, elements of andragogy theory.

3 Results and Discussion

Professional development of a civil servant is the purpose, meaning, and value of his professional culture as a personality and as a specific specialist; it is a complex, contradictory, and multifaceted process consisting of personal, professional and expert development, determined, as a rule, by social, professional-technological, age-related, personal, leading individual-psychological, professionally important and expert qualities and traits, has an open, uneven and heterochronic character. It represents the result of a constant search for an answer to the essence of contradictions (external and internal personal) that constantly arise in professional activity, and the specialist's efforts to solve or remove them; it is a necessary condition for the successful professional activity of a specialist, a necessary condition for personal and professional self-actualization of a future civil servant in professional activity [21; 35; 58].

Meanwhile, there are many gaps in the modern system of professional training of civil servants of Ukraine. The general disadvantages of this system are as follows:

▪ Firstly, lack of competition between state and non-state educational institutions for the right to receive a state order for professional training and advanced training of civil servants;
▪ Secondly, complete subordination of educational institutions to their customers, which constrains the initiative of educational institutions;
▪ Thirdly, the widespread and not always justified involvement of civil servants who do not have scientific degrees to participate in educational programs as teachers;
▪ Fourth, the disconnection of the system of advanced professional education of employees from practice and from the general education system provided by the Ministry of Education and Science of Ukraine. This gives rise to insufficient coordination with the general educational standards of teaching general humanitarian disciplines, which excessively reduces the quality of training;
▪ Fifthly, problems regarding the quality of the development of the legal framework for professional training, retraining and advanced training of civil servants: the fragmentation of regulation and the legal uncertainty of many concepts of the professional development of civil servants (for example, in the issue what kind of education is required for civil servants of a certain rank and holding a certain position);
▪ Sixth, lack of systemic formation and development of the educational system, with the help of which professional training and retraining of civil service personnel should be carried out.

The civil service reform in Ukraine was launched at the end of 2015. In 2015, the Verkhovna Rada adopted a new law on civil service. One of the transformations that should take place in this area is a change in the system of motivating civil servants to professional development and training. Civil servants must periodically undergo advanced training courses. However, the range of courses, forms of training and providers of such services was limited.

By Resolution No. 106 of February 6, 2019, the Cabinet of Ministers changed the system of professional training of civil servants and representatives of other central and local authorities [60; 61]. It is based on the European Credit Transfer and Accumulation System (ECTS). The credits of such a system will be the units of measurement of the volume of the educational load. The volume of one ECTS credit is 30 hours.

However, it is obvious that the reforms will not bring the desired result without the introduction of innovative training programs for civil servants. When determining the conceptual foundations of the development of professional training of civil servants, it is impossible to limit oneself only to the solution of current issues [65]. The main factor in improving the system of their training is the use of competencies to determine needs and conduct training activities that correspond to the individual's ability to perform various tasks.

O. Khrushch [25, p. 77] notes that with regard to the quality of education, as practice shows, it is not enough for civil servants to get an education in the field of public administration and law. The complex of knowledge that was obtained in an educational institution five or ten years ago is not enough to make rational and constructive decisions in the future. In this regard, in the legislation regulating the field of professional development of employees and the activities of state bodies, considerable attention is paid to the issue of specialized systematic training of employees. However, graduates of recent years also do not possess the entire set of necessary competencies. In today's turbulent social and political environment, they are often unable to adequately assess all factors of the situation and make the optimal decision. In this context, it is advisable to consider the experience of countries with the most effective public administration systems.

Currently in Great Britain, according to some data, about 25% of government officials are specialists in various fields of law, economics, and science. The demand for such personnel is constantly growing: they make up about 60% of government officials. But in general, the so-called "generalists", i.e., professional managers, predominate in the state apparatus - they number about 75% [28]. The UK experience allows emphasizing that the content of curricula should be correlated with the goals of current policy; it is advisable to create a system of indicators for the continuous assessment of the competence of civil servants based on clearly developed criteria and the obligation to constantly improve the level of professionalism; it is important to create and develop a wide network of specialized courses and seminars that meet the needs of dynamically developing public policy [28].

In Germany, where civil servants include not only government officials, but also teachers, university professors, bank employees, and other categories of citizens, they are required to have a certain level of professional education and preliminary training, the type and duration of which is differentiated depending on the level of service provisions [63; 64]. Continuous education is a mandatory condition for advancement in the civil service in Germany. Therefore, a wide range of training programs accompanies the official throughout his career. Germany has long been a trendsetter in the development of public administration as an academic discipline with an emphasis on the legal component. However, at present, German universities are establishing a tradition of training specialists on the basis of an interdisciplinary approach, a balanced version of curricula, where great importance is attached to the study of economic disciplines [9].

In France and the USA, a unified network of specialized institutions for training and advanced training of officials is widely developed [51; 53]. The most famous and frequently visited of them are: the National School of Administration or the School of Public Administration (Ecole nationale d'Administration) (it is training directly civil servants of the

highest categories and groups of positions), Center for Leadership Development (developing key qualifications of managers for at any stage of career), National Center for Distance Learning (CNED) (the center's activities are aimed at saving time resources; it serves to popularize the practical experience of the center at the international level and takes an active part in European programs (experience exchange): online seminars, electronic lectures, advanced training programs, modules, mini-MBA) [14].

The special social significance and specificity of the activity to ensure the execution of state functions and powers of state bodies is such that its performers can be united into a special social group - the profession of "civil servant" with its own system of professional socialization (including vocational training), a special professional culture.

Modern times require new staffing and increased professionalism of civil service personnel [48; 49]. In the context of the development of Ukrainian statehood and the European integration processes of statehood and civil society institutions, an updated system for training public management personnel is needed, more responsive to new social challenges and institutional reforms being carried out in Ukraine.

The training of managers should be based on the use of the latest forms, methods, and technologies of training. The civil service is in dire need of a comprehensive development of a system of professional education for its employees [4-7]. Its organization is the most important task for the public administration system of modern Ukraine: after all, the effectiveness of the activities of government bodies directly depends on the level of professionalism of employees.

Back in the early 1980s, research emerged that relied on the activity-based approach to learning. These include the works of D.A. Kolb et al. (Kolb, Boyatzis, Mainemelis, 1984), B. McCarthy (2010), and others who developed the theory of experimental learning (learning by experience). Thus, Kolb's four-stage cyclic learning theory or experiential learning theory combines experience, perception, cognition, and behavior change (Kolb, 1984) and consists of four stages [54-57]. The first is Concrete Experience (CE) - training aimed at acquiring first-hand experience or new experience, during which the ability to perceive new things appears. The second stage is Reflective Observation (RO) - turning to experience, consciously reflecting on its results, in the process of which the ability to reflect and interpret existing knowledge and experience develops [11-13]. The third stage is Abstract Conceptualization (AC) – summing up the results of the work, an attempt to conceptualize experience, propose a hypothesis or theory, or form a model of action, rules for making decisions in similar situations. At this stage, the following skill are developed: the skill of accumulating received information and adding new information; the skill to think systematically and holistically, purposefully and logically; the skill to generate ideas, identify contradictions and build relationships; the skill to formulate concepts, theories, models that describe the structure and operating processes of the object being studied [41-46]. The fourth stage is Active Experimentation (AE) – testing a theory or model in practice, planning upcoming experiences, changing the rules of behavior. This leads to the formation of the ability to draw conclusions based on theoretical knowledge, solve practical problems, test models for applicability in practice, and develop new experience. D. Kolb's training cycle has found application in training systems, as written by B. McCarthy (2010) and other authors. For example, McCarthy proposed an additional tool - 4MAT (from the word "matter") - a system of questions for going through the four stages of the Kolb cycle, taking into account the learning styles he identified and the use of D. McClelland's model to motivate training participants [50].

In particular, understanding the theoretical and methodological foundations of training is of fundamental importance when using gaming technologies in the process of training personnel in state and municipal services. These technologies are aimed at maximum assimilation of theoretical material by students,

practical testing of methodological tools and step-by-step involvement of the entire audience in the learning process, regardless of individual learning style [15-18]. They are able to maximize the effectiveness of educational activities of the academic type, quasi-professional, educational-professional and professional.

A comparative analysis of competencies formed by gaming technologies showed that business games are the most effective [62]. They are the ones which make it possible to iplement professional competencies in the field of state and municipal management in a whole set of activities: administrative and technological, design and research. It should be noted that the process of developing professional competencies through business games among future leaders in the field of state and municipal management includes, first of all, a research and design component [19; 20]. The situations simulated in the business game assume:

1) Development of research competencies in students based on a theoretical study of trends in state and municipal management as a scientific direction; developing awareness of paradigms and subject fields that relate to modern theoretical models; familiarization with analytical tools;
2) Formation of project competencies based on mastery of tools for analyzing the practice of state and municipal management, models for posing problems and their solutions, and generalizing best practices.

The tools of modern management processes - New Public Management and Good Governance - continue to be improved [23; 24]. It can be successfully recreated when simulating a real situation in the form of virtual business games, in particular such as: a cooperation game (reaching an agreement on the implementation of a project on the terms of a public-private partnership in the municipality), a competition game (developing alternative strategies in one of the aspects development of a municipality), a conflict game (based on modeling the situation of locating an environmentally hazardous enterprise on the territory of a municipality), etc. [35]. Knowledge of analytical tools allows students, within the framework of business games, to model the organizational structures of executive authorities on a new qualitative basis, to improve administrative processes, personnel management technologies, to develop skills in interaction between government bodies and civil society institutions and the population, to gain skills in assessing regulatory impact, using tools for anti-crisis management of a municipal formation.

It is fundamentally important that the business game is based on real managerial, social, and economic situations, and that the selected tools correspond to current trends in scientific research and best practices in state and municipal management.

When modeling business games, the characteristics of research problems, the choice of research object and analytical tools for assessing the situation and making decisions by business game participants and experts are of great importance. As the experience of using various forms of gaming technologies for training civil servants in Western Europe and the USA shows, they make it possible to develop the following professional competencies (see Table 1 below) [22].

Table 1: Professional competencies of graduates studying in the field of study "State and Municipal Management", formed through the use of business games

Types of gaming technologies	Characteristics of the type of gaming technology	Professional competencies formed through this type of gaming technology
Didactic games	Strictly regulated and do not imply the development of a logical chain to solve the problem	*Administrative and technological activities*: – mastery of modern methods of diagnosis, analysis, and soving of socio-economic problems – ability to critically use

		information and constructively make decisions based on analysis and synthesis
Case technologies	Analyzing simulated or real situations and finding a solution. *Approaches to compiling cases:* 1) American school: involves searching for the only correct solution to a given problem; 2) European school: emphasizes the versatility of decisions and their justification	*Administrative and technological activities:* – ability to critically use information and constructively make decisions based on analysis and synthesis. *Project activities:* – ability to use knowledge of methods and theories of the humanities, social and economic sciences when carrying out expert and analytical work
Computer games	Analysis of simulated or real situations and search for optimal solutions using computer technology	*Administrative and technological activities:* – ability to critically use information and constructively make decisions based on analysis and synthesis *Research and teaching activities:* – possession of methods and tools that contribute to the intensification of cognitive activity
Basket method	Imitation of situation	*Administrative and technological activities:* – mastery of modern methods of diagnosis, analysis, and solving of socio-economic problems
Business games	Modeling of professional activities in the field of state and municipal management, reconstruction of problem situations and interaction of players as a condition for making agreed decisions	*Administrative and technological activities:* – knowledge of modern methods of diagnosis, analysis and solution of socio-economic problems, as well as methods of decision-making and their implementation in practice; – ability to critically use information and constructively make decisions based on analysis and synthesis *Project activities:* – the ability to systematize and summarize information, prepare proposals for improving the system of state and municipal government; – the ability to put forward innovative ideas and non-standard approaches to their implementation; – the ability to use knowledge of methods and theories of the humanities, social and economic sciences when carrying out expert and analytical work *Research and teaching activities:* – possession of methods and specialized tools for analytical work and scientific research; – mastery of methods for analyzing the economy of the public sector, macroeconomic approaches to explaining the functions and activities of the state

During the business game, it is necessary to implement certain organizational, psychological, and pedagogical principles, namely: simulation modeling of the content of professional activities in the field of state and municipal management;

recreating problem situations typical for a given professional activity; interaction of players as a condition for making agreed decisions; two-dimensionality of the game [36-39]. Moreover, during the business game, it is desirable to formalize the problem by constructing an economic and mathematical model (if this is possible in accordance with the conditions of the business game). Students can be asked to choose the optimal one from a variety of acceptable solutions - one that corresponds to the logic of common sense, taking into account the restrictions imposed by the game situation (budgetary, legal, resource, etc.), as well as established efficiency criteria (social, economic, budgetary, etc.) [26; 27]. These criteria reflect the degree of compliance of the results of solving the set goal and at the same time are a means of assessing the correctness of the measures proposed by students.

At the present stage, a special place in the development of professional competencies among students in the field of study "State and Municipal Management" is occupied by information and methodological support, methods and models for optimizing management decisions that students use within the framework of a business game, as well as the information technologies they use. During the business game, it is desirable to formalize the problem by constructing an economic and mathematical model (if this is possible in accordance with the conditions of the business game) [29-31]. Students can be asked to choose the optimal one from a variety of acceptable solutions - one that corresponds to the logic of common sense, taking into account the restrictions imposed by the game situation (budgetary, legal, resource, etc.), as well as established efficiency criteria (social, economic, budgetary, etc.). These criteria reflect the degree of compliance of the results of solving the set goal and at the same time are a means of assessing the correctness of the measures proposed by students.

It is fundamentally important that the business game is based on real managerial, social and economic situations, and that the selected tools correspond to current trends in scientific research and best practices in public administration [32-34]. An example of a business game could be "Comprehensive investment plan for the socio-economic development of a monofunctional smart city", with the goal of the game being to train students in diagnostic methods and technologies for comprehensive investment planning for the socio-economic development of a monofunctional city to develop measures that contribute to its transition from critical to stable condition.

One should note the large-scale introduction of new technologies in the field of public administration. In particular, the practice of public administration in the most developed countries is already demonstrating pilot projects for adapting augmented reality technologies to the goals and objectives of managing a modern state [52]:

There is professional training and education for civil servants using AR technologies, aimed at optimizing financial costs and standardizing educational AR products. Thus, in the United States, more than 2.1 million people work in the structure of executive bodies of government and government from local to federal levels. Training this vast number of employees for their multiple job responsibilities is one of the most costly and time-consuming tasks in the public sector [40]. AR applications, training programs and simulators provide AR access to information materials and virtual models of material infrastructure objects, for example, buildings and structures, industrial equipment, etc. Interactive training with AR support will allow students to virtually simulate scenarios for the development of various situations and problem solving, that they may encounter in the workplace.

Today reality requires skillful combination of traditional and technology-based learning in the sphere of public servants training (see Figure 1 below).

Figure 1. Combination of conventional and technology-driven learning [59]

The use of digital platforms in training, AR, VR, and computer games should be combined with effective "offline" methods - case studies, business games, etc.

Modern conditions dictate new requirements for managers and specialists involved in the system of public authority. A civil servant, official, government representative, firstly, must be able to think systematically. Secondly, he must be aware of the "rules of the game", that is, understand and analyze the significance and cause-and-effect relationships of professional decisions, his place in the public administration system and the patterns of functioning of the system itself [10; 47]. And finally, a civil servant must possess work skills, that is, those unique professional competencies that are developed only in the process of practical real actions. Virtual computer educational simulators allow to painlessly, that is, without real mistakes and negative results, train professional competencies necessary in the work of government agencies.

Augmented reality at first glance may not seem as universal as virtual reality, but it can bring more tangible benefits in the field of public administration, including in the process of training future civil servants, associated with the circulation of not only data, but also the transformation of material reality. The potential for its practical application is related to the fact that it can extrapolate elements of the virtual world of data to the real world of material objects, supplementing these objects with digital "add-ons" or "markers" that we are able to see, hear or even feel using mobile devices. The main motive for the introduction of augmented reality technologies in the field of public administration is the need to visualize increasingly complex and diverse secondary information - a world of large volumes of data, formed on the basis of the collection and statistical analysis of primary data, in order to make more effective management decisions. Achieving this goal involves solving a number of particular tasks, such as collecting primary information, its classification and storage, distribution between the structural divisions of the government body and its employees, preparation for processing, transformation, presentation in visualized form, providing direct and feedback links both with executors of government decisions and with consumers of government services.

The very possibility of layering a virtual projection onto the real world will allow making the work of a civil servant faster and more efficient, teaching him safe ways to work with information through individualized and interactive training, modeling dangerous situations and solving cases, and reducing the cost of training civil servants.

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Primary Paper Section: A

Secondary Paper Section: AE, AM

FORMATION OF THE INFORMATION SPACE AS AN ELEMENT OF UKRAINE'S HUMANITARIAN POLICY IN THE CONTEXT OF EUROPEAN INTEGRATION

[a]TETIANA PALAMARCHUK, [b]PETRO OPANASHCHUK, [c]OKSANA LYTVYNCHUK, [d]YEVHENII TARAN, [e]VIRA KUDLACH, [f]VASYL ANDREEV

[a,b,d]*Taras Shevchenko National University of Kyiv, 60, Volodymyrska Str., 01033, Kyiv, Ukraine*
[c]*Zhytomyr Polytechnic State University, 103, Street Chudnivska, 10005, Zhytomyr, Ukraine*
[e]*Ivano-Frankivsk National Technical University of Oil and Gas, Karpatska Str., 76019, Ivano-Frankivsk, Ukraine*
[f]*Chairman of the Trade Union of Construction and Construction Materials Industry Workers of Ukraine, 2, Maidan Nezalezhnosti, 01001, Kyiv, Ukraine*
e-mail: [a]*tetiiana.palamarchuk@knu.ua,*
[b]*OpanaschukPetro@gmail.com,* [c]*oksana.litva@ukr.net,*
[d]*yevheniii.taran@knu.ua,* [e]*vira.2566@ukr.net,*
[f]*vasyl_andreiyev@ukr.net*

Abstract: The article examines conceptual features of information space transformations in postclassical era and its implications for Ukraine within the process of European integration of the country. The key concerns of today's information space in Ukraine in its connection with humanitarian policy are considered. The presence of the phenomenon of paradigm shift in the information space caused by war, and the necessity of changing methods of organizing this space as an element of the humanitarian policy of Ukraine, taking into account national realities and the process of European integration, is noted.

Keywords: information space; media; journalism; mediaspace; paradigm shift.

1 Introduction

The relevance of the research topic is due to the need for scientific analysis and philosophical understanding of large-scale social and cultural changes occurring in the modern world under the influence of the processes of informatization and globalization. The development of information technology, media and electronic communication gives rise to global changes that modern society has been undergoing over the past decades. The transformation of culture, the emergence of new cultural practices, changes in the information space of modern society lead to the formation of a new system of values, the formation of the latest cognitive and practical priorities, which have a significant impact on human social behavior, on the development of the economic and political system, on the functioning of almost all social institutions. The study of new value priorities, updated by cultural innovations, is also one of the priority tasks of modern social philosophy.

Culture, politics, and economics in the modern information society are exposed to multiple dangers and risks associated with the use of information in the interests of certain power groups, or deliberate distortion of information. These problems oblige researchers to rethink the prospects for the development of culture in the conditions of the dominance of electronic communications, and also force them to adequately assess the capabilities of a new type of information space and create the necessary conditions for the implementation of its positive potential.

Identifying the socio-ontological status of the information society in the social order of today's society is impossible without understanding the mechanisms of the dynamics of transformation processes evolving along with the developing society. The solution to this task is possible only with the formation of an integrated systematic approach based on the synthesis of theories, principles, techniques of the above directions, capable of providing both an increase in socio-philosophical knowledge and the utilitarian effectiveness of the practical design and management of transformation processes.

Ukraine has long chosen the path to European integration, which consists not only in economic cooperation and improvement of legal norms, but also in Ukraine's entry into the information space of the EU for the purpose of information exchange, ensuring information security and mutual cultural enrichment, popularizing Ukrainian culture and national values. It is especially important to cooperate and integrate the information spaces of Ukraine and the EU now, during a full-scale war started by the Russian Federation.

In the European information space, there is a powerful legal framework that regulates the functioning of the space itself, the use of information products, the protection of intellectual property rights, as well as compliance with security requirements [7]. Legal support for the functioning and openness of state information resources is a necessary condition for the integration of the unified information space of Ukraine with the European and world information space. The organizational basis of the information space concerns the functioning of state and non-state bodies for the formation of information policy and ensuring information security, the procedure for the functioning of information in mass media and other information sources, contains requirements for the reliability of information and, in general, is little different from the organizational foundations of the modern Ukrainian information space. The information space as a set of information processes in society determines the political, economic, social, security and cultural potential of society. The information space will be effective if it is open to society, which, in turn, will make it possible to comprehensively and systematically implement the agreed interests of citizens, society, and the state, that is, if the development of this space will take place on the basis of humanization.

A new information context of reality is being formed. Thus, the formulation of the problem of the humanistic trends spread in the study of information space in a wide range of interests of the social and humanities corresponds to modern directions of interdisciplinary approaches. At the same time, the process of social management of any complex object, including the information space, is effective when applying special management principles that take into account its structure and the functional connections of its main components in dynamics.

2 Method

The main methodological principle of the work is the principle of complementarity, which allows generalizing the results of disciplinary research and give them philosophical significance. The basis of the research was the methods of comparative analysis, unity of the abstract and concrete, logical and historical, comprehensiveness, realism, objectivity of consideration, and integrity.

3 Results and Discussion

The emergence of the very concept of "information space" is due to the increased need of society for continuous information. In addition, the formation of the "information society" is closely related to the introduction of innovative technologies that have reduced the time of delivery of information to the audience, making it possible to keep abreast of all the events that are happening at a given moment.

The realities of information society demonstrate a new quality of development of the social system. An essential factor determining all processes in society is the ever-increasing role of the media and communication. They are included in the dynamics of all processes of transformation of the economy, politics, social and cultural life, and undergo processes of social evolution corresponding to the system. Moreover, the media themselves are a complexly organized system that functions according to general and specific laws inherent only to it. The representation of human existence in other, more complex, sign and symbolic systems requires the mobilization of not only epistemological and rational ways of comprehending reality. Redundancy of information, randomness and unevenness of its

demand by subjects of the communication process significantly complicate the adequacy of the "translation" of the socially significant content of the information message [8].

The image of reality created by the media system in the era of the dominance of information technology is a special type of reality - virtual sociocultural reality. Presented in the form of a picture of the world, it plays a key role in the self-determination of modern humanity [1; 3; 4]. The role of sociocultural reality created by journalism is so great that understanding the mechanism of its formation and functioning can be attributed to the formation of a strategy for the survival of humanity in the information age, and should definitely be considered as an object of humanitarian policy [19].

The functioning of media occurs in social space, while spatiality is one of the main characteristics of social existence, and social theory in its development faced the need to interpret social reality in a spatial context. Media space, as part of the social space, carries within itself the features of constructive social activity, certain vital meanings that are important for the social subject. In the era of industrial modernity, interpretations of media space were possible based on the views of the founder of "social geometry" Ritzer, as well as Simmel, who believed that the filling of social space is the result of social interaction and is a consequence of the sensory perception of individuals. The views of Dürkheim developed in the same direction – he was noting that the differentiation and heterogeneity of social space has a value-normative basis, and its spatial organization is a form of representation of social organization [13]. Here we would also include P. Sorokin's ideas about social space – he considered it as a factor in the preservation of collective unities from the point of view of integralism [20].

The identified sociological approaches to the interpretation of space belong to the first, industrial modernity. Based on them, it can be argued that during that historical period, changes in the social space itself occurred relatively slowly and with the dominance of linear trends [25-27]. This largely determined the qualities of the media space of the era of industrialism: 1) it had fairly clear boundaries determined by national cultures; 2) occurred at a time measured by a strictly defined system of units of reference adopted in a given culture; 3) all meaning-producing institutions created practically uniform values and norms, which shaped the generally predictable behavior of people, differed by their belonging to different social groups; 4) the general character of space was determined by fluctuation trends between ideological and sensual cultures; 5) in any case, such a media space formed individuals as objects of control.

The nature of space began to change radically during the period when society entered the second, reflexive modernity. Its structures, including the media space, increasingly acquired reflexive qualities, which, accordingly, began to affect the nature of people - individuals became not only objects, but also subjects, and then actors, which required the development of fundamentally new approaches to managing them.

These circumstances demanded a rethinking of the concept of space. In recent decades, space has acquired the status of a particularly significant sociological category [6-9]. The history of science teaches us that behind any "turn" in science we should look for a crisis of "old" realities and a transition to new ones. If we try to find the most general formulation to describe the crisis with which the proliferation of "turns" in modern social and humanitarian research is associated, then it will probably turn out to be a "crisis of individual and collective identity", marking a qualitatively new stage in the development of society, which Buber would call "the era of homelessness" [11]. Reflexive realities subject the "home" to dispersion. Essentially, the space of "home" with its rather rigid and stable qualities disappears.

The "home" we are accustomed to has now practically disappeared. The modern "home" is formed by a reflexive media space - its qualities become, according to Z. Baumann's definition, so "fluid" that it gives grounds to talk about the affirmation of the space of homelessness [6]. Thus, any major

change in the direction of research in social and humanities turns out to be a practical necessity realized by scientists, dictated by the increasingly complex dynamics of modern society of reflexive modernity and the changes associated with it: crises, collisions, traumas, ruptures and contradictions of practical life.

The position on the need to take into account the qualitatively new spatial aspect of human existence should be understood taking into account several points: the emphasis shifts from space in itself as a subject of study to a reflective, establishing space; establishing, according to P. Sztompka's definition, is the result of modern, increasingly complex dynamics that give society a characteristic one, previously unseen feature of constant incomplete development, which is manifested in the enormous variety and diversity of forms of social life [22].

The formation of an information society, based on the transformation of information, information systems and technologies into a system-forming element of all spheres of human activity, not only ensured a rapid increase in its productivity, but also gave rise to a wide range of new problems associated with the use of information [13; 14]. The constantly growing information problems include the development of information and political threats that violate the political security of the country.

A refined understanding of information and political security is a complex problem that consists in protecting the vital interests of citizens, the state and post-industrial society as a whole in the political sphere from internal and external information and political threats [17; 21]. This clarification allows considering information and political security somewhat more broadly: firstly, by including within the framework of this definition the political activities of citizens, organizations and the state; secondly, by taking into account the information factor in the process of forming political threats, the influence of which on the state in recent years significantly exceeds purely sectoral effects and is one of the most important factors contributing to the solution of key tasks of state policy.

Previously, one of the main sources of increased conflict in the political space was the desire of political subjects to possess significant political resources. Nowadays, this reason is the desire to possess information resources that are significant from a political point of view [18-20]. The elite, which has greater access to information resources than other political actors, is becoming the new dominant class of society. Such an increase in the importance of the information foundations of political life contributes to the transformation of modern political space into a complexly organized system, one of the main content elements of which is the political and information space.

The effectiveness of measures to prevent political threats will largely depend on the knowledge of the environment where they are implemented. A significant part of the environment under consideration is occupied by the information space. The information space is usually understood as a set of databases and data banks, information and telecommunication networks and systems, as well as technologies for their use, operating on the basis of general principles and according to rules that ensure information interaction between organizations and citizens, as well as their information needs [1]. In addition, a number of authors include information objects in the information space, which are data formed according to certain rules and interpreted by the information system as a single whole [4].

In a philosophical plane, the change in relationship between information systems (space) development paradigms and methods is presented in Figure 1 below. Today understanding of information space, although it evidently gravitates towards neohumanism, still contains other three 'visions' – functionalism, social relativism, and radical structuralism. It is especially evident during social upheavals and war conflicts, and Ukraine represents a bright example here: during current war, democratic neohumanistic principles of information space, based on both journalistic ethics and constitutional state, sometimes gives place to purely functionalism approach, or to radical

structuralism and even social relativism, with manipulation of public opinion.
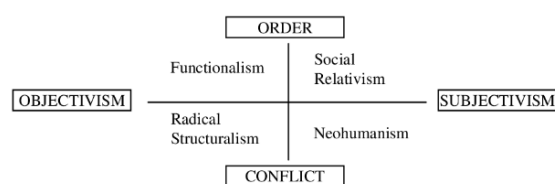

Figure 1. Relationship between information systems (space) development paradigms and methods [14]

The Ukrainian state is included in the process of universal informatization of society and the formation of a single world information market. Such transformations have led to the fact that currently ensuring the information security of Ukraine as an integral element of its national security is becoming increasingly urgent, and information protection is becoming one of the priority government tasks [28-30]. The problem of creating and maintaining a secure environment for information exchange, which determines certain rules and security policies of a modern state, is very relevant, since today information and information technology are becoming the main strategic national resource, the basis of the economic and defense power of the state. Information in the modern world is an attribute on which the efficiency of life in modern society largely depends.

The universality of the information space lies in the fact that it is the sphere of activity of public authorities and management (structures that enter into active communication with the population - public relations services and departments), state and non-state media, as well as non-state socio-political associations, whose information and communication activities meet the officially declared national interests of the media, professional groups, or individuals [31; 32]. This gives rise to unique opportunities for influencing in any professional field, including political, both on groups of people and on individuals.

At the same time, the national specificity of the information space lies in the fact that it has nationally specific ways of constructing, processing, and disseminating information [10; 21]. These methods are associated with at least two main aspects: technical-informational and national-informational. Technical-informational aspects presuppose the ability to create new hardware and software in the information space. National information aspects of building an information space are associated with the national and cultural characteristics of its corresponding part, as well as the political predilections of the regional (national) establishment.

Such properties of the modern information space as the high dynamics of its spatial development and semantic content, structure, security, universality, national specificity, accessibility and manufacturability, create additional opportunities for using information in the interests of creating external and internal information and political threats [12].

It should be noted that in political science there are normative and behavioral theories in understanding the processes associated with decision making. From the perspective of normative theory, decision making is based on the rational choice of policy goals. In turn, adherents of behavioral theory consider this process as a specific interaction between people through a description of various factors influencing decision-making in a specific social and political situation [33; 34]. Deviations in the practices of information support for the development and adoption of political decisions are embedded in the general social and political environment, characterized by the unity of politics and economics, social and individual-personal relations [13].

Deviations in the practices of information support for the development and adoption of political decisions are due to a large extent to the underestimation of the system-forming role of information. A political actor who makes a significant political decision is able to effectively use the capabilities of the current political system only if he understands the systemic properties of information in political processes [2]. Accordingly, effective political management and political decision-making should be based on working with information that allows, among other things, to identify and structure emerging problems [5].

Deviations in the practices of information support for the development and adoption of political decisions are positioned in the information sphere - a special zone of communications of society and the political system, when the latter acts as a complex set of information flows and communication connections in the space of activity of political actors.

Existing attempts to write concepts of information space only partially solve the problem, because the space is no longer formed by the state only, but rather by the market and new commercial structures [37; 38]. There are two aspects of state information policy: technological (regulating the process of development of components of the information environment) and content (priorities of communication activities of participants in the socio-political process). The objects of state information policy are the media (television, radio, Internet), communications, information law, information security.

From a government point of view, the construction of an information space should be considered as the basis for socio-economic, political, and cultural development, which requires the implementation of a targeted information policy consistent with economic, cultural, social, and other basic government strategies. Current political pluralism creates a huge public need for information [40]. The need to satisfy this need determines the special role of the media in the life of society. The media are an effective channel for informing society about the activities of the government and taking into account its reaction to its actions. This feature makes the media the most important social institution and a system-forming factor in the information space of Ukraine [42; 44]. The innovative component lies in the fact that with the development of information technology, new opportunities for creating personal and collective virtual environments appear. It is obvious that Internet journalism has been added to traditional journalistic fields such as newspaper, radio and television journalism.

One of the reasons that the information space is a key one for modern society is that its active functioning and free access to it create a platform for the development and functioning of democracy. The acute sense of the inability of ordinary voters to influence the course of policies pursued by state and local authorities causes a high level of tension in society [46; 47]. This became especially noticeable in the second year of the war in Ukraine, when active hostilities gave way to trench warfare, and acute issues of mobilization are one of the main factors of social fluctuations. Meanwhile, the current level of development of the information space is able to offer an optimal model for solving problematic issues through the development of appropriate software products that ensure "participatory democracy." Consequently, the ideas of forming an effective civil society with the development of electronic communications acquire the necessary material and technical basis.

It should be noted that, unlike the media space, the information space reflects all the diverse events occurring in the social space. The information space is always multifunctional, the flows of information circulating in it are chaotic, and the messages are ambiguous [49]. One can consider the information space as a complex of continuous processes associated with the dissemination of messages and the exchange of various data. The information and media space are connected by many connections and are mutually dependent. In the media space, there are more flows of messages directed and regulated by political and economic subjects than in the information space [51-53]. The functions performed by the information and media space are unequal, and manifestations of dysfunctional potential are also possible.

Apparently, the phenomenon of channels of political leadership is a direct link between the government and the people. Vitaly Kim, the head of the Mykolaiv Regional State Administration (now the Regional Military Administration), created a Telegram channel on February 24, 2022, published an appeal to the population every hour and informed about the situation in the region. Today, Kim's channel has 657 thousand subscribers. The head of the Kharkiv Regional Military Administration, Oleg Synegubov, has slightly fewer supporters - 130,000 [16].

However, official channels are still far from the driving force of Telegram - anonymous channels. Channels such as "Trukha Ukraine" (almost 3 million subscribers), "Kyiv INFO" (almost 814 thousand subscribers), "Kharkov Life" (571 thousand subscribers), "Odessa INFO" (640 thousand subscribers) and dozens of others have common features: more than half a million followers and an anonymous owner. In fact, no one is responsible for the reliability of information in them and they are far from classical journalism. The advantages of these channels are the speed of response to the event and prompt informing of the population.

In 2022, the vast majority of Ukrainians consumed news from social networks - 74%, and internally displaced persons even more - 78%. This is evidenced by the data of the annual USAID-Internews study "Attitudes of the population towards the media and consumption of different types of media 2022".

Telegram has become the primary social network for both communication and news consumption in 2022, showing significant growth in both categories. In general, 60% of Ukrainians use it to get news (only 20% in 2021), and 66% to communicate (40% in 2021). Facebook has reduced audience reach and lost positions in news consumption. Viber also decreased in audience reach but remained stable for news consumption [23]. Almost half of those who have group chats in messengers read the news there, but the vast majority do not post links to news in group chats themselves.

According to the results of focus group interviews, respondents divided social networks and messengers by functionality. For them, Telegram is actually the main channel for receiving news. According to the participants of the focus groups, its main advantage is the promptness of the news. It fulfills two functions at once - communicating with loved ones and receiving information. Respondents note that after they started using the Telegram channel as a source of news, they switched to it from Viber and WhatsApp as the main messengers for communicating with friends and relatives. In the first months of the full-scale war, the number of telegram channels was very large (up to 10), now respondents are subscribed to 2-3 news channels [23].

Facebook is more often used to get acquainted with the attitude to particular news. Respondents look at how much the news resonates in the community, as well as what comments it causes. YouTube is used instead of TV and to find videos to confirm the news that has sparked interest for bloggers to watch. Viber is a messenger for communication. It is noted about the presence of news groups: first of all, it is Viber channel "Blyskavka" - popular among 45+ years old population, but this channel is criticized for the large number of publications (more than 200 per day). Instagram is increasingly moving away from the "youth" group and targeting the 31-45 age group. Respondents note that it has dramatically changed from an entertainment social network to a news network, and has also become a place for expressing a civil position [23].

Bloggers' accounts are most often used not to receive news, but rather to form an assessment of particular news. Group chats are not so much used to receive news but rather to review the reaction of society to news. The use of group chats is more often observed among young people, who receive either confirmation or refutation of a particular information there. More than 40% of respondents learn news from Internet sites (42% and 53%, respectively). The audience for television continues to decrease, radio and the press are also not the main source of news. Most often, Ukrainians receive news from several types of media; if only one source is used, then it is, as a rule, social networks. The smartphone is the main device with which respondents get news [23].

The phenomenon of the Trukha Telegram channel deserves special attention. Administrator Trukha is even invited to meetings with the president 'behind the closed doors'.

The most popular Telegram channel in the real Ukrainian segment is namely Trukha-Ukraine, which has, as it was noted above, 3 million subscribers. It appeared at the end of autumn 2019 [17]. Until the spring of 2022, it specialized in Kharkiv news. Mostly, the channel disseminated criminal news, occasionally - news from the Kharkiv region, and even less often - news about events in Ukraine. By the end of January 2022, "Trukha-Ukraine" gradually increased from several thousand to several tens of thousands of subscribers per month based on such content. The peak of the channel's popularity occurred after February 24, 2022. Due to the promptness of the publications about the situation in the city, which the Russians were trying to conquer, the administrators of "Trukha" were ahead of the traditional media and official sources [55; 56]. With the growth of the audience, "Trukha" is trying to satisfy the need for news, the creation and distribution of which is the job of the mass media. The channel began to inform less and less about events in Kharkiv, and increasingly more about national and international events. The rapid rise in popularity of "Trukha" after the full-scale invasion of the Russian Federation is clearly shown in Figure 2.
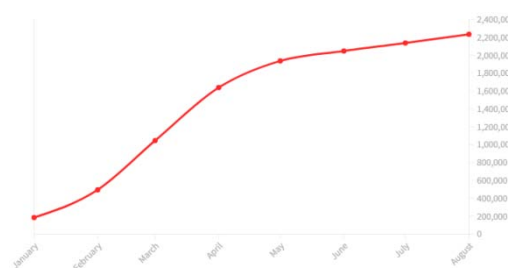

Figure 2. Dynamics of growth in the popularity of the Trukha Telegram channel in Ukraine in 2022 [17]

The media space performs informational, communicative, organizational, ideological, entertaining, integrating, and educational functions. Subjects of the information and media space can also implement dysfunctional potential. All these important issues should be addressed – this is evident condition for Ukraine' integration into the EU. The process of Ukraine's entry into the global information space is accompanied by certain difficulties and problems [58]. Meanwhile, the information space of Ukraine is a factor in the formation of a consolidated Ukrainian community and a constituent part of the European and world information space. Ukraine's entry into the global information space will have positive consequences only under the conditions of ensuring information sovereignty and information security, preservation of national identity.

The national information space is a powerful state-strengthening and nation-building lever of the national security of every state. Zbigniew Brzezinski expressed the opinion that "socially and economically, the world is becoming a single playing field, in which three dynamic realities increasingly dominate: globalization, "internetization" and deregulation" [5]. It is difficult to disagree with that.

Media space, if to use Parsonian terminology, is a product of two systems - cultural and social, fulfilling its role in ensuring balance and internal homeostasis of the system. Namely the media space forms a symbolic environment that is vital for people as social beings, which guides the actions of social actors, helps them cooperate with each other, indicates what goals should be strived for, what actions to achieve such goals are acceptable and what are not, and what result of efforts made

should be considered successful [61; 62]. The media space is the result of socially determined actions at the level of these two systems: social and cultural itself. The first of them, social, is based on the joint actions of people, driven, not least, by the goals of their biological self-preservation in a certain social environment. In relation to the social environment, media space makes it possible to adapt to it, achieve the tasks set for oneself, integrate, that is, unite with other individuals, reproduce already found social structures, and relieve oneself of emerging nervous and physical stress. In relation to the cultural system, the media space acts as a repository and place for the production of a complex system of symbols and norms [63; 64]. The media space acts as the most important regulator of society with its normativity and symbolism.

In the 21st century, the information space has become a full-fledged political space, to which the focus has partially shifted in all areas of international relations, from socio-economic interaction to issues of international security. The transformation of the nature of threats and interstate interaction in the information space can be traced through the prism of the theory of securitization, which was proposed by representatives of the Copenhagen School (Buzan, Hansen, Nissenbaum). This theory provides a stable methodological basis for studying security issues in the information space, since problems in the digital domain do not exist in a vacuum and most often are global in nature, influencing the international system without reference to state borders [9, p. 4]. These authors propose to compare the transformation of security problems and international regulation of the information space, comparing the nature of threats, the main actors and international legal regimes in order to trace the chronology of the securitization of the information space since the creation of the Internet. Technological development and the increase in ICT users have created a precedent for the transition of threats from the physical domain to the digital one, where the system of interaction between actors appears anarchic and not controlled by generally accepted regulatory regimes.

Due to the specifics of the information space, the nature of the so-called "bottlenecks", or points of tension, in the information space has also changed. While initially the most vulnerable places in the digital domain were considered to be critical infrastructure - root servers, etc., then along with the evolution of the nature of interaction and threats, points of tension have become "virtual".

Unprecedented transformations also took place in the social sphere. The nature of user behavior changed, and states, in turn, adapted their policies to new realities. Society began to switch to communication through devices connected to the global Internet. Currently, more than 4.8 billion people use the Internet, and the majority (90%) access the Internet from mobile devices [15]. At the same time, changes began to occur in the nature of power in society. Traditional power, usually using methods of punishment and intimidation, began to transform into network power, which is implemented through the creation (framing) of ideas and control over communication [3]. The theory of the "network society" allows considering the power of the state in a network society as a critical aspect of national security, since foreign influence on society from the outside can undermine the established ideas and frames of society and subsequently obtain mechanisms for managing society.

According to M. Castells, power relations in a network society are the basis, and the institutions and norms created in it are necessary to promote the interests and values of this power [3]. The main characteristic of such a society is the formation of power relations in which the power position is occupied by institutions governing the network society, including media companies, technology companies and political institutions that exercise global governance and oversight (surveillance).

As a new political space, the information space plays an important role not only in terms of issues of influence and control in a network society, but also in the context of modern international economic and political relations [65]. Such relationships formed between state and non-state actors require

rules of behavior and norms, but at the moment there is no full regulation of relationships in this area.

It is necessary to separate state and non-state information policies. State information policy is the ability and opportunity of policy subjects to influence the consciousness, psyche of people, their behavior and activities with the help of information in the interests of the state and civil society. Non-state subjects of communication can enter into dialogue with the state or oppose it, or entirely serve only the interests of certain groups and factions, parties and even individuals. Real humanitarization of the information space is possible only in the case of synergy or at least consistency of these policies.

The causal complex that determines the relevance of the design and implementation of the concept of modern state humanitarian policy (anthropopolitics) as an integral part of the concept of the country's humanitarian development strategy, its socio-humanitarian (anthropological) transformation, one of the most important mechanisms for the formation of a human-oriented state, has "multiple causation" (P. Sorokin). In particular, in the political and philosophical context, the category "human-oriented state" is conceptualized as the highest manifestation, degree of development and form of the state, the state policy of which is aimed at creating conditions for the formation of a harmoniously developed personality, improving the quality of human potential, and the humanitarian transformation of the country.

Today, there is a kind of "paradigm shift" in the Ukrainian media and information space. Accordingly, the forms of public dialogue, the dialogue between the authorities and civic journalism as a representative of civil society, must also change. The driver of this sudden change was the military invasion of the Russian Federation, which changed many of the usual attitudes in Ukrainian society and discourse. The classical, 'Newtonian' information space, formed since the independence of Ukraine, has given way to a post-classical, 'quantum' information space. Accordingly, the methods of organizing this space as an element of Ukraine's humanitarian policy must change.

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Primary Paper Section: A

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DIRECTIONS AND PROSPECTS OF THE APPLICATION OF ARTIFICIAL INTELLIGENCE IN CUSTOMS AFFAIRS IN THE CONTEXT OF INTERNATIONAL RELATIONS

[a]MAKSYM RAZUMEI, [b]IRYNA KVELIASHVILI, [c]SERHII KAZANTSEV, [d]YEVHEN HRANYK, [e]OLEKSANDR AKIMOV, [f]LIUDMYLA AKIMOVA

[a-d]*Institute University of Customs and Finance, 2/4, Volodymyr Vernadsky Str., 49044, Dnipro, Ukraine*
[e]*Interregional Academy of Personnel Management, 2, Frometivska Str., 03039, Kyiv, Ukraine*
[f]*National University of Water and Environmental Engineering, 11, Soborna Str., 33000, Rivne, Ukraine*
e-mail: [a]*m.razumiey@gmail.com,* [b]*i.kvelin@ukr.net,* [c]*s.kazantsev85@gmail.com,* [d]*graniik.evgen@gmail.com,* [e]*1970aaa@ukr.net,* [f]*l_akimova@ukr.net*

Abstract: The article is devoted to analysis of vectors and specific features of AI solutions development in the field of customs service. Based on tracing the evolution of digital transformation in custom, conceptual model of AI integration in custom IT system is considered. Practical implications of AI systems introduction in customs, in particular within the context of international relations, are outlined, together with the examples of advanced experience.

Keywords: customs; artificial intelligence; international relations; evolutionary model; digital customs.

1 Introduction

Foreign economic relations of states, primarily foreign trade, are directly related to customs activities. Under the influence of the processes of globalization of global and economic relations of states, the formation of a mechanism for implementing various forms of international relations, customs law becomes a regulator of international economic relations and forms of protecting the economic security of states. The development of international customs relations follows the general trend of countries' inclusion in the world trading system. Integration of customs relations is expressed in the emergence of the World Customs Organization, customs services within various regional unions, in the conclusion of international treaties and agreements on customs issues, in the development of uniform tariffs, agreed upon systems for describing and coding goods, in the creation of regional international organizations that establish rules, regulations, and procedures for regulating foreign economic activity.

As it is known, the main subjects of international customs law are states and international organizations, whose activities extend to the spheres of international trade and customs affairs. The movement of objects across the customs border is carried out on the basis of common principles, which should be understood as the accepted guidelines of international legal regulation of relations in the field of interstate customs cooperation, that were formed in the process of customs relations development.

International customs law contains unified institutions used in regulating international trade in goods, for example, classification of goods, customs value, origin. That is, these institutions themselves do not regulate the import or export of goods, but are used in the application of specific tariff and non-tariff measures. The classification name of a product only facilitates the application of specific trade measures, but does not itself suggest these measures [1]. The same applies to customs formalities. Thus, while international trade law provides for the application of customs duties, restrictions and prohibitions (licensing, quantitative restrictions, certification, and other measures), international customs law ensures compliance with the above trade measures through customs formalities.

International legal acts do not contain provisions on how the national customs service should be organized and what competencies it should have. Exceptions are those rights of customs authorities that represent an integral part of international legal customs institutions, for example, customs control, customs

clearance of goods. However, the specific forms of implementation of these powers are already at the national level of the internal customs affairs of a separate state. Thus, the effectiveness of providing customs services depends on the efforts of a particular state.

Typically, the process of customs clearance of goods involves filing a goods declaration, customs control, collection of taxes, duties and fees, then releasing the goods in accordance with the declared customs procedure. In the 21st century, the procedure for actions performed during customs clearance has undergone significant changes due to the massive spread of the scientific and technological revolution achievements. Today, participants in foreign trade activities can electronically inform customs authorities about the arrival of goods into the customs territory, pay due customs duties, taxes and fees, while customs authorities, in turn, conduct customs control and release goods before arrival. Consequently, the activities of customs authorities are aimed at creating favorable conditions for doing business based on improving the quality and effectiveness of customs administration while optimizing costs, i.e., the activities of customs authorities acquire a service-oriented character [15].

Matsudaira [35] introduces evolutionary model specifically designed for the customs area, the Digital Customs Maturity Model (DCMM), the concepts of which are summarized in Figure 1.
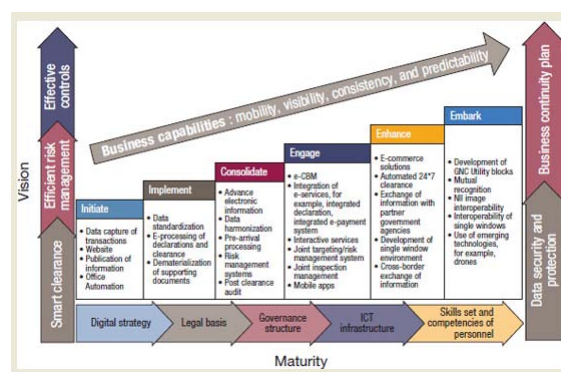

Figure 1. Digital Customs Maturity Model (DCMM) [35]

In turn, in order to ensure national economic progress and improve the quality of service to stakeholders, customs authorities are introducing digital technologies. In the customs control process, special attention is paid to the processing of declarations, namely, such components as risk management, data verification, and payment services [57]. With the help of information technologies, the quality of services provided not only to participants in foreign economic activity, but also to government authorities is significantly improved.

The priority vector of customs administration is to create a network of electronic customs offices, which are equipped with the most modern information technology and software tools, and have high-speed centers for operational monitoring and data analysis.

According to WCO Vision, "building blocks" of customs in the 21st century include the following [58]: "1) Globally networked customs; 2) Better coordinated border management; 3) Intelligence-driven risk management; 4) Customs-trade partnership; 5) Implementation of modern working methods, procedures, and techniques; 6) Enabling technology and tools; 7) Enabling powers; 8) A professional knowledge-based service culture; 9) Capacity building; 10) Integrity".

When carrying out customs control, authorities use data mining and carry out predictive analytics through the use of cognitive

technologies and advanced algorithms [2-4]. Because unstructured data is analyzed alongside predictive analytics, the best results can be to identify patterns and trends, track the history of compliance or non-compliance, and identify gaps and risks in the work performed. The essence of analytics is to extract valuable information from a huge array of sources. This is where artificial intelligence 'comes to the scene'. The main purpose of artificial intelligence technology in the implementation of customs control is the ability to structure the volume of data that customs services collect and goods, people, and vehicles generate.

The relevance of the use of AI in customs is due to the increased amount of information about goods and vehicles submitted for inspection, as well as the following number of factors [40]:

1. Limited time for making management decisions.
2. The difficulty of making the most correct (lawful) decision.
3. The need to accurately evaluate various alternatives.
4. Using the modeling method to predict the development of situations.
5. Making a decision based on a variety of initial data.
6. Using large amounts of data.
7. Integration and interaction with external data sources (including other executive authorities).

At the same time, the main advantages of AI application by customs authorities are:

1. A noticeable increase in the speed of task completion, through automation and increased productivity, without the involvement of additional labor resources.
2. Elimination of errors arising due to the "human factor".
3. Redirecting the activities of personnel (customs officials) to perform analytical work and solve problems that cannot be achieved using AI alone.
4. Multitasking and flexibility of automated processes.
5. Influx of new highly qualified personnel.

A person's physical capabilities do not allow him to operate with the amount of information necessary to control the correct classification of goods in accordance with the Commodity Nomenclature of Foreign Economic Activity. The lack of classification experience for the participant in foreign trade activities and the lack of time for the customs inspector during customs control before the release of goods is the reason for a large number of lawsuits and negative events after the release of goods for free circulation [13; 14]. It is obvious that the use of a cloud-based foreign economic activity aggregator based on AI, which involves solving one of the problematic and complex issues of foreign economic activity through an improved service for identifying and classifying goods in accordance with the Commodity Nomenclature of Foreign Economic Activity, will be equally in demand both by electronic declaration centers of customs authorities and by participants in foreign economic activity [20; 23]. The introduction of AI technologies into the activities of customs authorities during customs control and customs administration at the present stage of development should be aimed both at ensuring the national and economic security of the state and at creating a favorable environment for international business communities when carrying out foreign economic activity and international trade. The stage of creating artificial intelligence tools should be considered as a factor in the evolution of the system and a condition for the continuous development of customs activities.

2 Method

The theoretical and methodological basis of the study consisted of the works of scientists - specialists in the field of development of customs services, the procedure for performing customs operations and conducting customs control. The research used both general scientific methods (analysis, synthesis, measurement, logical modeling, induction and deduction) and special methods (method of expert assessments, customs statistics, etc).

3 Results and Discussion

Considering the model of the evolution of systemic intellectualization of customs activities, we note that different levels of intellectualization (intelligent, hybrid, and artificial) ensure the performance of certain functions. So, at the first level - the actual intellectual level - the competence potential of customs specialists is used to apply rational management methods and solve professional problems. The second level - hybrid intelligence - requires the use of competence and technological potential, an example is the performance of tasks by a specialist using information systems and technologies [5; 6]. At the third level - artificial intelligence - functions are selected taking into account the possibilities of automatically solving problems exclusively using technological potential. The fourth level of intellectualization is represented by the functions of systemic cooperation and social production, which should also be considered as an intellectual partnership, since the customs system is not only capable of solving problems independently based on information systems and technologies, but also ensures its continuous development in conditions of active interaction with external participants - business community.

Figure 2 shows the connection between functions, the possibility of their integration and transition between levels of intellectualization. In this case, the metasystem is the customs system, which is represented as a body of knowledge for solving professional problems [12; 17]. Ensuring the functioning of the system (s) begins with identifying information which enters the system and assessing the degree of its certainty (Y) for solving the task; then, alternately using intellectualization functions, the system develops in terms of competence potential (K) and technological potential (T) to the level of a hybrid intelligence, then the system is able to independently function and develop.
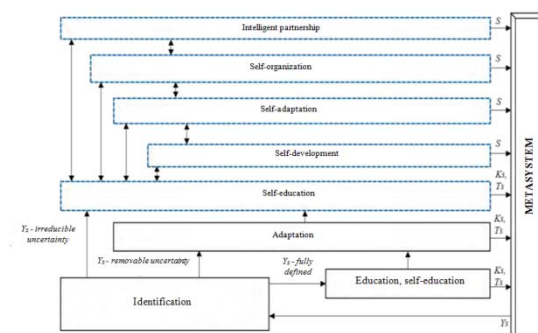

Figure 2. Intelligent Feature Integration Framework [18]

In modern management theory and practice, based on the ideas of AI, a new approach is being formed, which can be defined as multitasking or multimodal. 'Multitasking' means that solving problems or a set of management tasks is carried out on a single technological platform. A multimodal approach involves the systematic development of the intellectual capabilities of the functionality of machine (or platform) control intelligence. It is clear that in this case the platform and functionality are inseparable; developing intelligence is the coordinated development or self-development of the platform and management functionality [16].

Intelligent technologies and end-to-end processes actively fit into the activities of customs authorities, namely in the processes of analytical and monitoring activities, customs operations, including the use of inspection and screening complex [24-27]. The intellectualization of activities is accompanied by the acquisition of new properties by the customs system. At the stages of customs control, which are implemented without the involvement of an official, artificial intelligence technology is being developed in the perspective; at stages involving the cognitive competencies of officials, hybrid intelligence technology is being developed.

Table 1 presents a matrix of the main opportunities for introducing elements of artificial intelligence into the activities of customs authorities. Thus, the introduction of AI elements into the customs administration process will make it possible to both improve existing technologies (risk management system, data processing centers) and create new ones (digital diaries, smart checkpoint) [28-30]. The most promising direction today is the creation of smart checkpoints, which will make it possible to carry out customs control without the participation of customs officials, automate decision-making on the release of goods, and, as a result, would enable non-stop movement of risk-free supplies across the customs border.

Table 1: Matrix of possibilities for using artificial intelligence in solving problems assigned to customs authorities

Risk management system	Data processing center	Digital twins	Intelligent checkpoint
Automatic assessment of the risk level of consignments in real time	24/7 continuous operation of customs information systems	Analysis of the past, optimization of processes in the present, forecasting future results	Automatic weight and size, fluoroscopic, radiation control
Integration of risk management system segments at the supranational level	Processing large data sets	Automatic selection of customs control objects, including after the release of goods	Carrying out customs control without the participation of customs officials
Exchange of results of application of the risk management system between state regulatory authorities	Self-learning	Modeling the process of end-to-end customs control	Automatic decision making on product release
Data mining	Creation of a unified logistics process	Identification of the most significant deviations from the point of view of the likelihood of violation of the law	Non-stop movement of risk-free supplies across the customs border

It can be noted that the creation and further operation of an intelligent checkpoint will reduce the time costs associated with carrying out customs control at checkpoints while simultaneously increasing its effectiveness and efficiency [36-39]. Thus, further directions for the development of customs administration are determined by the transition to the creation of "intelligent" customs, characterized by a high degree of use of digital platforms and services, digitalization and automation of customs operations, and the rapid implementation of customs formalities, which together will lead to the effective implementation of the process of end-to-end customs control.

According to the authors studying the possibilities of using AI systems in customs, the mechanism for providing customs services by customs authorities within the framework of the end-to-end customs control process can be presented as follows [43]. The foreign trade participant, using the technology of the foreign trade participant's personal account, submits a declaration for the goods to the customs authorities, after which format and logical control is carried out in relation to it to the extent necessary to verify compliance with the conditions of automatic registration and automatic generation of the necessary package of documents for subsequent customs operations at a smart checkpoint. The intelligent module of the risk management system in the electronic declaration center allows assessing customs risks in real time, using methods of intelligent (semantic) analysis of information about the consignment declared in the declaration for the goods, as well as, in conjunction with the intelligent

module of the intelligent checkpoint, selecting further scenario of customs operations in relation to a consignment [43].

An intelligent checkpoint assumes the presence of three main corridors:

1. Green corridor. It assumes non-stop passage of risk-free consignments and applies in case of absence of detected violations (discrepancies) with the declared information upon arrival at the checkpoint and information reflected and submitted to the customs authorities earlier [32]. Namely in the green corridor, the customs clearance and customs control are most automated and have the lowest costs for foreign trade participants.
2. Yellow corridor. It is intended for consignments of the so-called medium risk level and is used if discrepancies are identified between the actual data upon arrival and those declared in the goods declaration (risks have been identified by country of origin, weight characteristics, product code, etc.). At this stage, the cargo must pass all stages of inspection by an intelligent system - automatic weight and size, X-ray, radiation control [33]. At each stage of verification, artificial intelligence analyzes the received data and makes an appropriate decision. If no violations were identified at any stage of the inspection, auto-release occurs and the vehicle departs from the smart checkpoint. If at some stage the risks are triggered, the system directs the vehicle through dispatch to the red corridor.
3. Red corridor. Vehicles for which risks have been triggered are sent to the red corridor. To minimize identified risks, customs officials carry out forms of customs control (for example, customs detailed inspection), including the use of technical means of customs control [34]. If, as part of the actual control, customs officials have identified facts of violation of customs legislation, the customs authorities take measures provided for by the legislation on administrative offenses and criminal offenses.

Thus, the customs administration system becomes more dependent on changes in external environmental conditions, as it becomes increasingly more focused on the development of foreign trade activities. A paradigm shift in the development of customs administration, due to a shift in emphasis from bureaucratic, control, and supervisory functions and a functional approach to a service-oriented and process approach to the regulation of foreign trade activities, is associated with the active introduction and implementation of digital technologies, platforms and services that allow assessing the results of the activities of customs authorities not only as the performance of functions and tasks, but also as customs services provided to participants in foreign trade activities [42].

From the moment container transportation began to be actively carried out (both within countries and cross-border), the need arose to use non-intrusive customs control tools, namely, X-ray scanning.

Typically, a cargo X-ray scanner scans 35 to 50 containers per hour. Those images that are uploaded to the scanner network are carefully analyzed by employees for anomalies. Such analysis seems to be a complex cognitive task and requires increased concentration, accurate determination of the location of the target along with available distracting factors. Errors often occur: for example, due to overexertion and fatigue, the human eye may not notice illegal cargo [22].

Currently, there are technologies for compressing images into a small format and cheaply storing information, which helps customs authorities collect, store, and archive X-ray images at a lower cost [41]. As a result, a large library of images is formed, which can be used both as a reference database for educational purposes and for developing automatic threat detection algorithms.

In China, since 2017, customs authorities have been exploring the possibility of using artificial intelligence along with

inspection equipment systems: due to testing, the machines were found to be quite effective in detecting restricted and prohibited items. Subsequently, automatic threat detection technology was introduced into China's customs inspection scanners and integrated into their customs information systems [8].

Dubai, one of the world's busiest trade hubs, is investing heavily in cutting-edge technology and harnessing the power of artificial intelligence (AI) to improve trade facilitation and border controls. These efforts are aimed not only at strengthening Dubai's position as an international trade and tourism hub, but also at setting new standards for customs operations and services worldwide, resulting in a positive impact on Dubai Customs' customer satisfaction index reaching 98% for smart and electronic services [11].

The "core" AI systems in use today correspond to reactive AI with limited memory. They can enable customs to make sense of the images and data generated by NII systems, cross-check data streams, analyze vast data sources to detect fraud, look for all types of risks and find anomalies.

Dubai Customs has harnessed the cutting-edge capabilities of blockchain technology to form strategic collaborations with leading free zones to create an innovative platform to facilitate cross-border e-commerce [44]. This platform easily integrates with the IT systems of various e-commerce companies. This collaborative network includes e-commerce businesses, courier companies, logistics service providers, cargo handling authorities and free zones. The platform contributes to building trust and transparency in the e-commerce ecosystem and also helps improve compliance levels.

When an e-commerce order is placed online by a company connected to the e-commerce platform, the order data is transmitted to the platform instantly. After receiving the invoice and shipment information, platform quickly creates a customs declaration by applying the policy benefits [45; 46]. The customs declaration clearance message is transmitted to the company and the free zones, allowing products to be quickly unloaded through the free zone gates. The platform allows identification of e-commerce companies which improves their servicing, automated preparation of declarations and their immediate execution, automated and instant refund of customs duties/deposits, providing duty exemptions and reductions in service fees, regulation of the return of goods by linking import and export declarations, ensuring 100% visibility and tracking of e-commerce transactions, enhanced flexibility for e-commerce companies 24/7, integrated pass for faster movement and delivery of goods [11].

As such, this innovative e-commerce ecosystem is not only shaping the future of the industry, but is also positioning Dubai as a global leader in facilitating e-commerce. From January to September 2023, AED 732 million worth e-commerce declarations (CIF value) were processed without any registration fees. More than 300 companies have registered with customs as commercial and/or logistics companies engaged in e-commerce operations [11].

In addition, the Remote Inspection initiative, developed in collaboration with strategic partner Dubai South, allows companies with AEO status in Dubai Logistics City to request customs to carry out inspections at specific locations within their territory using a robot equipped with thermal imaging and infrared video camera [48]. The camera is controlled remotely by customs officers, and the footage and related data are transmitted to the customs control room in real time. The remote inspector robot is powered by a long-lasting lithium-ion battery with fast charging capabilities.

Robotic Process Automation (RPA) uses intelligent automation technologies to perform repetitive office tasks such as retrieving data, filling out forms, or moving files. Dubai Customs uses RPA and IA to automate claims and refund processes [49]. Technical development teams have implemented an intelligent returns system that matches and verifies item details with

supporting electronic/scanned documents without any human intervention [50]. The implementation of the Smart Refund system provides key benefits to both businesses and governments in terms of promoting trade, reducing costs, and increasing the transparency of international trade transactions.

Robotic process automation and artificial intelligence have also been used to transform and improve another important aspect of customs operations - post-clearance audits. This step implies automation of some of the verification processes for import declarations of high-value goods [52; 53]. Five software applications, or "bots", need to be trained to automate repetitive processes such as data collation. AI has been integrated into their core functions, with bots using machine learning algorithms and natural language processing to interpret data and identify patterns. In addition to significant cost savings by eliminating the manual review process, audit automation is expected to impact revenue collection from audits. This will enable Dubai Customs to gradually increase its inspection coverage of high value import declarations from the current 19% per year (approximately 380,000 declarations) to 100% (2 million) over the next five years [11].

There are many more areas where customs can use AI to potentially transform trade processes and improve security [9; 10; 47; 59]:

- Automatic threat detection algorithms to search for specific patterns in X-ray images of all types.
- Predictive analytics (automatic analysis of historical trends to build predictive models).
- Automated document verification systems.
- Chatbots and Virtual Assistant.
- Records of transactions and cargo movements based on a distributed data registry (blockchain).
- Tools for anomaly detection.
- Drones with artificial intelligence support.
- Analytical platforms for collecting and analyzing customs data.
- Computer vision systems designed to use information obtained from digital images to automatically check containers for damage, tampering or hidden compartments.

The effectiveness of introduced intelligent AI system is evidently supported by statistics: the Jebel Ali and Tecom customs center at Sea Customs Centers Management, being one among Dubai Customs' departments, "remarkably crossed the two million bar by completing 2.189 million customs transactions in the first nine months of 2021 for goods with a combined value of AED 609.357 billion and volume of 79,369 tons" [31] (see Figure 3 below).

Figure 3. Jebel Ali and Tecom Center's performance in 1ˢᵗ nine months of 2021 [31]

Customs risk management systems using artificial technologies have now been implemented in a number of other countries. Thus, the international inspection company COTECNA, which assesses the quantity and quality characteristics of cargo, has been working closely with customs authorities of various countries for more than 20 years, improving its automated risk

management system (CRMS®), which is one of the most modern similar systems [40]. The CRMS® system is largely based on machine learning technology.

Machine learning makes it possible to develop predictive models that, based on processing large volumes of data, can identify potential risks before they occur. By analyzing and comparing data from a variety of sources, including customs declarations, commercial documents and invoices, trade agreements and contact information, machine learning algorithms are capable of detecting patterns and anomalies that may indicate customs risks [55; 56]. Historical data analysis plays a critical role in optimizing risk management strategies. Using a wide range of historical data sources available, customs authorities are able to quickly make informed decisions tailored to the ever-changing conditions of international trade.

With the help of machine learning, customs authorities can identify key risk factors, thus improving the risk assessment models used. In particular, machine learning algorithms help to reveal patterns that indicate a high risk of non-compliance with customs rules, discrepancy between declared values and reality, as well as providing false information about delivery conditions [43]. By more accurately assessing risks, customs can focus resources on the highest risk activities, thereby reducing the likelihood of crime and the risk of financial losses.

Advanced data analytics using machine learning technology combines large data sets to monitor activity, transforming complex data into intuitive infographics. This kind of visual representation helps customs officers quickly assess the efficiency of customs operations over time [60; 61]. This allows to quickly identify problem areas and compare performance against targets. By combining disparate data sets, customs management can easily identify key performance indicators (KPIs) based on current operational goals and objectives.

Machine learning creates reliable decision support tools to combat constantly emerging new methods of smuggling and other violations of the law. AI systems have the ability to constantly learn and adapt to changing risks and trading dynamics [62]. Thanks to machine learning algorithms, these systems also improve their accuracy and performance over time. As customs risk management becomes more complex, AI's agility ensures it remains an effective solution to emerging problems.

Minimizing customs risks also requires the introduction of artificial intelligence technologies into the work of commercial organizations - participants in foreign economic activity. Founded in 2022 in London by a global team of customs experts and technical specialists, the iCustoms startup has developed a cargo declaration automation platform of the same name. The goal of the development was to help businesses overcome legal compliance problems. The iCustoms platform is a comprehensive software solution that automates customs and trade compliance using artificial intelligence and machine learning [21].

iCustoms software allows regulating cargo flows by performing the following main stages of work necessary to ensure correct declaration of goods [21]:

1. AI-based risk assessment. Using machine learning algorithms, one can analyze information about trade transactions, identify risk indicators and prevent violations of laws. Artificial intelligence-based risk assessment and profiling help both facilitate and secure international trade.
2. Automation of document flow and ensuring compliance with regulatory requirements. Artificial intelligence services automate the analysis of shipping documentation and allow to quickly identify discrepancies in invoices, customs declarations, and other documents using natural language processing and machine learning methods [63]. Automation speeds up customs clearance, reduces the number of errors, and optimizes the processes of cross-border movement of goods.
3. Scanning and automatic recognition of cargo based on artificial intelligence. Cargo inspection and scanning using

AI improves customs security. Computer vision algorithms, trained with artificial intelligence, help identify smuggling and other risks by analyzing photographs and X-rays. Artificial intelligence technology automates cargo inspection, improving safety and efficiency.

4. Trade facilitation. Virtual assistants, chatbots, and customer service systems based on AI can help participants in foreign economic activity in real time in matters related to customs procedures and communication with authorities. Appropriate intelligent solutions improve the quality of customer service, eliminate manual intervention, and optimize foreign trade processes.
5. Customs predictive analytics. Predictive analytics using AI technologies helps customs officers plan and allocate resources, and enable exporters and importers to avoid violating customs rules. Artificial intelligence algorithms analyze historical data, market trends and external factors to estimate trade volumes, detect bottlenecks, and optimize operational resources. Data-driven customs operations become more efficient, faster and of higher quality.

The introduction of AI into customs procedures leads to increased efficiency and security of foreign economic activity. This, in turn, ensures the streamlining of international trade flows and the overall improvement of trade operations management, which in some way has a positive effect on the system of international relations in the political plane. As Borysenko et al. rightly note, "the influence of globalization processes, the customs space of the country, requires the development and implementation of a transparent state customs policy to ensure security and integration into the space of the higher hierarchical order" [7].

The critical importance of ensuring the efficiency of customs checkpoints and the relationship between this problem and the context of international relations is evidenced, in particular, by the blocking of the Ukrainian-Polish border by Polish carriers at the end of 2023. One of the demands of the protesters was to improve the mechanism for crossing the border by heavy vehicles using Ukrainian electronic queue system. The situation on the border created risks for relations between Poland and Ukraine.

Beyond machine learning, one of the key elements of AI is the use of deep neural networks, built on multi-layered sets of nonlinear transformation functions, where the output of each layer becomes the input to the next layer of the network. Each level (layer) can be optimized for one type of data (for example, images), and be combined with other levels for other types of data (for example, text information). Multilayer neural networks can significantly increase the capabilities of machine learning and effectively analyze information extracted from chaotic data of different types (such as video, audio, and texts) [15]. Appropriate technologies can be successfully used in the activities of both customs authorities and commercial organizations operating in the field of international trade in order to improve customs risk management activities.

Kafando [19] suggests conceptual framework for adopting AI technologies in the customs environment (see Figure 4).
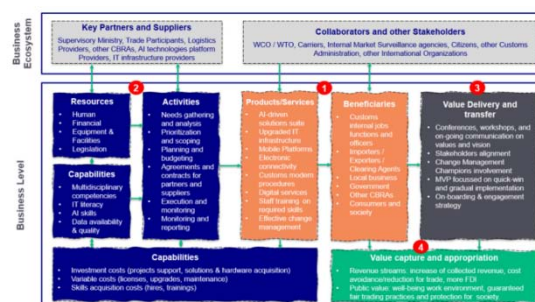

Figure 4. Conceptual framework for adopting AI technologies in the customs environment [19, p. 152]

A general methodological approach to determining the possibility of introducing artificial intelligence into customs technology can be implemented in the following steps:

- Customs technology that needs for or in which artificial intelligence can be applied and thereby increase its efficiency is selected;
- A verbal (descriptive) model of this technology is being developed with detail that allows identifying processes (operations) which can be replaced by artificial intelligence (according to regulatory documents and based on the practice of their implementation);
- Processes (operations) of the customs inspector are identified and examined for possible replacement with artificial intelligence;
- Artificial intelligence technologies are being developed that can replace the actions of a customs inspector;
- A new solution for the implementation of modernized customs technology as a whole is being developed;
- A preliminary assessment of the economic feasibility of replacing the current customs technology with a technology that performs the same functions using artificial intelligence is being carried out.

The solution generation module is the main one - it generates a solution similar to the solution that would be generated by a human operator. The module for generating initial data based on the analysis of input information, if necessary, optimizes incoming information, removing unnecessary information and adding missing one from external sources. The training module corrects decision-making algorithms based on error correction during selective control of the flow of decisions by a human operator and identification of violations detected in the external environment, and on the basis of a decision made by artificial intelligence. It is assumed that the level of training of artificial intelligence and filling the database of correct solutions provide the specified requirements for the system, for example, not exceeding the number of errors of the first and second types when performing customs control tasks [51].

One of the key challenges when implementing AI is ensuring the confidentiality of information and increasing the availability of databases. The process of maintaining internal privacy standards is paramount to reducing cross-border transfers of personal data, which could negatively impact the development of AI algorithms. However, personal data may be used in an area for which the data has already been collected, and cannot be used as part of a deep learning process for AI neural networks to improve the efficiency of service delivery methods. Creating strong privacy protections requires providing large amounts of personal data to study and improve AI programs. Based on this reasoning, the key challenge is to design privacy rules that do not place undue restrictions on AI access to big data [54].

The next problem is the development of uniform international standards in the areas of application of AI services. For example, the use of self-driving cars requires the development and unification of new standards for vehicle production and safety. On the one hand, this could lead to an increase in the cost of technological production, and on the other hand, it will create an international discussion about the compatibility of domestic standards of different manufacturing countries with the aim of eliminating trade barriers to trade in goods using AI algorithms. Another problem that can be highlighted is the protection of intellectual property rights for software products and provision of AI systems. This problem requires the development and implementation of methods to protect data from unauthorized copying and misuse of protected data.

In general, the use of AI systems in customs requires an integrated approach. An example of this approach is the interaction of Dubai Customs with stakeholders. As part of Dubai Customs' "Al Furdah Innovates 2022" activities during the UAE Innovation Month 2022, the Service Innovation Department organized three sessions on the future of innovation, supply chains and digital transformation in customs sector in cooperation with the Rochester Institute of Technology University- Dubai and the Global Innovation Institute (GINI). The sessions, which saw the participation of more than 300 employees, clients, researchers and partners, aimed at sharing scientific scenarios and spreading academic knowledge to enhance and further develop services and practices in digital transformation. "Innovations and advancements have helped us top the GINI list, which puts Dubai Customs as the most distinguished organization in the Middle East list and the first government department worldwide to achieve this unprecedented feat. GINI report on the Middle East 2021 stated that the UAE is among the most active in innovation, and Dubai Customs is the most innovative organization in the Middle East" [11].

Thus, increasing the efficiency of the customs service with the help of AI tools can not only strengthen the positive vector in the development of international relations, but also become a driver for the development of Industry 4.0 in a particular country and increase the country's ratings in the global economic space.

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EDUCATIONAL-METHODOLOGICAL COMPLEXES APPLICATION WITHIN SPECIFIC DISCIPLINE IN THE PROCESS OF TEACHING SOCIAL WORK AND PHYSICAL REHABILITATION AT THE UNIVERSITY (ON THE EXAMPLE OF MULTIFUNCTIONAL DUAL ENGLISH COURSE COMPLEX HIGH NOTE (IN UKRAINIAN CONTEXT)

[a]NATALIIA VASYLYSHYNA, [b]IRYNA BARBASHOVA, [c]TETIANA SEMASHKO, [d]OKSANA BESPALOVA, [e]ANGELINA MYRNA

[a]National Aviation University, 1, Liubomyra Huzara Ave., 03058, Kyiv, Ukraine
[b]Berdyansk State Pedagogical University, 4, Schmidt Str., Zaporizhia Reg., 71100, Berdyansk, Ukraine
[c]National University of Life and Environmental Sciences of Ukraine, 15, Heroyiv Oborony Str., 03041, Kyiv, Ukraine
[d]Sumy State Pedagogical University named after A.S. Makarenko, Sumy, Ukraine
[e]National University Zaporizhzhia Polytechnic, 64, Zhukovskoho Str., 69003, Zaporizhzhia, Ukraine
email: [a]nataliia.vasylyshyna@npp.nau.edu.ua, [b]i.a.barbashova@gmail.com, [c]semashkotat@ukr.net
[d]i-ozon777@i.ua, [e]angelina.myrnaya@gmail.com

Abstract: The relevance of the article is determined by the fact that the modern landscape of higher education, the competitiveness of specialists in the labor market, the problem of professional training of social work specialists is of particular relevance. It is shown that the creation of an active learning environment using active forms, methods and teaching aids is of particular relevance in modern university education of future social workers. Taking into consideration the modern tendencies happening in the frame of higher education of Ukraine it was mentioned that educational methodological complexes of all university courses are the intrinsic part of the successful future specialists' preparation. Theoretical review of the educational-methodological provisions stated in the official documents that should be fulfilled by teaching staff and learners during university studying is given. Secondly, the recommendations for displaying and analyzing from the teachers' perspective modern courses and Pearson English Platform are given, that can be used during teaching English language, and a comprehensive summary of the advantages and disadvantages of paper teaching materials and on-line resources is presented. The article emphasizes that the means of systematic approach implementation purposed to reveal main sides, components and functions of the educational methodological complexes allow implementing a personality-oriented paradigm, in accordance with the requirements of modern society for the quality of training of a future specialist in the social sphere as human capital, a labor market resource and an agent of social change. The conclusions emphasize that university educational process must be supported with educational methodological complexes of all disciplines, built according to synergetic approach.

Keywords: systematic approach, higher education; main provisions; educational-methodological complex; English language; legal complex regulations; High Note course; Pearson English Portal Platform; university learners; on-line resource application

1 Introduction

Social policy and the social sphere today face new priorities and tasks that correspond to the dynamics of social development. Moreover, today it is important to consider social work in particular within the paradigm of rehabilitation. Rehabilitation is a direction of modern medicine, which in its various methods relies, first of all, on the individual's personality, actively trying to restore the person's functions impaired by the disease, as well as his social connections. Today in the world, its active forms are becoming the most important in the system of social protection measures. The most effective of them are physical rehabilitation and social adaptation. Naturally, the types of rehabilitation should be considered in unity and interconnection. Rehabilitation should be seen as a complex, socio-medical problem, which can be divided into several types, or aspects: medical, physical, psychological, professional (labor) and socio-economic. This, in turn, determines the need for continuous updating of technologies and programs of higher education in the field of social work, in order to train competent specialists. On the one hand, there is an urgent need to develop the professional competence of future social work specialists, allowing them to work effectively with various categories of clients, on the other hand, the scientific foundations for the formation of the professional competence of a social work specialist, the content, forms and methods of such training at Ukrainian universities have not been developed systemically.

Meanwhile, education is a unique social phenomenon that has a significant impact on all aspects of the life and activities of the country, society, and human civilization in general. In the conditions of the modern scientific, technical, and information revolution, education functions as a complex socio-economic organism, which plays a major role in the social progress of mankind. It is one of the most important branches of labor and cognitive life. The current stage of the development of the education system of Ukraine is characterized by its reformation, the search for ways to bring the content in line with the personal needs of students and world standards. A kind of crisis phenomena in education, which are observed today, are connected with the ongoing formation of Ukraine as an independent state within the context of EU principles, the nature of social relations, the reformation of the political and economic systems on a fundamentally new basis. Adapted in the past years to a rigid regulated environment, since Ukraine' independence education has come into conflict with the new, more flexible and constantly changing requirements of Ukrainian society - with the market economy [4; 8; 10].

Reforming education is conditioned by the need to overcome the negative phenomena taking place in Ukrainian society, including within the economic sphere [2]. It is no coincidence that among the numerous transformations and modernizations of recent decades, a special place is given to those directly related to education and education management. The education system of Ukraine consists of educational institutions, scientific, scientific and methodical institutions, scientific-production enterprises, state and local educational management bodies and self-government in the field of education [5; 7; 12]. The structure of education includes, like in most of the countries in the world, the following levels: preschool education; general secondary education; extracurricular education; professional and technical education; higher education; postgraduate education; graduate school; doctoral studies; self-education. The bodies of state management of education in Ukraine are the Ministry of Education and Science, ministries and departments of Ukraine conducting public management of educational institutions, Attestation Board of the Ministry of Education and Science of Ukraine, departments of education of local state administrations [6; 16].

The state nature of the management of the Ukrainian education system is based on the principles of: availability of all forms and types of educational services provided by the state for every citizen; the availability and free of charge of obtaining a complete general secondary education; compulsory general secondary education; equality of conditions for each person for the full realization of his abilities, talent, comprehensive development; humanism, democracy, priority of universal spiritual values; organic connection with world and national history, culture, traditions; independence of education from political parties, public and religious organizations; scientific nature of education, integration with science and production; interconnection with the education of other countries; flexibility and predictability of the education system; unity and continuity; diversity; combination of state administration and public self-government.

The main trends in the functioning and development of the education system in Ukraine, which affect the regularity of management of educational institutions regardless of their type and form of ownership, are:

- Priority of universal values and humanistic orientation;
- Activation of public and state efforts to bring education up to the level of international standards and achievements in this field;
- Formation of national-patriotic morality;

- Development of education based on the latest psychological and pedagogical technologies;
- Moving away from the principles of authoritarian pedagogy, considering the natural individual characteristics of all students;
- Radical restructuring of management in the sphere of education through its democratization, decentralization, creation of regional management systems of educational institutions empowered with greater independence;
- Further development of non-state forms of ownership of educational institutions [8; 10; 24].

These most general trends in the education of Ukraine give rise to corresponding derivative trends in all its subsystems: organizational-management, scientific, educational, special-pedagogical, professional-technical. They, reflecting the general problems of Ukrainian education, are at the same time concrete and specific for universities of all fields, including social work, due to the peculiarities and conditions of their activity.

The most significant global tendencies characterizing the functioning of general education institutions in modern conditions are:

- The desire to expand the variability of the content of educational programs, a certain profiling for the necessity of compliance with state education standards;
- The efforts of the management of educational institutions to create complexes: preschool, secondary and higher educational institutions, united by a common strategic educational goal and traditional connections corresponding to the general goal of building the organization and the methodology of the training process;
- Competition of educational institutions of various types and forms of ownership based on the improvement of educational services;
- Penetration and implementation of foreign pedagogical technologies in the educational process (especially in the field of teaching subjects of the humanitarian cycle);
- Expansion of bilateral contacts between groups of students, educational institutions of different countries;
- - Implementation of the distance education system at all its levels;
- Dissemination of advanced IT technologies (in particular, AR, VT, and AI) in the learning process [7; 8; 14; 21].

Figure 1 shows expectations of students in different countries concerning their institution, according to surveys.
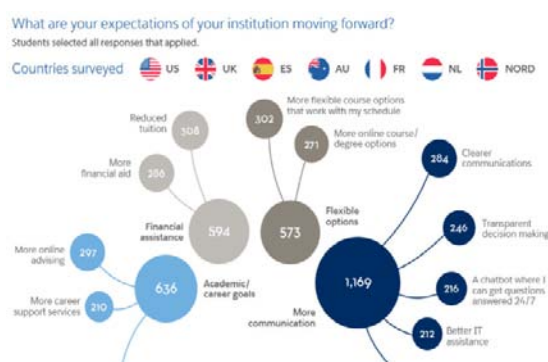

Figure 1. Global tendencies of higher education, according to students' expectations [4]

Taking into consideration the modern tendencies taking place in the frame of higher education of Ukraine that were briefly presented in this introductory section, it worth mentioning that educational-methodic provisions of all university courses is an intrinsic part of the successful future social work specialists' preparation. Regardless the actuality of contemporary books, courses, internet resources that should be actively applied in the educational process, the main goals of this investigation are: firstly, to give a theoretical review of the educational-

methodological provisions stated in the official documents that should be fulfilled by teaching staff and learners during university studying; secondly, to display and analyze from the teachers' perspective modern courses and Pearson English Platform that can be recommended to be used during teaching English; thirdly, to present a comprehensive summary of the advantages and disadvantages of paper learning resources in comparison with on-line resources.

2 Materials and Methods

In frames of research, direct, empirical analysis and synthesis were applied to stage of first-line familiarization with the educational methodological complexes. With separation of parts of the object and detection of properties, the simplest measurements, fixation of data lying on the surface of the general are carried out. Reverse or elementary theoretical analysis and synthesis are used to comprehend the essence of the phenomena. Analysis and synthesis are based on some theoretical considerations, which may suggest causality of the connection of various phenomena, as well as the action of some regularity.

Moreover, in the frame of this research, systematic approach was used. It demonstrated that the problem of studying process provisions was researched deeply at the beginning of the 20th century by some scholars (A. Berg, L. Bertalanfi, N. Winer, K. Boulding, etc.). These studies served as the scientific basis for the works of pedagogical and methodological areas of science. In addition, thanks to them, the term "systematic approach" entered into common scientific use. Systematic approach is one of the important mechanisms that provide integration of scientific knowledge. Consequently, it was used in the frame of current pedagogical research.

The term "system" or "complex" in our research, linked to educational methodology course complexes, has a number of definitions:

- A set (complex) of interacting elements (L. Bertalanfi);
- A set of elements between which there are relations of objects and their properties (A. Hall);
- A set of material or ideal objects, the relationship and interaction of which leads to the emergence of new integrated properties of the system that are absent in its components objects. The application of this principle for the university teaching process is depicted on Figure 2.
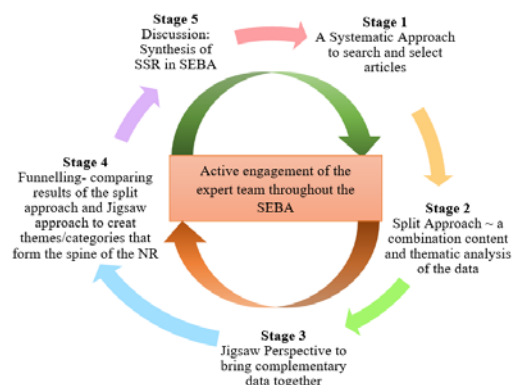

Figure 2. Systematic approach cycle in modern scientific areas

3 Results and Discussion

Realizing the first outlined in the introduction main goal connected with the theoretical review of the educational-methodological provisions stated in the official documents that should be fulfilled by teaching staff and learners during university studying, we would like to describe the content, structure, and functions of the educational-methodological complexes that must be created and actively implemented into

the professional preparation process of modern university learners in the field of social work.

Initially, defining the educational and methodological complex of the discipline, it is necessary to pick out that this is a set of educational, scientific and methodical documents and materials, which provide all forms of the educational process, types of educational classes, forms of monitoring students' knowledge of a specific academic discipline, that are implied by the curriculum of the relevant educational program. All course complexes cover educational publications, educational and methodological and reference materials, which are made in printed or electronic form, and are also necessary and sufficient for the organization of the educational process in a specific discipline curriculum [6; 17; 23].

The main functions of the development and use of the educational and methodological complex aimed at solving the main problems are the next ones:

- A clear definition of the place and role of the academic discipline in education activity and in the system of training a specialist within a higher education;
- Fixation and specification of educational goals and objectives of the discipline on this basis;
- Reflection in the content of the educational discipline of modern achievements of science, culture, and other spheres of social practice that are related to a certain academic discipline;
- Consistent implementation of intra- and interdisciplinary connections, agreement of the content and avoidance of duplication of the material being studied with regard to other disciplines of the educational program;
- Rational distribution of study time by study modules of disciplines and types of educational activities;
- Clear distribution of educational material between classroom classes and independent work of students;
- Planning and organization of students' independent work taking into account rational use of time allocated for independent work;
- Determination of the range of sources, educational, methodical and scientific literature, necessary for mastering the academic discipline; formation of bibliographic list;
- Development of an optimal system of current and final control of students' knowledge [6; 11; 20].

In addition, the educational and methodological complexes are characterized with the following: they are developed for all disciplines of the curriculum; materials are developed in the state language; they are developed by a pedagogical worker, in the educational field within the load of which this educational discipline is planned, or by the staff team, if different types of study load within the same discipline are planned by several working programs; preparation of elements is included in the individual work plan of teachers; they are submitted to the chairman/manager for discussion and approval at meetings of the cyclic commission/department, which is reflected in the minutes of the meeting cycle commission/department; in case of detection of deficiencies in the formation, the developer is given time to eliminate them – no more than one week from repeated procedure of discussion and approval at the cyclical meeting commissions/departments; if necessary (in connection with a change in legislation, the introduction of new standards of higher education) changes may be made by reviewing and approving the corresponding materials at a meeting of the cycle committee/department; the complex enters into force after its approval at the cyclical meeting commissions/departments [5; 18; 19; 22].

The structure and components of the educational and methodological complex for studying disciplines consists of the following important parts:

- Syllabus (work programs of credit modules);
- Textbooks in accordance with the syllabuses of academic disciplines;

- Recommendations to students regarding the acquisition of new knowledge;
- Plans of practical and seminar classes;
- Teaching aids for various types of work in the discipline: laboratory work, practical classes, computer workshops;
- Educational content – didactic and demonstration materials for educational classes (tasks for practical classes, multimedia presentations, posters, layouts, models, computer programs, instructions, texts, handbooks, standards, albums, diagrams, video and audio recordings, designed to accompany the educational process);
- Variants of individual semester tasks and recommendations for their implementation;
- Topics of course projects/papers on educational disciplines;
- Teaching aids for course projects/works;
- Diagnostic tools for current and semester control of the results of studies and evaluation criteria;
- Tasks for carrying out comprehensive control on educational disciplines and criteria for assessing the level of student training for accreditation of the specialty teaching, monitoring of residual knowledge and skills;
- Educational and methodical materials for distance learning (automated educational complexes: video lectures, electronic textbooks and workshops, virtual laboratory work, means of test current control; methodological recommendations regarding the peculiarities of the organization of distance and mixed learning) [4; 7; 15; 23] (Figure 3).
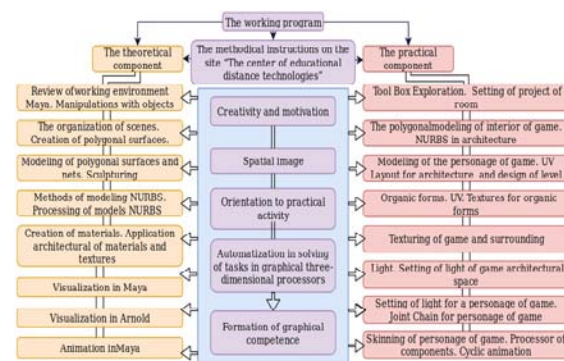

Figure 3. The structure and the content of educational and methodological complex at universities

Further, moving to the practical section of the ongoing investigation, we are going to realize the second goal: to display and analyze from the teachers' perspective modern courses and Pearson English Platform that can be recommended to be used during teaching English.

Learning a new language can unlock a wide range of opportunities. It might be the key to a new job or a promotion at work, or it could help overcome the last hurdle to advancing student' education. It is especially important in social work, allowing the social worker to practice cross-culture approach. But choosing the right online program can prove daunting due to the overwhelming number of options. We've selected ten of the best online courses for learning English and listed them below. Each of these courses takes a different approach, and there is sure to be one that fits one's style:

Udemy — English for Beginners: Intensive Spoken English Course — Top Pick;

Coursera — English for Career Development — Best Online Platform;

Coursera — Speak English Professionally: In Person, Online, and On the Phone — Most Flexible;

Coursera — Learn English: Advanced Grammar and Punctuation Specialization — Best for Grammar;

Coursera — Improve English Communication Skills Specialization — Best Career Outcomes;

Alison — English for Career Development — Most Affordable;

Alison — English Grammar: Comparisons and Word Order (Intermediate) — Best Intermediate Option;

Perfectly Spoken — Everyday English — Shortest Course;

Perfectly Spoken — A2: Pre-Intermediate Online English Course — Best Mobile Option;

ed X — Upper-Intermediate English: Business and Modern Life — Most Advanced Course [3; 15; 18; 23; 26].

All in all, students' involvement into the online platforms intensifies student-oriented approach that is outlined as the most important one in the development of sufficient professional training of university undergraduates (Figure 4).
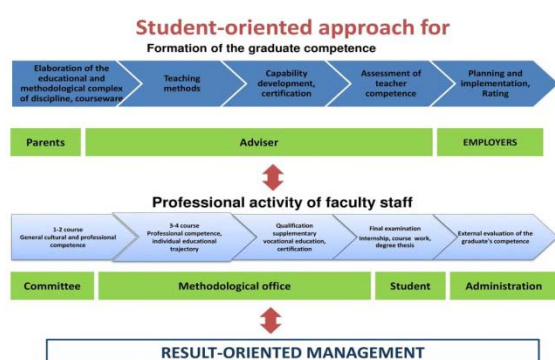
Figure 4. Student-oriented approach in teaching English with High Note course

High Note is an intensive five-level course for upper-secondary students that bridges the gap between school life and young adulthood. Designed to inspire modern teenagers to reach their ambitious goals, the course equips them with language skills alongside the life and career competencies that are indispensable to succeed in exams, in the workplace, and in their future lives.

Each level of the High Note Course comprises Student's Book and Active Book with Online Practice Core content of the course used with the teacher in class.

Moreover, Online Practice & Extra digital activities and resources are placed in the Interactive Workbook with instant feedback and automatic grading. There is also a Personal gradebook for students to review their performance. What is more, extra grammar and vocabulary checkpoint activities for Reading, Listening, and Use of English banks of texts and exercises with all audio and video resources are accessible on the platform Pearson English Portal [15; 18; 27].

Proceeding to the third goal stated at the beginning of the article, it must be mentioned that we are going to present a comprehensive summary of the advantages and disadvantages of paper resources in comparison with on-line resources which are to be taken into account at the university studying process.

The biggest advantages of the English teaching on-line courses can be summarized as follows.

Flexibility. Technology demands newer updates and faster systems all the time. This can only be achieved with constant training and learning. Working a 9-5 job and pursuing courses may seem tiring if one has to go to a training center before or after work. Sometimes going to the training center may rob person's weekends and eat up his free time. Online training courses can be taken anytime, anywhere. The only requirement would be an internet connection. Making time during coffee breaks at work, sitting on couch and taking online courses instead of watching television, and listening to audio/video files while travelling to and from work are some of the ways online training courses can be taken up. This ensures flexibility in terms of time and effort.

Mobility. A place that has internet connection is a place to take advantage of. Online training and eLearning would require a traditional registration process, followed by a user log in page, but since browsers are available on phones, tablets, and laptops, online courses are not only restricted to desktops; courses are configured to all types of devices. If one is thinking of taking a course while travelling, eLearning is now in his pocket [12; 22; 27].

Easy on the Pockets. With all these physical copies of books, notes, and professors to handle courses, traditional software training courses demand a very high price for certifications and course completion. In comparison to this, eBooks and notes are permanently saved in hard drive when it comes to online training. Certifications are provided online, in printable format, with course completion recognition that can be shared on job-posting websites, social media, and more. Reference videos, course materials, and examination scores are saved and can be viewed multiple times, with no limit. Online courses are extremely cost-effective and can be utilized efficiently [10; 11; 20].

Community. Meeting different people and joining forums does not stop at social media sites. People with same interests or with the same learning goals may join a community that interacts effectively exchanging questions, doubts, and ideas. Participating in such groups may offer a more detailed insight on where the course is leading to [10; 12; 14; 27].

Online Support. Professional educators and eLearning customer support are always looking to help and motivate students. Online course trainers can be emailed and interacted with, when students have any questions, and chat support is almost always available on online learning portals.

Progress Report. Online assessments test the ability to understand topics without the pressure of taking an actual exam. Some assessments can also be retaken and reconsidered if students are not satisfied with their scores. Properly justified and marked, online assessments bring about a fair scoring system that helps online students evaluate their understanding of a given subject.

Easy Accessibility. In a fast moving world, almost everything is readily accessible. Downloadable online notes, online support, online interaction, training videos that can be replayed, and assessments/quizzes that can be taken anytime during the course help professionals learn better and faster. The easier courses are to be reached, the easier it is for professionals to reach their goals [11; 16; 25].

Information Retention. Online courses help trainees retain and remember information with attractive images, videos, legible fonts, movie clips, animated descriptions, and more. Real-life examples are also given to explain concepts better. Displaying information in well-crafted ways leads to better understanding of learning content, more than taking notes with pen and paper. Face-to-face instructor-led training can force trainees to deviate from topics because of long lectures, where speech is the major mode of communication [22; 27].

Constructive Criticism. Providing constructive criticism through quizzes offers trainees the ability to understand where they stand in terms of knowledge. Multiple choice and open-ended questions prepare students better for taking an exam. The automated corrections like "wrong answer" and "right answer" give trainees the opportunity to go back and correct themselves when wrong. This saves time and effort when compared to unit tests where the papers are sent to the professor for correcting errors and giving the final grade (Figure 5).

The core advantages of online learning are summarized in Figure 5.

Figure 5. Advantages of On-line Learning

4 Conclusions

To sum up, the educational and methodological complex of a discipline is a collection of normative, educational and methodological, and program materials from a specific disciplines presented in paper or electronic forms, necessary and sufficient for the effective implementation of the work program in the discipline, the formation of relevant higher education/professional or pre-higher education applicants competencies provided by the educational program.

The educational and methodological complex is created at the cycle department from each academic discipline with the aim of comprehensive educational provision process in accordance with the requirements of state and industry standards of education.

On the basis of educational and methodological complexes of certain (separate) disciplines in the case if necessary, an educational and methodological complex of the specialty is created for specializations (educational and methodical support of the specialty/specialization).

Regulations on the educational and methodological complex of the discipline are developed as a component of the quality management system and regulate content, requirements for registration, procedure for development and approval of normative documents at modern universities, that are included in the educational and methodological complex of the prescribed discipline within the educational program of training and the curriculum according to which training of applicants for higher education/professional is carried out.

The regulation defines a comprehensive and systematic approach to provision of the educational process with educational and methodical, informative, reference, control and other materials aimed at improving quality training of applicants for higher education/professional, pre-higher education, as well as creating conditions for effective organization of their independent work.

The regulation was developed in accordance with the Laws of Ukraine "On Higher Education" (with changes and additions) and "Professional pre-university education", Resolutions of Cabinet of Ministers of Ukraine "On approval of the Licensing conditions of the proceedings of educational activities of educational institutions", Regulation on the organization of educational process in the college, Regulations on the system of internal quality assurance of higher education at the college, and other normative documents. Moreover, the requirements of the Regulations are the only ones in the educational activity of universities and mandatory for all teaching staff and learners.

Also, some people prefer face-to-face training, while others may prefer online training. According to the American Society for Training and Development, nearly one-third of all eLearning content and material is available and pursued online. Online training is no doubt a huge cost saver for organizations and individuals, as only certification courses come with a high price tag compared to free online courses. Utilizing the internet for improving skills is the ultimate way to climb up the success ladder, since the best investment that one can make is investing in self.

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INFORMAL COMMUNICATION IN INTERNATIONAL RELATIONS: ROLE AND IMPACT

[a]NATALIIA STYRNIK, [b]IHOR ISHCHENKO, [c]OLEH KUZ, [d]YAROSLAVA BEDRYCH, [e]IRYNA LAZNEVA

[a]*University of Hradec Králové, 62/26, Rokitanského, 500 03, Hradec Králové 3, the Czech Republic*
[b]*Oles Honchar Dnipro National University, 72, Haharina Ave., 49010, Dnipro, Ukraine*
[c]*Simon Kuznets Kharkiv National University of Economics, 9a, Nauki Ave., 61166, Kharkiv, Ukraine*
[d]*National Academy of Sciences of Ukraine, 4, Triohsviatytelska Str., Kyiv, Ukraine*
[e]*National University Zaporizhzhia Polytechnic, 64, Zhukovskoho Str., Zaporizhzhia, Ukraine*
email: [a]n.styrnik@gmail.com, [b]ivishchenko@gmail.com, [c]olehkuz@hneu.net, [d]bedrych.@ukr.net, [e]irishkins_29@gmail.com

Abstract: The article attempts to systematize arguments in favor of the fact that today the study of political communication at the international level, its various manifestations and consequences, faces problems that do not fit into the rigid framework of generally accepted political and philosophical theories, approaches and schools, and thereby actualizes the task of theoretical methodological understanding of the ongoing global socio-political changes through the formation of a new paradigm for studying the politics of international relations, adequate to the state of the world community and the challenges of the time. It is shown that in conditions of modern extreme instability and conflict potential, a special role is played by unofficial diplomacy, carried out through informal communication in various formats, in particular, in the format of the track two and track 1.5 diplomacy. The effectiveness of this kind of diplomacy is demonstrated by referring to its evolution and successful examples of its application in the 20th century, as well as the foundations and prospects in the current century.

Keywords: international affairs; diplomacy; informal political communication; means of communication; nonverbal communication; cultural sensitivity; soft power; informal network.

1 Introduction

Communication in the system of international relations is a complex and multifaceted phenomenon. Many aspects related to its nature remain to be studied. The elements of the system of international relations are interconnected, and the activities they carry out serve as connections. Moreover, the connections between the elements are of a different nature and can be implemented in various forms. Without such a connection, there are no relations, and in a broad sense, there is no system of international relations itself. Therefore, the first essential feature of the concept of "communication in the system of international relations" is the fact of the implementation of the connection between the elements of this system, expressed in various forms.

In contrast to the most common approach in political theory to the definition of political communication as the transfer or exchange of politically significant information between actors, in the system of international relations the connections of its elements are not limited only by the boundaries of the information sphere. In the system of international relations, in addition to information, the transfer and exchange of resources, technologies, cultural and other spiritual and material substances, some of which belong to the category of values, are actively carried out. It is advisable to consider the entire set of such objects in the system of international relations as objects of communication. In this regard, the fact of the presence of specific objects of communication that can be transmitted by elements in the system of international relations determines the second essential feature. Informal communications are organically woven into this complex landscape.

In its most pronounced form, it seems, the specificity of international political communication is determined by the characteristics of its subjects and objects, and, consequently, the subject-subject and subject-object relations that arise between them. The aggregate subjects of such communication are traditionally states, interstate associations, and international organizations created by them. In the context of globalization, signs of subjectivity also appear among non-state and transnational players who have powerful resources and are increasingly active on the world stage. Here it is enough to name transnational corporations, global media empires, private military firms, terrorist organizations, etc. that actually compete with states and the institutions they create. Within the framework of the relations of these entities, a complex system of communication is being formed.

International relations and diplomacy are inseparable processes. The degradation of the diplomatic and negotiation processes leads to chaos in international relations and a growing atmosphere of general mistrust. Moreover, there are situations when official diplomacy cannot work effectively or, in principle, is unable to act in any way - in the event of a breakdown in diplomatic relations, in a state of war, in acute contradictions or, for example, in case of interethnic hostility. When other ways are impossible, informal communications and the so-called "track two" diplomacy come to the fore [6].

The emerging model of the new world order is acquiring the features of an unpredictable aggressive confrontation between nuclear superpowers and their allies within the framework of various forms of the "cold war" (information, sanctions, cyber attacks, hybrid warfare, etc.). In the era of hybrid conflicts, the concept of a hybrid peace has also emerged, the achievement of which is only possible through the use of unofficial diplomacy, soft power and the paradigm of informal communications.

2 Materials and Methods

The theoretical and methodological foundations of the study represent a multi-level complex of principles and methods of cognition inherent in modern science. The theoretical and methodological basis of the study was made up of general scientific principles of system-structural and structural-functional analysis in combination with a specific historical research method, which makes it possible to trace the process of genesis, formation, and development of the objects under study in their relationship with other phenomena of the international political sphere. The basis for studying problems and solving set tasks was the application of the principles of historicism, systematicity, comparison, dialectical unity of the theoretical and empirical. The methodological basis of the study was the conceptual provisions of institutional, functional, sociocultural, communication theories, public diplomacy, and soft power.

3 Results and Discussion

Some political scientists emphasize that there have always been two forms of diplomacy - formal (negotiations) and informal, which refers to indirect communications through words (for example, statements by the Ministry of Foreign Affairs) or actions (for example, putting troops on alert or military parades) aimed at attracting international attention to some issue related to the interests of this particular state [23]. Sometimes, diplomacy is equated with negotiations, which is, however, incorrect. Informal diplomacy is an element of the art of managing a state's foreign policy. Its only drawback is that the signal may be misunderstood, especially since it is perceived by the general public, including opposition forces within other states.

The problems of the modern world are so complex and multifaceted that no country can solve them alone. The only way to confront global challenges is the joint work of representatives of different states. During the Cold War, the situation was different: the planet was ideologically and politically divided into two blocks, where the main role was played by two "superpowers" - the USA and the USSR. It would seem that it was easier for the two participants in the dialogue to find a common solution. However, history has shown that even in the face of global problems, the USA and the USSR could not always agree. Often, on the way to an agreement there was a wall of mistrust, fears, suspicions, and misunderstandings.

Ideology and propaganda only aggravated the problem - it became increasingly difficult to distinguish between actual political initiatives and slogans.

Informal diplomacy played an important role in overcoming disagreements and misunderstandings between these countries during the Cold War. After the signing of an agreement on cultural cooperation in 1958, a small but important channel for the transmission of information opened up for the USA and the USSR. Scientists, athletes, writers, and cultural figures became able to exchange opinions on various issues that influenced relations between the two states. One of the striking examples of informal Soviet-American diplomacy during the Cold War was the Dartmouth process.

The Dartmouth Dialogue (as it was later called) was in no way intended to replace formal relations between the United States and the USSR. This is obvious even in view of the lack of any powers of "unofficial diplomats". Informal dialogue was supposed to be, in the words of Dartmouth meeting veteran Philip Stewart, at the intersection of official diplomacy and public opinion and serve as an important link "public opinion - informal diplomacy - official diplomacy" [3]. Thus, dialogue was intended as a tool to facilitate more successful work of diplomats at the official level.

For the first time, Norman Cousins voiced the proposal to convene an informal meeting of the most famous and influential public figures of the USA and the USSR during his speech before the presidium of the Soviet Peace Committee - formally a non-governmental organization. The proposal was welcomed by the Soviet side, but it took another eighteen months before a meeting was held on the Dartmouth College campus, that marked the beginning of the Soviet-American informal dialogue [5].

At all the first meetings, the issue of disarmament was hotly discussed. It should be said that in parallel, the so-called Geneva process was ongoing - official meetings of experts in the field of nuclear weapons and disarmament, one of the goals of which was to develop the terms of a treaty prohibiting nuclear weapons tests. Since 1962, this process has taken place within the framework of the Committee of 18 Countries, one of the UN bodies. The Geneva negotiations, as some participants admitted, were distinguished by a "banal lack of trust," which ruined all attempts to reach an agreement [4]. They were often interrupted for long periods. However, despite the fact that attempts to find a solution to the most pressing problems related to nuclear weapons had been going on for about five years by that time, virtually no progress was observed in the negotiations. One of the main obstacles to reaching an agreement was the issue of inspections documenting underground nuclear weapons tests. The Soviet Union categorically did not agree to them.

It is quite natural that this question arose at the Dartmouth meetings. Soviet participants opposed the idea of inspections, calling them interference in the internal affairs of the state [4]. However, as a result of the dialogue, both sides came to an important conclusion: the essence of the inspection problem was not the legal aspect (interference in the affairs of a sovereign state), but the issue of trust. There were acute fears in the USSR that inspections could be a cover for espionage. Therefore, the participants of the Dartmouth meetings made a logical conclusion: control and inspections are necessary, but they need to be introduced gradually, in accordance with the growth of trust between countries [4].

Of course, it was difficult for the participants in the first meetings to develop solutions to problems that official diplomacy had been working on for many years, but they did not have such a task. More important is the fact that the dialogue, not devoid of propaganda, but still more objective than a simple exchange of memorized slogans, made it possible to build trusting relationships between the participants in the first two meetings, despite the fact that one of the participants in these communications (the USSR) was an extremely ideological country with a dictatorial regime.

However, the Dartmouth process was tailored to an era of relative strategic stability and global strategic balance. Although the two superpowers were divided not only by military-political (geopolitical) and political-economic confrontation, but also by fundamental ideological differences, at the same time they were in a relationship of parity and their official and public circles spoke to each other on equal terms. Today, the geopolitical landscape in the world has become significantly more complex, and communications in international relations have accordingly become much more complex.

The identification of public diplomacy and propaganda, recorded during the Cold War between the USA and the USSR, contributed to the fact that in the changed geopolitical conditions, methods of direct propaganda were less in demand, and, accordingly, the previous tools of public diplomacy lost their importance. Therefore, a number of experts believe that the concept of "soft power", which replaced public diplomacy in the 20th century, essentially provided its new interpretation [17].

New technological capabilities, coupled with the development of civil society institutions, have significantly expanded the existing diplomatic arsenal. In addition to traditional channels for conveying information, the possibilities of non-profit associations and organizations, business circles, etc. began to be used.

In general, changes in public diplomacy in modern conditions are dictated both by changes in the nature of international relations (the abandonment of bloc confrontation while maintaining a multipolar world) and technological changes in the field of global communications (a single information field, the availability and openness of information resources, their multi-format nature, speed of information dissemination, etc.).

Against this background, the use of the media in order to form a certain view of an issue or situation within the framework of interaction with the journalistic community is, on the one hand, a classic practice of public diplomacy from the Cold War period and earlier, and on the other, taking into account the level of development of information technology, it opens up new possibilities.

Interaction with political actors - current and former politicians, representatives of academic circles, implementation of educational programs and internships is another classic tool of public diplomacy. The effectiveness of this kind of action is long-term in nature, that is, the result, unlike using the potential of the media, is not achieved immediately and in this regard is delayed. However, from the point of view of the potential opportunities that open up as a result of such impact, such tools, of course, are particularly effective.

Dartmouth, being one of the international informal forums that arose during the Cold War, had its own characteristic 'face'. As it was mentioned above, only representatives of superpowers took part in it. The events were closed, and information about them rarely appeared in print or on television screens. The conference did not issue manifestos and appeals, did not try to develop its own credo, but welcomed a polyphony of views. Long before the concept of discussion according to the rules of Chatham House, developed by the Royal Institute of International Affairs in London (confidentiality of exchange of opinions, the obligation not to refer to each other outside the framework of the discussion), Dartmouth actively used its principles. As a result, a trusting atmosphere of meetings was created; their participants were more sincere in their opinions and used contacts among themselves to convey important information from official sources.

The Dartmouth experience is of interest primarily as a historical phenomenon, because the activities of this non-governmental organization contributed to the detente in relations between the superpowers and are worthy of close attention. Its participants set themselves not only the task of eliminating the use of force in international relations. Stopping violence does not mean achieving sustainable peace. To do this, it is necessary that a

solid basis for resolving conflict situations be created on the basis of civil society; multi-level dialogue is important, and Dartmouth was one of its manifestations.

One of Dartmouth's main legacies is its commitment to involving both government structures and civil society structures in their interaction in a multi-level process of peaceful resolution of conflicts. In contrast to the concept of "multi-track diplomacy", at the Dartmouth level communication occured between individuals, rather than official representatives of states or professional organizations. Another difference lies in the organization of the process itself and how the participants communicate. Its key element is the attitude of continuous dialogue, a multi-stage process of conflict resolution. One of the "textbook" newest examples of the application of Dartmouth's "lessons" is the attempts of Turkish President Erdogan to mediate in the Russian-Ukrainian war. This mediation made it possible to take a very significant step - to open a "grain corridor", a "fairway" that is not fired by the Russian aggressor for the passage of civilian bulk carriers with grain, which reduced the likelihood of a food crisis, in particular, in African countries.

Dartmouth activists relied on a gradual change in the climate of communication between participants and, as a result, on the penetration of the constructive influence of these meetings into wide circles of their political elites. Dartmouth's history has shown that under certain circumstances, such as changes in political leadership or foreign policy, "windows of opportunity" arise when an organization like Dartmouth can make a significant, and at times decisive, contribution to the outcome of a particular episode of international politics.

Dartmouth is less known than a number of international forums founded during the years of bloc confrontation. For example, in terms of its public resonance it cannot be compared with the Pugwash movement, which was awarded the Nobel Peace Prize. However, in the 'intimacy' of its meetings, in the deliberate avoidance of the 'spotlight', in the targeted focus of the recommendations developed, lay its strength and no less significant role [19].

The Dartmouth experience was used by the Americans to develop a dialogue with the PRC, which began at the initiative of the Kettering Foundation, a longtime sponsor of the movement, and with the support of Gerald Ford in 1986. Here, the "continuous dialogue" model was complemented by an appeal to a broader form of interaction in the form of Sino-American forums. Thus, in 2000, 25 such events took place. The same experience was used in solving problems of interaction between the United States and a number of Latin American states. The "continuous dialogue" model was used in the 1990s in Russian-Estonian relations, as well as in resolving racial and ethnic conflicts in the United States.

It should be noted that for decades now there has been a discussion about the future of the diplomatic service. Basically, the participants in this discussion are divided into pessimists and optimists, into those who predict its decline, and those who consider this branch of public administration to be quite stable. However, it is obvious that in the modern world foreign policy is gradually losing its former status. In the context of a globalizing world, the line between foreign and domestic policies is gradually disappearing. Problems that were previously considered a purely internal matter of a particular country are often resolved only at the international level.

Unlike countries with authoritarian structures, in democratic countries there is a significant dispersion of centers of power and, accordingly, decision-making centers. Diplomats from these countries are not always sure whether the actions they undertake abroad will receive support from parliamentary institutions, local authorities, and municipal authorities. It is no secret that the solution to many vital foreign policy issues for the country moves from the diplomatic department to the administration of the president or prime minister, or to other departments. Institutions such as the Interministerial Committee for the

Coordination of Foreign Policy Activities, created in France in 1994, began to act as coordinators of foreign policy. It was headed by the Prime Minister, and included those cabinet members whose departments have access to the international arena. The special representative of the president takes part in the work of the committee, as well as the secretary general of the interministerial commission for European cooperation [7]. In Germany, the corresponding Office of the Bundeschancellor is also responsible for coordinating foreign policy. This is especially true for military security issues. American sources note that national security issues are practically moving out of the control of the State Department [21].

Within government structures, the range of departments that directly enter the international arena and interact with their partners abroad is constantly expanding. All this occurs in a complex political environment, where the boundaries between subnational, national, and international political fields become indistinguishable. Indeed, recently there is increasingly talking about a new form of international activity - citizen diplomacy, - since the transformation of state sovereignty and new technologies allow non-professional diplomats - non-governmental organizations, groups and individuals to enter the international arena, bypassing the state apparatus. In this regard, the question arises about the interaction between state and non-state actors on the world stage. J. Rosenau [15] proposes to consider modern international politics as "two worlds" - a world dominated by sovereign states, and a world where there are many other centers of power. Both develop in parallel and interact with each other. Researchers have also developed other scenarios that involve the intersection of official and unofficial diplomatic activities. S. Brown proposes to consider the modern world system as a "global polyarchy", permeated with complex connections [3].

"Logically, diplomacy is no longer the traditional conduct of public policy, it is a set of relationships established between both state and non-state actors, resulting in negotiations and the creation of new institutions", note Princen and Finger [14, p. 42].

The complexity of the system of international relations, the global nature of most problems, and the increasing intertwining of domestic and foreign policies lead to the fact that at the present stage multilateral diplomacy is acquiring decisive importance. International organizations (universal, regional, subregional), created by states on the basis of multilateral treaties and in accordance with international law, become the highest form of multilateral diplomacy. Each of them adopts its own charter, determines the budget, and establishes a headquarters and secretariat. Service in these organizations is called the international civil service and is subject to special regulation.

A new form of multilateral diplomacy was the convening of conferences, the participants of which were only international organizations. It is about, in particular, meetings in Strasbourg of the forum, in which representatives of the Council of Europe, NATO, and WEU participate, thus coordinating their actions in administrative and financial matters.

Multilateral diplomacy requires participants to strictly adhere to the rules of procedure, a clear understanding of the interdependence between various multilateral structures, and the ability to build and mobilize political coalitions that are beneficial to them. The negotiation process is of particular importance within the framework of multilateral diplomacy.

In the face of new threats and challenges, multilateral diplomacy goes beyond traditional boundaries and increasingly needs the interaction with new actors in world politics. As a result of the interaction of state and non-state actors in world politics, a kind of symbiosis occurs in the field of diplomatic activity.

B. Hocking suggested the term "catalytic diplomacy", implying close interaction between official and unofficial diplomacy [10]. Under current conditions, "catalyst diplomacy," which involves the interaction of governmental and non-governmental actors,

requires a flexible response and the development of such qualities as the ability to quickly adapt to the situation, the ability to, while pursuing own interests, attract opponents to one's side.

The exceptional complexity of the topics of multilateral negotiations on climate change, genetic engineering, and environmental protection required the involvement of representatives of science, industry, business, and authoritative non-governmental organizations in the negotiations. The Institute for Consensus Building, a non-profit private organization in Massachusetts, developed the famous theory of "parallel international negotiations." Its concept was tested during several rounds of negotiations on trade and environment issues held in 1994-1996, as well as during the preparation of the climate change conferences in Kyoto (1997) and Buenos Aires (1998). The heads of official delegations and the heads of relevant non-governmental organizations took part in the negotiations parallel to the official ones. They were able to meet in an informal setting that allowed them to implement something that is usually impossible to do at forum meetings, that is, to have free discussion and brainstorming. A survey of negotiators showed that everyone was very satisfied with the results of the meetings, which greatly facilitated the achievement of agreements at the official rounds [2].

In addition, today the rapidly changing geopolitical picture of the world poses for the states the problem of finding new forms of adequate response to emerging threats and challenges, as well as the task of increasing their diplomatic influence in the international arena, for which soft power is actively used.

The pragmatic task of "soft power" is to form within a specific country, which is the "object" of influence, a position of leaders, elites and citizens favorable for the "subject" of influence in relation to the political and economic actions of the state in whose interests this influence occurs [9]. Advocates of "soft tools" believe that the change in the global system has created a "hazy power space" that requires the careful development of new approaches to power. They argue that today's interest in neoliberalism and constructivism is no coincidence: these paradigms reflect the changing nature of world politics. The growing importance of "soft power," in their opinion, is due to the use of the following factors: 1) the interdependence of national economies, which has led to a change in priority from coercion to cooperation; 2) increasing costs of using force, especially among nuclear powers; 3) the affirmation, at least in the West, of a "prosperous society" whose members are not 'carried away' by the "ethics of war"; 4) development of civic consciousness and network cooperation [12].

Formulated by J. Nye in the early 1990s, the concept of soft power turned out to be one of the few Western concepts that has gained widespread popularity in many countries in the Asia-Pacific region. Today, the concept of soft power, the possibilities and prospects for its use to ensure national interests are actively discussed in academic and political circles of most of them. It is attracting the attention of economically developed regional powers such as Japan and Australia, which are concerned about maintaining or strengthening their authority and influence. The rapidly growing Asian giants, China and India, are turning to it, trying to rethink their place and role in the regional and global environment. It is attracting interest from mid-level regional powers such as South Korea and Indonesia, which are considering opportunities and prospects for enhancing their status in a rapidly changing world. It is approached by poor (Nepal and Bangladesh) and rich (Singapore and Taiwan) small countries and economies seeking to ensure favorable external conditions for their existence and development.

In China, the term "soft power" has become firmly entrenched in academic and political discourse. Several approaches to this concept can be identified in the works of Chinese scientists [17]. Within the framework of the structural approach, researchers identify sources of "soft power" and formulate its models. For example, sources such as multilateral diplomacy, cultural diplomacy, and foreign assistance programs are highlighted.

Another version of the sources of "soft power" includes assimilating power (cultural values, ideology), institutional power (creation of international institutions, setting the agenda of international forums and organizations), identifying power (a country's influence on other states through recognition of its leading role). The practical implementation of the "soft power" strategy in China includes projects diversified across various regions and countries: cultural, scientific, and educational initiatives (for example, within the Confucius Institute), sporting events, active use of the media, development of local brands, creation of think tanks, environmental projects.

In the Islamic world, Turkey and the Islamic Republic of Iran have the most significant soft power potential. The soft power of the Turkish Republic historically dates back to the reforms of Mustafa Kemal in the first half of the 20th century, when the monarchical traditionalist state of the Ottoman Empire was transformed into a European-style republic. This vector was confirmed further: the course towards European integration and the reforms of Turgut Ozal (1983-1989), aimed at unifying the legal and political system of the country with the norms of the European Union. The approach to soft power changed with the coming to power of the moderate-Islamist Justice and Development Party, led by its leader Recep Tayyip Erdogan. His political course moved away from nationalism and pan-Turkism in favor of an Islamic orientation, and in the wake of the growth of Euroscepticism, the democratic image is changing to the image of an effective autocracy, justified by the principle of "balance between security and democracy" [22]. Turkish researchers view these processes as an attempt to synthesize Turkish nationalism and Islamic traditionalism, the basis for which is the formation of a new soft power strategy.

The informal ideologist of the soft power of the Republic of Turkey is the former head of government and former Minister of Foreign Affairs, Professor Ahmet Davutoglu. The concept of "invisible force" put forward by him shows the possibility of achieving foreign policy success through humanitarian and diplomatic influence [22]. This concept is a national version of the reception of the concept of "soft power". As noted by Western experts, "the concept of Ankara's "soft power" can be considered as the result of a synthesis of various approaches that make up the theoretical basis of modern foreign policy, which is constantly expanding and becoming more complex as new ideas are developed" [17].

The most classic "Western" understanding of "soft power" of Iran can be seen in the activities of President Mohammad Khatami (term 1997–2005). The concepts of "Islamic civil society" and "dialogue of civilizations" that he put forward implied the creation of a positive image by turning the country into a cultural bridge between the West and the East. The main goal of the state was declared to be the protection of the rights and freedoms of citizens; special attention was paid to the transit of technologies and the implementation of a policy of multiculturalism. This policy was scaled back by Mahmoud Ahmadinejad, who replaced him as president (term 2005–2013). Supported by reactionary layers of the population, he added many "hard" elements to Iran's foreign policy, the most significant of which was the nuclear program. Despite conflicting rhetoric and a sharp decline in attractiveness in Western countries, his government continued its course towards creating a holistic system of "soft power" based on culture. "Despite tough positions on a number of issues and revolutionary rhetoric, namely the national-cultural community is important as a starting point for strengthening ties between the states of the region" [9]. It was under Ahmadinejad that two main directions of Iran's "soft power" took shape: 1) interaction with Iranian ethnic groups and peoples with similar cultures; 2) comprehensive, including armed, support for Shiite entities around the world.

H. Saunders - American diplomat, director of the Bureau of Intelligence and Research of the US State Department in 1975–1978 and US Assistant Secretary of State for Near Eastern and South Asian Affairs in the Carter administration in 1978–1981 –

is known for significant achievements in the field of peace negotiations, including the conclusion of the Camp David Accords of 1978 and the Peace Treaty between Israel and Egypt of 1979, as well as in the negotiations for the release of American hostages in Tehran in 1979. Subsequently, Saunders gained fame as a scientist and one of the creators and leading specialists in organizing negotiations in track two format.

Track two diplomacy is not a new phenomenon and has a long history. It turned out to be useful in certain situations. For example, the 1993 Oslo peace agreement between Israel and Palestine was negotiated largely through "track two" negotiations. The leaders of the two countries took ideas from the track two discussions and turned them into an agreement.

The role of such negotiations increases during periods when official channels of communication are in a kind of freeze, or when there is a lot of tension in bilateral relations. However, sometimes discussions even take a semi-official form - the so-called "track 1.5". Under Track 1.5 diplomacy, negotiations and meetings are informal and often initiated by non-state actors, which may be joined by state actors. The negotiations are intended to create a neutral forum where statesmen can then meet and lay the groundwork for real diplomatic negotiations [25].

An interesting example of Track 1.5 diplomacy is the negotiations between Biden and Xi Jinping in 2023 (the two leaders have not met since their contacts at the G20 summit in 2022). Thanks to high-level informal interactions, there has been a slight improvement in Sino-American relations. Over the past few months, high-level diplomatic dialogue between the two sides has intensified dramatically. This rise, experts believe, bodes well for the possibility of expanding these conversations to representatives of the Defense Ministries of both countries. Both American and Chinese political scientists rightly emphasize that both countries should continue Path 1.5 diplomacy [4]. The diplomacy of such a track allows discussions to take place without the need to maintain the 'appearances' that are necessary for high-level interaction. It is emphasized that such conversations can improve communication between the American and Chinese sides and make future discussions between senior government officials more attractive.

In this context, one should remember the Geneva Summit of 1985, when the former head of the Soviet Union, Mikhail Gorbachev, and then US President Ronald Reagan held their historic meeting. This summit became a historical milestone in the development of not even both states, but the world, since after it the Cold War turned to the finish line. As a result of an exchange of views, which took place behind closed doors, M. Gorbachev called the American president a "dinosaur", while Reagan labeled the Soviet counterparty as a "hard-headed Bolshevik", and nevertheless, the USA and the USSR for the first time assured each other that they would not strive for a military dominance. In a joint declaration, they stated "that nuclear war cannot be won and should never be fought" [8]. It is also interesting to remember that during the events of the Six-Day War in Israel, the intensity of consultations in the UN Security Council gradually decreased, and it seemed that the discussion of the problem of the Middle East settlement had once again reached a dead end. But at a time when official diplomacy showed its helplessness, behind-the-scenes diplomacy once again demonstrated that it is the most reliable tool for achieving compromise and a peaceful settlement in the Middle East: the compromise proposed by British diplomats suited both the Arabs and the Israelis [20].

In today's extremely tense geopolitical situation in many regions of the world, so-called preventive diplomacy is also gaining special importance. Preventive diplomacy focuses on action in unstable regions during periods when there is a growing or high likelihood that regimes or individuals will take up arms or use other forms of coercion to "resolve" political differences.

The virtual failure of the policy of détente in the late 1970s and early 1980s and the apparent increase in tensions in the international arena left little room for preventive diplomacy in its current sense. At the same time, the paradox of the situation is manifested in the fact that the agreements on limiting strategic offensive weapons concluded between the superpowers at that time were striking examples of what we are now accustomed to calling examples of preventive diplomacy, since they really influenced the process of reducing the risk of unleashing a global nuclear war. This also includes the creation of so-called hotlines, the organization of centers to reduce the risk of a nuclear war, the formation of nuclear-free zones, etc.

Conflict resolution in the international arena requires the constant creation of new tools and improvement of old ones. The main need is for conscientious and timely information about emerging conflict situations. Specific symptoms, such as leaders' deliberate mobilization of aggressive public opinion or stockpiling of weapons, must be closely monitored. All preventive diplomacy actors - both governmental and non-governmental - must be guided solely by the desire to prevent armed conflict and the human suffering and material losses it generates.

It is worth noting that the concept of preventive diplomacy is most fully reflected in the works of Michael Lund. The author pointed out that the essence of preventive diplomacy is to prevent the uncontrollable escalation of conflicts and their transition into constant violence, accompanied by the reconciliation of armed forces. In his book on the concept, methods, and goals of preventive diplomacy, Lund defines it as follows: "It is an activity carried out in vulnerable regions in sensitive times with the aim of avoiding the threat or use by states or groups of armed force and similar forms of coercion to resolve political differences. which could arise as a result of the destabilizing influence of economic, social, political or global changes," and Lund further writes that "such activities may involve the use of a range of "diplomatic" (in the narrow sense), political, military, economic and other mechanisms and may be carried out by governments, intergovernmental and non-governmental organizations, individuals or the parties to the dispute themselves..." [11].

Zartman defines the main meaning of conflict prevention in keeping them at the political level and eliminating the causes that can give them violent forms [26]. The moment of using preventive diplomacy in this case becomes of great importance. The action between peacetime diplomacy and crisis diplomacy is preventive diplomacy, defines Lund [11].

As the experience of recent decades shows, the effectiveness of international peacekeeping efforts is often insufficient, and the authority of the UN is undermined. In such conditions, the role of preventive diplomacy and informal communication channels, cultural sensitivity and informal networks increases significantly.

It must be emphasized that the role of multilateral and multi-track diplomacy especially increases at turning points in the development of the system of international relations. Its important advantage, compared to bilateral diplomacy, is the greater publicity of the work, greater flexibility in the forms of discussions, exchange of opinions, and the ability to connect channels of unofficial diplomacy.

It should be noted that Saunders is the author of the concept of five-step sustainable dialogue. It is necessary to highlight three pillars of this concept. The first is the emphasis on a "civil society peace process" ("a public dialogue"). The second basis of the concept, closely related to the first one, is a clear rejection of intrusive, hyperactive, and sometimes "aggressive" external moderation of the negotiation process, which began to spread rapidly with the growth of the number of peace processes in the 1990s (one of the striking examples is the Dayton negotiations on Bosnia). Instead, it was supposed to provide greater independence to the participants in the "civil dialogue": "it is not about playing the role of some kind of mediators from one side or another, but rather about the mission of specialists to establish a negotiation process, which the conflicting parties could then

conduct and support themselves" [18]. And finally, the third basis, which gave the final name to the format itself and, in our opinion, became the main contribution of this model to facilitating peace negotiations, is a key focus on the dynamics of the negotiation process within the five-stage dialogue model. The starting point here is that it is about a process, and a long one, at different stages of which different tools may be needed and step by step one can consistently achieve results - from more modest in the first stages to more significant and sound in subsequent stages. For Saunders, sustainable dialogue is "a conceptualization of what people do in conflict situations when they are in a safe space created to conduct a dialogue systematically over time" [18].

Actually, Saunders, back in 1985, divided this process into five interrelated stages, as it was mentioned above: (1) identifying and formulating a problem that both sides consider to be such; (2) making a decision on the advisability of actions to resolve it through negotiations; (3) organization of negotiations; (4) conducting negotiations to reach an agreement; (5) implementation of the agreement as a condition for the next steps to continue the peace process. However, only in the early 1990s Saunders finally firmly came to the conclusion that "the development of relationships within the framework of a sustainable dialogue can be presented in the form of a certain scheme of sequential actions," proposing a harmonious, five-stage sequence of stages of such a dialogue, starting with the pre-negotiation stage (when potential participants are still weighing whether to join it at all or not). Subsequent steps include: defining the problem area and agenda; analysis of specific problems during a certain continuous sequence of meetings of dialogue participants interested in resolving it; transformation of the group of dialogue participants into a kind of laboratory that explores the relationship between the parties to the conflict and offers scenarios for interactive steps to achieve positive changes; finally, exiting the sphere of discussion into a broader political space and exerting a practical influence, including on the course of the official negotiation process [1].

This approach and its more recent varieties, in particular, make it possible to smooth out the influence of the concept of development of "contracting" states, which is very difficult to achieve at the level of official diplomacy due to the impossibility of ideological "concessions" in public discourse. By the end of the twentieth century, two political models had emerged. One is based on liberal principles, while the second - on a rigid administrative-command system. They were called the Washington and Beijing Consensus, respectively.

It is easiest to establish a public diplomacy channel where there is an open request for dialogue and cooperation and, of course, such channels should be supported. But public diplomacy is truly urgently needed where relations are on the brink or already in a state of acute crisis. Organizing and holding any event to maintain informal contacts in the context of disrupted official interstate relations is a very difficult political and logistical task, but this is the art of informal diplomacy. In such cases, it is not always necessary to touch upon the most sensitive issues, such as interethnic conflicts or issues of unrecognized territories. But namely the platforms where experts, scientists, students, and social activists can meet in a fairly free and frank atmosphere make it possible to create a dialogue window, including on the most pressing problematic issues.

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Primary Paper Section: A

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MUSICAL INSTRUMENT IN THE STRUCTURE OF PERFORMANCE THINKING

[a]AllA CHERNOIVANENKO, [b]DUAN JINGHAN, [c]CHEN HUANGQI, [d]ZHANG JIAHAO, [e]WANG HAUOYUAN

[a-e]*A.V. Nezhdanova Odesa National Academy of Music, 63, Novoselskogo Str., 65000, Odessa, Ukraine*
email: [a]alla__ch-ko@ukr.net, [b]649427473@qq.com, [c]c247022@gmail.com, [d]zjh756350020@live.com, [e]869355468@qq.com.

Abstract. The article examines the specifics of the processes of musical thinking and the formation of this concept in musical communication and philosophical research. The relationship and interaction of emotional-imaginative and logical components of musical intelligence, aesthetics and intonation are analyzed, and the operating mechanisms of musical thinking are considered.

Keywords: musical instrument; musical art; musical performance; musical thinking; musical language; musical texture; sign; means of musical expression; musical semiotics; musical semantics; interpretation; musical communication.

1 Introduction

The path to determining the disciplinary status of the category of musical thinking in order to study its nature and process of functioning inevitably leads to the realization that not only musical thinking, but also any mental manifestation of human consciousness demonstrates its sign organization and semiotic origin, that is, it fixes the correlation of sign and semantic parameters of consciousness. The very concept of musical thinking indicates specific dynamic and qualitative indicators of the process of perception and action associated with musical creativity. Musical thinking or, as M. Bonfeld defined it [3] – thinking with music – is subject to those features and patterns of the functioning of consciousness that relate to its creative resources. Also important for the sphere of musical thinking is the correlation of the emotional-imaginative and logical components of musical intelligence, as well as intonation as a possible unit of measurement of musical information, i.e., soundability (the sphere that most directly depends on the musical instrument and the specific thinking of the musician associated with it - "thinking on a tool" and "thinking with a tool" [4]).

The methods and categorical apparatus of the sphere of musical thinking as a whole are determined by the multi-layered nature of the musical and textual material that it is forced to involve: the output here is historical-comparative and structural-analytical methods, based on genre-compositional, stylistic and stylistic-chronotopic approaches. The importance of a conceptual approach to teaching, learning to play an instrument, as well as to the performing arts has received active attention in research in recent decades [12]. No less important and categorically argued are the methodological positions of related sciences, such as philosophical hermeneutics, aesthetics, epistemology, theoretical psychology, sociology, philology and structural linguistics, linguistics, cultural history, etc. Actually, all the existing disciplines of this circle are related to those realities of human existence in language and with language that semiology, or more precisely, musical semiology, is trying to study [2]. After all, it proposes to perceive and reveal the purpose of musical art as one of the leading languages of the total human civilized existence, a single and, at the same time, individualized human consciousness [6]. In this way, musical semiology is able to enter into the sphere of questions about the origin of human linguistic consciousness and its varieties, in particular, as being naturally determined and transmitted in a psychophysiological way, and at the same time artificially formed, introduced from the outside, by external means, in the sign-speech practice of interpersonal communication. At the same time, language will never be what we think but will be what where thought is implemented. In this regard, a musical instrument acts as an important tool for the indicated "implementation of thought", and thanks to specific means of sound production, sound engineering and playing techniques, it can, in a certain way, become "what we think" - a direct, materialized sensory-sound image-idea, not just taking an active part in its formation and

development, but also guiding, "suggesting" the directions of such ideas, musical and linguistic ways of their implementation.

2 Method

The use of a cultural and psychological approach made it possible to consider the multidimensional integrity of performing thinking as a structure and the place of a musical instrument in this structure. The conceptual guidelines of the general scientific systems approach made it possible, by summarizing data from different areas of scientific knowledge, to consider performing thinking as a single integral structure, highlighting its genesis, stages of development, structural and functional certainty, transformation of the sociocultural paradigm, as well as aesthetics and psychological aspects.

3 Results and Discussion

Methodologically significant for the problems of this article is the following reasoning of M. Bonfeld, who believes that "music demonstrates a very specific area of meaning", which is subject only to musical means of meaning: "Despite the fact that each type of art is connected by some essential aspects with spiritual the intellectual world of a person, and harmonious development is unthinkable without the participation of all types of creativity, music has special, unique possibilities for a direct impact on the human psyche. This is due to three reasons.

1) Music is closer than other types of art to continual thinking due to the greatest abstraction from the objective realities of the extra-artistic world, on the one hand, and on the other, due to the pronounced continuity of its artistic fabric itself, which has no analogues in other types of creativity.
2) Music directly comes into contact with the abstract mental process as its analogue, sometimes even before understanding the semantics of the sub-sign layer.
3) Music also has a direct emotional impact as a sensory-acoustic signal, as the embodied beauty of sound. Thus, music turns out to be able to awaken and harmonize with its influence all spheres of the human spirit, transform human thinking into thinking as music, that is, improve personality - and this is the ultimate goal of musical art as the most secret, most intimately connected with the inner world" [3, p. 119]. Bonfeld differentiates the following concepts of the theory of musical thinking: thinking with music - music as thinking (composing aspect), thinking in music - thinking together with music (performing aspect), thinking about music (musicological aspect). What is important here is the relationship between the highlighted aspects of musical thinking as necessary interpretative factors of musical creativity, since it serves as the basis of musical understanding. Let us note that a musical instrument (and instrumental music in general), in conditions of "the greatest abstraction from the objective realities of the non-artistic world" and complete independence from the word, at the same time, allows for a specific (sound, visual-kinetic, theatrical-artistic) objectification of the non-verbal musical thinking in the process of "unfolding" interpretative experience.

From the standpoint of performing interpretation, musical thinking inevitably takes on several positions, among which the cognitive and linguistic aspects should be highlighted [4], as well as the sphere of musical communication [11; 13]. One of the studies initially aimed at the intersection of communication and interpretation was the article by E.A. Turner, published in the famous magazine "The Musical Quarterly" back in 1944 [13]. The author reflects on what a "work of art" is and defines it as a "highly intellectual unity of complex impulses", as communication between the mind of the creator (through certain symbols, which means the system of musical speech - rhythm, meter, melodic line, etc.) to the "mind of the recipient" [13, p. 299]. That is, any type of musical activity becomes mental (taking into account its compositional, performing, and listening

specifics) and communicative (the main thing for participants in communication is to correctly determine the methods of achieving mutual understanding). At the same time, the thinking of the composer, performer, and listener, having a number of common characteristics, is distinguished by certain specific functioning. Moreover, musical thinking is also subject to subtler differentiation depending on the specific musical instrument (and the corresponding specification of the performer) - its timbre, register, articulation-stroke, dynamic, texture features, the very type, capabilities and some historical genre and style traditions of instruments. In this regard, musical and instrumental creativity represents a special sphere of musical thinking.

Similar to verbal language, musical-instrumental organization, serving as an expression of musical meaning, not only acquires specific grammatical, figurative-sonic, associative-historical, performance-psychological, and artistic forms characterized by aesthetic perfection but also serves as a carrier of information as a means of communication. It is precisely here that Lotman's developed structural-semiotic approach proves to be effective as one of the important ways to comprehend complex objects such as works of art, cultural epochs, musical-instrumental art, and musical instruments. According to Yuri Lotman [10], the structural method ensures the logic of research, the validity of conclusions, and the ability to demonstrate the integrity of the object.

Since the second half of the twentieth century, the updated semiological potentials of science began to actively penetrate musical aesthetics and musicology. This process was largely facilitated by musical avant-garde movements, the figurative and technological parameters of which stimulated debate about the ability of music to express certain meanings by definite (primarily purely instrumental, non-verbal) means. And although, in general, the statement about music as a means of specific artistic communication found more fans, the mechanisms and nature of musical meaning, symbolism, and sign remain today promising objects of scientific research. The musical instrument itself (with its history and capabilities), as well as the instrumental and linguistic means developed during the historical development of music, act as the most important specific "signs" of the system of musical thinking.

The point here is not only the presence of a certain sign system in a "pure" musical-instrumental "message", communication where there is no verbal text, which largely determined or contributed to the formation of a holistic meaning over thousands of years, as well as purely musical intonations in the conditions of instrumental accompaniment of singing. The fact is that in instrumental creativity the mechanisms of associative-sound memory are triggered, storing certain semiotic signs of the instrumentation itself in its materialized-organological (timbrality, appearance of the instrument, ways and techniques of playing), as well as situational-substantive (ritual, leisure, production processes, etc.) and genre-style expressions. Thus, the semiotic approach in musical instrumentalism (as in music in general) is dictated by the needs of modern performing and composing practice, musical psychology and performance theory, contributing to the development of their cognitive aspect, i.e., musical thinking.

On the long path of its autonomy, the art of music produced (this process continues today) such specific artistic (musical) techniques that: generated "reality and sublimity of experience" [8, p. 21], which could reflect the character and mood of "simple" leisure and entertainment, primary genre forms (from folklore and secular music) and complex philosophical concepts; real-(fantasy-)sensual and exquisitely intellectual images and structures - i.e., almost the entire spectrum of life ("earthly" and "unearthly") space of thought-feeling. Moving away from the potential objective expressiveness of the human voice (singing) in "pure" instrumentalism, musical art not only steadily expanded its figurative palette due to machine-increased technological capabilities, but also produced, created, without the help of words, specific laws of higher logic, the highest manifestation of thought-feeling, as if outgrowing the "teacher" -

the voice, with its objectified meaning - the word. Through "church roots" [8, p. 20] academic musical art has significantly expanded the spiritual vector of musical instrumentalism, which, of course, is already felt in the music of the great I.S. Bach, in the concept and phenomena of "absolute music" (a German term of the 19th century; Russian musical thought preferred the expression "pure, non-programmed instrumental music") and further up to the present time.

The founder of this development of music - pure non-program, non-verbal instrumentalism - was Beethoven (for relying on the achievements of baroque and classicist forms). The emotional capabilities and high logical relationships of all elements of music, brought to perfection during the 17th - 20th centuries, allowed this type of art to convey in its "wordless language" even that "which could not be expressed through philosophical ideas" [7, p. 23] (it is not without reason that from the end of the 19th century philosophers began to draw their ideas from the art of music, using the analogy of its expressive and linguistic means, forms, and dramaturgy). However, the emancipation of music actually occurred in the era of I.S. Bach, although it did not become noticeable here, since Bach surrounded it with a "curtain of verbal emblems" [ibid., p. 98] and his predecessors - organists (from J. Sweelink), clavierists (from virginalists), violinists (A. Corelli and others), and ensemble players.

According to U. Eco, in the 17th century symbols were perceived as genuine reality: "People of that century considered it their duty to turn the world into the thick of Symbols, Masquerades, Picturesqueness. Everything had to reflect secret connections, be a treasury of meanings, tell a lot, but quietly, hide more than reveal. The mystery of the symbol (the border of boundaries) is fleeting, like an elusive dove, and it is never known where it is. But whether to dream about something that is not consciously given is not the pinnacle of the noblest desires? [5, p. 331]. It is not surprising that precisely at this time a new, autonomous musical and instrumental art was born, capable of embodying pure meanings with new linguistic means, building on their basis a new type of communication between the musician and the listener, as well as on the basis of linguistic means directly related to instrumental technique, organology, performing techniques, etc. Thus, the main discoveries of the musical baroque (the birth of opera; the formation of the instrumental concert; the emancipation of concert halls; the emotional impression of affects; the energy of motor movement) led to a historically new concept of "music". All of them were largely formed in instrumental (called "absolute" music in the 19th century) and were based both on the development of musical performance and on the capabilities of musical instruments. It can be argued that musical thinking (and musical language) developed not just in parallel, but in close connection with musical-instrumental organology, encouraging each other to new discoveries. Thus, bowed performance and instruments took shape much later than plucked ones, and the bow itself received improvements for varied, refined articulation and "singing" on the instrument, when "both sides" "needed" each other. At the same time, the type of keyboards was formed (at first - claviers) and only in the 1820-30s the piano appeared "needed", which made a real revolution in musical thinking and musical language. Only in the middle of the 19th century were wind instruments improved (with their method of sound production, known since ancient times), but the development of symphony and opera orchestras required new timbres, artistic and technical instrumental capabilities. It is unlikely that the keyboard-pneumatic button bayan and accordion, with their unusual timbre and noticeable connection with the democratic strata of music and the population, would have become in demand by composers and performers earlier than the 20th century.

The very concept of "absolute music", with the philosophizing inherent in German science, at one time raised the Beethoven-type symphony to the highest level of the musical and artistic hierarchy, establishing the thesis that one's own instrumental art is music as such. Purely musical intonation (rhythmic, pitch melodic, modal, textured) structures become carriers of

meanings, ideas, their signs (although such modal signs can already be discussed in the doctrine of modes in ancient Greek music), embodying the subtlest aspects of artistic paradigms of different eras, styles, nations and individual author's manifestations. In the post-verbal – instrumental – embodiment, this becomes especially noticeable and even visual, acquiring spatial and sound specificity.

It is characteristic that the key idea of "absolute music" was the emancipation of musical instrumentalism and the new possibility of embodying the Absolute, associated with its specificity and means of expression (without words, based on purely instrumental linguistic features). In the 19th century, "having also freed itself from religious duties, absolute music simultaneously showed the world such high spiritual properties that in some respects it was able to replace religion" [7, p. 31]. In the twentieth century, in terms of the importance of ideas, instrumental music reached the level of conceptual philosophical thinking (from Beethoven's model "from darkness to light", the symphonies of P. Tchaikovsky, G. Mahler - to the works of D. Shostakovich, A. Schnittke, V. Silvestrov, etc.), from now on music becomes the basis for philosophical conclusions and judgments. Thus, music "outgrew" the framework of human feeling and individual life, jumping into "the immensity of the cosmic world and the Divine" [7., p. 38]. Namely along this path, functional musical thinking unusually expanded and deepened. And the musical instrument is directly becoming increasingly more involved in this process (including as a certain "animate", primarily for the performer, unit of the creative process) - covering the tendency of the 20th-21st centuries towards the emergence of extremely specific, individual playing techniques and textures, to writing music that cannot be transferred to other instruments without compromising the figurative and timbre-sound quality.

A significant aspect for the functioning of musical thinking is another point directly related to instrumental performance and the instrument itself. While recognizing the long-standing (and quite prolonged) inseparable connection of instrumental play with words, it is essential to note that instrumental music-making is originally linked to essential life processes – the organization of work, leisure, and, of course, rituals, where the "concealment of the human voice" is often necessary for various reasons. All this makes the instruments themselves, their performance, and the music played on them recognizable as "symbolic carriers". Such symbolism – a "non-verbal translational system" – actively operates beyond the scope of labor experience, leisure, and ritual actions. The maturation of music from "non-music" is not only (and not so much) a "mechanical" process of isolating a musical instrument but also the development of a new quality: it is a kind of transitional synthesis, primarily in "unusual" (until certain times) thinking.

The very genetics of musical instruments demonstrates this quality as gesture and sound simultaneously separated from the body. But gestures and facial expressions are the most natural and ancient of all human semiotics, since they are the basis of such languages as ritual, dance, acting and, of course, music. Moreover, music, of all of them, is the most difficult to decode semiotic language system, especially in the field of so-called "pure" instrumental music, which directly (without using words) conveys "pure meanings" - mental feelings [4]. In music (as in the development of human intelligence in general), along with the voice, the hand takes part (namely the hand produces meaningful, intonating sound production and sound control on the instrument). According to B. Asafiev, "the process... of intonation in order to become not speech, but music... bypassing the word (in instrumentalism), but experiencing the influence of the "silent intonation" of plasticity and human movements (including the "language" of the hand), ... becomes "musical speech", "musical intonation"" [1, p. 211-212]. And, further, "the human hand seems to be able to "put a voice" into instrumental intonation" [1., p. 216]. Noteworthy is K. Kvitka's hypothesis that primitive man, when drilling holes on a flute, took into account only optical (and not acoustic) symmetry. "Probably the primitive master did not worry about exactly what intervals he would get on his instrument; he was pleased by the presence of different sounds... the sounds that came out as a result

were considered good... Only gradually did hearing become involved in this matter" [9, p. 221].

In musical-instrumental music, in addition to the procedural unfolding of meaning, the development of a musical idea (or even a specific sound-image, sound-symbol), and the means of artistic expressiveness (melody, rhythm, texture, dynamics), movement becomes visually perceptible, materialized, typical, or improvisationally unexpected. Finally, it is linked to the method of sound extraction and sound production. This is not only in a concert-stage or folkloric setting, where attention is intentionally directed at these forms of movement. Semiotic parameters of movement with a musical instrument in hand, even in the process of ancient ritual (often with the requirement of mystical concealment of the human voice), labor, or leisure activities, as well as performance forms of movements on the instrument (directly for sound extraction), are enriched with auditory impressions: on percussion instruments – with timbral-rhythmic ones, on strings, wind, and keyboard instruments – also with timbral-pitch, motivic-melodic, modal, articulatory, etc. Such motor-sound semiotics forms a new layer (sound) with its sign system. Moreover, it is known that musical (rhythmic-pitch, dynamic, articulatory) expressiveness significantly shapes the kinetics of human movements, as well as the kinesthetic activity of language, which is inseparable in the conditions of instrumental play.

Such semiotic connections tend to be preserved in the associative-sound memory of humanity, which can be observed during the historical development of musical and instrumental creativity, and even, directly or indirectly, influence the figurative and sound representations of subsequent generations and eras, primarily in "pure" instrumental music.

For example, the sound of brass instruments can most often be associated with images of heroism, military valor, and victorious apotheosis; hunting / "forest" mythology; holidays; rituals. And then, with the involvement of new associative series, professional musical and instrumental art develops. Thus, from the 19th century, copper has also been involved in the creation of tragic, fantastic, and grotesque images. In the twentieth century, it mastered the pop-jazz sphere, etc. Woodwind instruments often embody images of idyllic pastoral, fairy-tale, fantasy, play, characteristic motor or lyrical utterance, etc. A separate associative and philosophical series of wind instruments is associated with the living breath of the performer (and this is the principle of sound production on such instruments). It can symbolize a whole sphere of figurative and semantic lines of music necessary for earthly and unearthly life - human life, the principle of life as a whole, the heavenly spirit itself, etc. And by blowing (inhaling) an air stream (as a "breath of life", "spirit") and transmitting it through the instrument, the wind performer seems to revive, mythologize, personify his instrument, which as a result becomes capable of "speaking" to the otherworldly, extraterrestrial, inhuman voice (clearly proving the participation of the lungs and embouchure apparatus in sound production by analogy with verbal human speech and, at the same time, the impossibility of using the voice at this moment, i.e., its actual replacement). In this way, the wind instruments seem to present to the listener and other participants in the performing act a specially encoded idea, a symbol - with the help of specific symbolic means. Perhaps, thanks to this "living spirit" (in addition to the power of sound and acoustic capabilities), the Catholic Church chose (officially allowed) to glorify God in the temple, next to the "angelic voices" of the human choir, an instrument with exactly this method of sound production - the organ. And the musicians themselves later called its improved version "the king of instruments".

Plucked instruments, genetically associated with both singing and dancing (the latter area seems very important in the development of musical instrumentalism), have an organologically determined chamber sound and mobility. Therefore, they are well suited for the performance of ritual and secular verbal genres (accompaniment of spiritual, prayerful, historical and entertaining chants), and are also indispensable (along with woodwinds) in bright rhythmic ones (at the same time, they are designed in pitch,

unlike percussion, which contributes to emotional perception) structures characteristic of national genre-dance melodies. The organological ability of plucked instruments to synthesize rhythmic clarity in the arrangement of accentuation (like that of percussion) with the pitch parameters of the sound necessitated their emergence and existence in all folk cultures. Namely the plucked instruments (primarily the lute, guitar, etc.) mastered in the indicated genre and stylistic spheres a whole complex of instrumental and textural clichés of the emerging homophonic thinking (while retaining polyphonic techniques of presentation) - based on the organology of specific instruments. Let us add that homophonic elements were formed, took root, and developed precisely on instrumental soil, because these instruments performed the functions of bass continuo, and then - various types of homophonic accompaniment of the melody in the form of chords and, most importantly, motor-figurative means. The latter, in fact, were born in lute performance and from there were translated into keyboard-piano, violin, orchestral, etc. Thus, the homophonic paradigm of musical thinking (in its instrumental format) gave impetus to a new instrumental language system. This system, having accumulated over time a hierarchically organized structure of linguistic means, became capable of transmitting the most complex conceptual-philosophical and direct-sensory meanings, to which certain instrumental-timbral (and sound-producing) spheres were assigned (in a flexible manner).

Bowed strings, which are a product of a later culture (compared to plucked and wind instruments), were originally "required" for the performance of melodic, smooth lines in the ritual sphere as a means of magical influence. Pretentious, varied motor-articulatory techniques, with light "jumping" or ponderously accented strokes, became available only with the advent of the modern violin family and with the improvement of the bow by G. Tartini. This allowed the bow players to come closest to the sound of the human voice (including the reproduction of the articulatory-dynamic subtleties of opera singing). In the relatively short history of their existence, bowed instruments have formed a sound image of the finest personal and psychological lyrics and, at the same time, brilliant concert virtuosity as vital energy and the Beauty of movement (which looks especially noticeable and impressive on instruments, including spatial visualization).

More complex in their organological structure, with a clear generalization of centuries-old instrumental experience in playing and manufacturing, keyboard instruments appeared as a result of the synthesis of the capabilities of solo and ensemble instrumental playing of different compositions. Such instruments do not require constant tuning; permanently located in concert halls, they represent an example of already developed musical and instrumental professionalism with traditions of teaching and performance, spatial-sound thinking of polyphonic homophonic-polyphonic texture (including texture clichés). One performer plays them, concentrating in his hands the functions of holistic coverage of "ensemble-orchestral" material and ideas (interpretation), which embodies the idea of a new order concert solo, born of the ideals of romanticism. A. Chernoivanenko calls such instruments (clavier, piano, organ, accordion) complementary, emphasizing that they could not have arisen before musical-instrumental and engineering-scientific practice had acquired the specified experience, and performing thinking had not become completely "ready" to the interpretative scope of the musical text [4, p. 530].

The described associative-mental tendencies are based on the functioning in music of this type of signs, such as symbols of reception expectation. Thanks to them, the listener prepares himself in advance for what he needs to hear. The effect of such symbols extends not only to the spheres of musical intonation (in a broad sense), but also to the "image of the instruments themselves", outside of which musical thinking would become narrow and less productive.

4 Conclusion

Modern researchers emphasize the need to study the symbolic structure of music and the resulting semantic "fields" of sounding (performed) music, including instrumental music. The search for structural and semantic attributes of musical thinking leads musicologists to study the concept of musical meaning, musical significance (except for musical imagery) and, therefore, to recognize the effectiveness of the semiotic study of music, since without it unlikely it is possible to establish definitions of musical and linguistic content. The structure of this content (and, therefore, thinking) inevitably includes the specific features of the musical instrument used. Thus, modern musicology poses and solves the problem of reflecting this thinking as an integrity, that is, embracing it as a cognitive-value and performing unity, as a synergistic cognitive-semantic image-sound phenomenon.

The reasoning presented in this article allows asserting that the process of musical and instrumental thinking should be presented in three main dimensions - from the outside, from the inside and, as it were, "from the middle": from the side of socio-cultural historical factors; from the side of immanent psychological content; from the material-sound side - organology of a musical instrument. Moreover, all three of these parameters exist only in mutual subordination, which means - in constant active interaction, that is a necessary condition and an immanent characteristic of performing thinking.

Despite the fact that in art the creative tone of human consciousness becomes decisive, i.e., conquering objective material, a musical instrument (as a material, objectified tool) not only has an unprecedented influence on the functioning of the mental image-sound processes of the musician (both performer and composer), but also informs him of the direction of such development, as well as its musical and linguistic forms. "Borrowed" from the material world, a musical instrument thus allows one to transmit an artistic (artistic-spiritual) idea with the help of specific non-verbal means of expressiveness (in its "pure" form), allows developing own language system for such translation and artistic communication as a kind of artistic "Esperanto".

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FORMATION OF REFLECTIVE COMPETENCE OF FUTURE SPECIALISTS IN THE EDUCATIONAL PROCESS IN HIGHER EDUCATION INSTITUTIONS

[a]ANTONINA KICHUK, [b]OLEKSANDRA KHALLO,
[c]VALENTYNA VERTUHINA, [d]TETIANA RUDIUK,
[e]LYUDMILA HALAIEVSKA, [f]OLEKSANDR VOROBETS

[a]*Izmail State University of Humanities, 12, Repin Str., 68600, Izmail, Ukraine*
[b]*Ivano Frankivsk National Medical University, 2, Galytska Str., 76018, Ivano-Frankivsk, Ukraine*
[c]*Borys Grinchenko Kyiv Metropolitan University, 18/2, Boulevard-Kudryavskaya Str., 04053, Kyiv, Ukraine*
[d]*Mykola Gogol Nizhyn State University, 104, Shevchenko Str., build. 3, ap.67, 16604, Nizhyn, Ukraine.*
[e]*Institute of Pedagogy of National Academy of Sciences of Ukrainey, 35/24, Kotelnikova Str., 04000, Kyiv, Ukraine*
[f]*Vasyl Stefanyk Precarpathian National University, 57, Shevchenko Str., 76018, Ivano-Frankivsk, Ukraine*
email: [a]*tonya.82kichuk@gmail.com,* [b]*Luskaif@gmail.com,*
[c]*vvertuhina@kubg.edu.ua,* [d]*Swir.id@i.ua,*
[e]*ludagala2703@ukr.net,*[f]*o1eksandrvorobec36@gmail.com*

Abstract: The article presents an attempt to systematize and complement available theoretical provisions and practical developments in the field of creation of reflective environment in higher educational institutions, in order to enable effective formation of reflective competence in future specialists. Particular attention is paid to andragogy provisions and possibilities of its use in universities. The very model of reflective learning is considered based on a cycle approach. The conditions for creating a reflective learning environment are presented, as well as possible criteria for assessing reflective competence.

Keywords: reflective competence; reflective environment; reflective learning; facilitation; learning cycle.

1 Introduction

The competency-based approach is a current trend in global education, allowing resolving contradictions between program requirements, the demands of society and the individual's needs for educational results. This approach reflects the main aspects of the continuous process of modernization of education (for example, the transition from University 2.0 to University 3.0 and 4.0): updating the content of education in response to a changing socio-economic reality; as a generalized condition for a person's ability to act effectively outside of learning situations; the ability to transfer abilities to conditions different from those in which this competence originally arose, etc.

This situation in education requires a higher level of professional competence of the graduate - a creative individual who owns the latest innovative psychological and professional technologies based on developed mechanisms for analyzing professional activity, which many scientists associate with one of the components of the professional competence of the future specialist - his reflective competence [2].

In the educational process, reflection represents one of the main components of activity, and, therefore, reflective competence acts as a necessary component of professional pedagogical education. The objective reason for including reflection in the educational process is that competence is not given by the teacher, but it is acquired by the student himself in the course of learning activities, which are organized as a mental activity or sensory-experienced process of the student's awareness of his activity [20]. Based on reflective action, students not only acquire knowledge, but learn to use it directly in their activities.

The reflective competence of a future specialist is defined as an integral, dynamic, structural-level education of the individual, including: reflection of the value-semantic aspects of professional activity, reflection of professional and personal potential, reflection of professional responsibility, as well as applied reflection regarding social responsibility, civic position, etc.

From a functional point of view, the reflective competence of a future graduate is an integrative unity of its structural components, which have a level character, and individual and personal ways of implementing the subject's professional and personal experience in the form of certain types of strategies for resolving professional situations. The effectiveness of appropriate pedagogical strategies is associated with different levels of development of the structural components of the reflexive competence in the future specialist: adaptive, pragmatic, and integrative [1; 3; 18].

The formation of reflective competence is a necessary condition for the development of a student's personality as an active subject of professional and personal development. Reflective competence allows the future professional to find own individual style, achieve adequate professional and personal self-esteem, predict and analyze the results of own work. The inclusion of reflective functions in activity puts the individual in the position of a researcher in relation to his own activity, but is not reduced to any of them. In modern approaches, reflection is considered "as the most important regulatory component of the personality, allowing it to consciously build its life activities" [9].

In modern society, labor processes in which a person is regarded in the context of intellectual and creative growth are beginning to dominate, which activates the problem of life-long education. A person begins to take on the functions of a 'controller' of the current process: he does not depend on technology, but, on the contrary, makes the functioning of technology dependent on himself. His work begins to be characterized by the presence of creative elements in any type of production. In a post-industrial society, the orientation towards expanding the production of material goods and services is being replaced by an orientation towards expanding the production of knowledge, towards the replication of information structured in a special way. As a result, changes occur in the structural elements of social production. Along with the main branches of industry, intellectual production is developing as the production of knowledge, communication means of various kinds are developing in the form of information networks, data banks, advertising structures, organizations establishing connections of interethnic interaction, etc. Machine labor is necessarily being replaced by intellectual labor, connected, on the one hand, with the use of computer technologies, and on the other hand, aimed at humans. Reflection is an integral component of such a constructivist landscape.

Reflection is especially sound in andragogy, and this is very important for the pedagogical process at a university, since andragogy provisions are increasingly used in higher education. In the andragogical model, the leading role belongs to the student himself. He is a doer, one of the equal subjects of the learning process. From an andragogical point of view, adult learners who have a deep need for independence (although in some situations they may be temporarily dependent on someone) should play a leading role in the process of their education. The teacher's task ultimately comes down to encouraging and supporting the adult's development of self-management, assisting him in determining learning parameters and searching for information. The main characteristic of the learning process is the process of independent search for knowledge, abilities, skills and qualities. In the andragogical model, continuous reflection acts as a source of learning [22]. The overall process of reflective learning is schematically depicted in Figure 1 below.
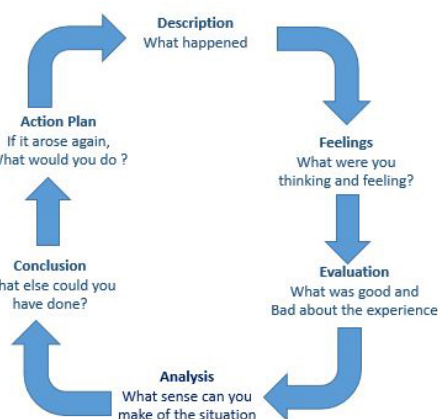
Figure 1. Model of reflective learning (based on Gibbs' model of reflection) [21]

It is natural that employers' orders are focused on graduates capable of solving professional problems that require a comprehensive vision of the problem, generating innovative ideas, and the ability to make innovative decisions. In particular, the likelihood of successfully solving complex engineering problems increases significantly if engineers have developed reflective skills that allow them to comprehend, model, and self-organize professional activities in accordance with new contexts.

Thus, the relevant scientific task is to study the pedagogical conditions for the development of the reflective component of the professional competence of future specialists.

2 Materials and Methods

The study used a combination of theoretical and experimental research methods: analysis of philosophical, psychological and pedagogical literature, curricula, manuals and methodological developments, teaching plans, as well as the study and generalization of advanced pedagogical experience.

Modern research devoted to professional competence increasingly appeals to the phenomenon of reflection, considering it both as a substantive element of the latter and as a condition for its development. This approach is taken as a philosophy of our research.

The principles of the personal-activity approach, which make it possible to identify and actualize the potential capabilities of a student in educational activities to achieve personally significant learning outcomes, as well as the principles and provisions of andragogy, served as methodological guidelines.

3 Results and Discussion

In modern studies on education and pedagogy, the term "reflection" is often used. The concept of "reflection" is entering a new – practical - period of its application in higher education. The initiation and actualization of reflective processes appears in the formation of reflective competence as one of the possible methods for achieving the set goal - professional development, personal growth, and the acquisition of reflective experience of future specialists.

In order for the process of forming the reflective competence of future graduates to be carried out at a high technological level, it is important to comply with the following requirements: target orientation towards the formation of reflective competence of students; interconnectedness of educational and methodological work; search and implementation of new rational forms and methods, means of educational activities that create the opportunity for reflective self-realization; the structured nature of the pedagogical process, which makes it possible to design the sequence of the process of forming the reflective competence of future specialists; reflective transmission of educational material by the teacher; mandatory reflection of reflective activities in

classes (lectures, seminars, workshops, business games, various projects, etc.).

Important requirements for organizing reflective learning are, among others, the following:

1. The choice of methods and technologies of training and education that promote the personal involvement of students, giving them a dominant role. Construction of the learning process taking into account students' expectations regarding the content and methodology of learning.

2. Implementation of the principle of learning implying the relationship between theory and practice, integrating new competencies into the field of experience and the base of practical knowledge of students. Updating professional and personal experience through the use of different organizational forms of training.

3. Facilitation of an active subject position through inclusion in research learning.

4. Providing practice in mastering new skills, allowing to immediately see the results and feasibility of training. Use of a complex of visual materials and interactive technologies.

5. Using the inductive method in presenting the material, constructing an explanation while deriving from particular practical problems to general theoretical principles.

6. Taking into account problems associated with the implementation of the student's educational process: psychological, financial, social nature. Creation of acceptable training and self-study formats.

7. Use of tutors, creation of a "smart learning environment" with the ability to support an individual educational route.

Also, reflective learning involves 'living' key values in learning. Ensuring this provision implies modeling of educational situations that provide a motivated student with conditions for living specific values. Such experiences are associated with deep understanding and emotional reflection of the personal significance of the profession, fulfillment of duty, participation in socially significant activities, living a civic position, etc. In order to enrich the palette of activities of the subject of education, it is necessary to live a new experience and connect it with his past valuable life practice [7].

One should also note the priority of active forms of learning. To achieve awareness of learning, motivation, and demonstration of the effectiveness of individual innovative methods and technological appraoches, it is necessary to include students in practice-oriented activities through active and interactive educational technologies, especially group forms of work - in particular, study groups, project groups, problem-solving groups, writing groups, discussion groups, debate or Socratic circle groups, peer editing groups, role-playing groups [19]. In recent years, group work methods within the curriculum have been transformed into collaborative work methods (see Figure 2).
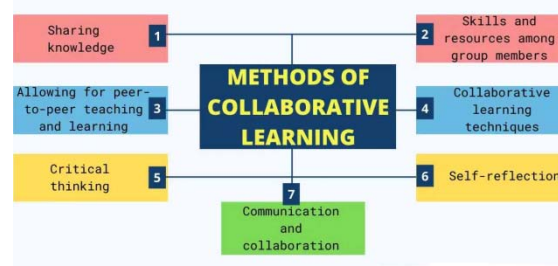

Figure 2. Collaborative learning paradigm [8]

Collaborative learning allows students to learn in an enjoyable and effective way. It also helps students develop indispensable

skills like communication and problem-solving [5]. Collaborative learning has the following benefits:

1. Enhances problem-solving skills. Collaborative learning projects sometimes call for groups to complete a task or address an issue. For tasks like this, students must debate and examine many ideas in order to identify the best answer. Working through a topic or project in a group helps students build their own critical thinking abilities [5], while also encouraging active participation.

2. Raises the level of communication, confidence, encourages social interaction and engagement. Collaborative learning relies on good communication to complete a task, which requires students to exchange ideas, clarify concepts, and offer clear and succinct feedback [5]. Students must engage as a group via eye contact, verbal communication, and social cues (while keeping in mind varied cultural contexts). Members of varied personality types learn to share and listen while working toward a shared objective. Throughout the process, kids learn and improve their social skills such as active listening, empathy, and respect. Another important aspect to consider is that the social skills gained via cooperation will assist students in developing and maintaining strong personal and professional connections in the workplace.

Similarly, collaborative projects urge passive students to become more involved in the project or conversation since the team expects their contributions.

In the works of psychologists who study personality, reflexivity as a personal quality is correlated with self-awareness as the ability to correctly assess oneself and one's place in the world [4]. According to a number of scientists, reflection blocks activity according to old patterns and opens up new paths for thinking and action when there is a deviation from the pattern-norm of human activity and dissatisfaction with own activities or pattern is realized. The manifestation of reflection occurs in the so-called normal duality of consciousness, when an individual, in relation to himself, simultaneously acts as an object of reflection (I am the performer) and as its subject (I am the controller), who regulates his actions [10].

Researchers have found that the leading cognitive function of reflection is implemented as awareness of the means of solving assigned problems through determining the ways to find them [12]. Reflective activity as a general phenomenon is characterized by the essential properties of activity: purposefulness, objectivity, meaningfulness, transformative nature, and the interconnection of all its structural components. The process of reflection acts as a complex mental ability for constant analysis and evaluation of each stage of professional activity, as an important prerequisite for effective activity, its deep awareness, critical analysis and constructive improvement.

The concept of reflection is widely used in acmeology when considering the concepts of professionalism and competence. In most psychological and pedagogical studies, reflection acts as one of the elements of competence or a factor in its development, but in acmeology it is considered procedurally. It is no coincidence that scientists, characterizing professionalism as the ability to solve standard professional tasks, identify the following levels of professional activity [13]:

▪ Formation of activity;
▪ Successful implementation of a fixed norm;
▪ Fulfillment of the norm with adequate reflection;
▪ Reflexive support of actions with fixation of the problem and correction of the norm;
▪ Complete reflective self-organization.

Namely in acmeology, the concept of reflective competence was formed, which is considered here from methodological grounds and from the position of reflective psychology as meta-competence, that, through knowledge and mastery of the mechanism of reflection, contributes to the adequate development of all other types of professional competence [13].

In the methodology, reflection is understood as a procedure that includes analysis of thinking or activity, a critical attitude towards them and the search for a new norm, which allows a person to make decisions independently. In reflective psychology, reflective competence is presented as a complex formation consisting of various types of reflection: cooperative, built on knowledge of the role structure and positional organization of collective interaction; communicative, based on ideas about the inner world of another person and the reasons for his actions; personal, which is based on actions, behavior, and images of one's own "Self"; intellectual, which operates with knowledge about the object and methods of action with it. Reflective competence is considered as "a professional quality of an individual that allows the most effective and adequate implementation of reflective processes, the implementation of reflective ability, which ensures development and self-development, promotes a creative approach to professional activity, achieving maximum efficiency and effectiveness" [2].

The figure below shows typical universal criteria for assessing reflective competence used by leading universities.

Figure 3. Levels of reflection in assessing reflective skills [11]

It is obvious that, in general, the complex of organizational and pedagogical conditions should provide the opportunity to organize the educational process to develop the reflective competence of students at a university. Organizational conditions include: 1) development of theoretical foundations for the formation of reflective competence; 2) creation of a scientific, methodological, didactic, psychological process for the formation of students' reflective competence; 3) creation of a reflective environment in an educational institution; 4) purposeful management of the process of developing students' reflective competence. Pedagogical conditions include: 1) reliance on personal-activity and reflective approaches; 2) readiness to demonstrate the reflective competence of the teacher and students; 3) the presence of diagnosable learning goals; 4) integrated use of reflective-oriented forms of conducting lectures and seminars; 5) organization and provision of monitoring of the educational process of reflective competence formation.

The need for a reflective environment at a university should be especially emphasized. The reflexive approach involves stimulating the internal efforts of the individual: his self-development, the desire for personal and professional growth. This approach is associated with the internal conditions of the reflective environment, under which a person realizes the meaning of his actions.

The reflective environment in the system of professional training of a future specialist includes the following postulates [16]:

▪ Uncertainty, stimulating a person to search for own guidelines, creating the need to find and establish own 'content';
▪ Free choice associated with variability and providing students with the opportunity to find their own creative solutions;

- Information and activity orientation of the content and forms of presentation of educational material, which ensures a high level of independence of educational and cognitive activity;
- Dialogicality, which allows directing the knowledge and establishing of own Self in the right direction;
- Time factor associated with the process of organizing reflection in the classroom (long reflection becomes burdensome for participants, causes a feeling of uselessness, a waste of time; insufficient use of time for reflection reduces the effectiveness of perception and comprehension).

The concept of "reflective educational environment" in pedagogy is new and insufficiently studied. A number of scientists understand the reflective environment as a system of conditions for the development of an individual, which opens up the possibility of self-research and self-correction of socio-psychological and professional resources [17]. Researchers call the main function of this kind of environment to contribute to the emergence of a person's need for reflection, and this is true. The reflective educational environment is formed by integrating the reflective sphere of activity and the educational environment of the university, and the higher the degree of interpenetration of these areas, the larger the space of the reflective educational environment.

The reflective educational environment presupposes the organization of the activities of its participants, which cannot be reduced only to a social order that meets the needs and requirements of the current state of society. The teacher and student are focused primarily on themselves, on their personal growth. The emergence of reflection is determined by the needs of the student, because subject to the harmonious development of the individual, the unity of the main functional levels (individual, personality, individuality), the unity of internal determinants of behavior (needs, capabilities and internal position), completeness of expression and unity with the social and natural environment, the need for reflection absent. Hence the following properties of the reflective educational environment:

- It necessarily contains an internal contradiction or subjective difficulty (associated with the educational activity of the subject himself);
- It is culturally appropriate, since namely in it, it is possible to rethink old and create new cultural norms in the process of education;
- The reflective educational environment is variable. The student and teacher have the opportunity to build an educational environment based on their needs and in accordance with their direction of development. Therefore, the reflective educational environment is not characterized by the presence of externally imposed and strictly regulated methods of work and programs;
- A reflective educational environment involves the choice of teaching methods in which the emphasis is made not on content, but on the methods of activity of the teacher and student;
- Any activity of its subjects is creative and research-like;
- The reflective educational environment is aimed at the formation of all types of reflection in its subjects and the development of all of its levels.

The identified essential characteristics and features of reflection make it possible to define the reflective educational environment as a space of individual' activity, determined by his reflective and educational spheres, which are integrated in the process of sociocultural self-determination of the future specialist into a single area under the influence of certain conditions, factors, and mechanisms. This is a set of external and internal pedagogical conditions in which the opportunity arises for an individual to choose goals, content, and methods of self-education and self-improvement, and a change in ideas about oneself as an individual and a professional occurs.

A reflective educational environment can be considered as a system if it has three mandatory signs of consistency: subordination of the entire organization to a specific goal (integrity); structure (presence of elements, parts); interconnectedness of elements (self-organization, controllability in the process of functioning).

Azwani Masuwai proposes the following vision of reflective education environment (see Figure 4 below).
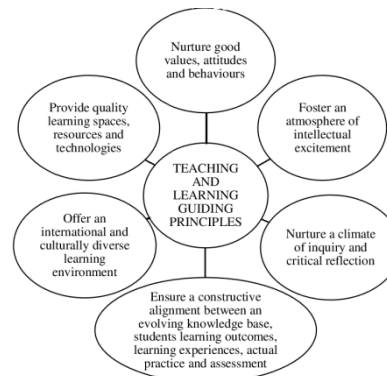

Figure 4 . Reflective environment for teaching and learning [13]

The main goal of organizing a reflective educational environment is to "introduce" the student into culture, teach him to comprehend cultural norms and patterns, and create new ones based on their processing.

Let us turn to the structure of the reflective educational environment. Like any environment, it is a combination of the following components: informational-semantic, social, material, technological, activity-based, and emotional-regulatory.

The information-semantic component reflects professionally and personally significant information. It consists, in turn, of certain elements - the content of general professional and subject disciplines, elective courses, curricula and programs.

The social component reflects, organizes social relationships, introduces certain experiences of these relationships, helps to acquire this experience, including in contact with external society, in the process of interaction with other students, teachers, representatives of elective university services, student government bodies, social services in university and beyond. Important ones here are both the professional and personal qualities of the subjects, as well as the nature of their relationships.

The material component of a reflective educational environment includes: design, image of the institution, architecture of premises, etc.; filling the premises with equipment, information and subject equipment (for example, appropriate software, equipment for working with augmented, virtual, and mixed reality). Each of the elements carries certain information, fully or partially structured.

The technological component represents various concepts and projects for organizing educational activities of students and teachers, aimed at building individual trajectories of professional and personal development.

As for the activity component of the reflective environment, an important characteristic of this component is the students' independent organization of their activities; it is also about the presence of a variable part in the educational activities of students in the selection, reflection and assimilation of professionally significant information, participation of students in various forms of activity: project, predictive, reflective, heuristic, search, productive, creative, classroom and extracurricular. Here one should also mention the use of various methods, forms, types of activities, amateur performances, which allows overcoming students' alienation from the activity,

ensures the satisfaction of the professional and personal needs of each student, the formation of cultural self-determination and general culture [23; 24].

The emotional-regulatory component presupposes the presence of a certain atmosphere of trust, cooperation, co-creation, and empathy.

At the same time, the complexity of modeling the reflective environment of a university is due to the need to comply with a number of conditions. Speaking about the conditions for the formation of a reflective environment, we understand those internal characteristics of the personal and external factors that together determine the process of formation of reflective competence.

In the conditions of functioning of a reflective educational environment, it seems appropriate to conduct a qualitative (for example, based on expert assessments) analysis of students' reflective competence based on the following descriptors.

1. Personal aspect of reflective competence:

- Competence in personality assessment;
- Reflective self-control;
- Desire for self-development;
- Level of self-esteem.

2. Interpersonal aspect of reflective competence:

- Ability to influence others;
- Assessment of self-control in communication;
- Reflective listening;
- Ability to cooperate.

3. Subject-functional aspect of reflexive competence:

- Competence in assessing one's professional activities;
- Tactical and practical thinking;
- Creative thinking in solving problem situations;
- Feedback in the educational process.

4. Methodological aspect of reflective competence:

- Sensitivity to scientific issues;
- Ability to conduct research work;
- Methodological culture;
- Professional self-education.

One of the effective means of determining the level of reflexive competence development is the case method, which is a complex formation characterized by problem, conflict, role, event, activity, and time aspects [22]. At its core, it is closest to game methods and problem-based learning, because it involves an active search by students for a solution to the proposed problem, followed by a discussion of the process and result of the joint actions of all participants. The outcome of a lesson conducted using case technology is summed up by assessing criteria that reflect the level of development of reflective competence. These criteria include: possession of analytical and critical thinking skills; the ability to practically consolidate theoretical knowledge; willingness to collectively identify and solve problems; willingness to solve complex problems in conditions of uncertainty; possession of communication skills; possession of presentation skills; self-confidence in arguing and defending own opinion, independence; the ability to take into account, discuss, accept other people's opinions, willingness to compromise. Using the case method, it is possible to develop all components of reflective competence and track weaknesses, as a result of which it becomes achievable to make timely adjustments in the process of formation and development of reflective competence.

It also seems expedient to apply the methods used in andragogy-framed teaching according to the Kolb cycle method - all these methods and evaluation criteria have great reflective value.

The main challenge in teaching according to Kolb and McCarthy is to help students learn to answer the questions "What?", "How?", "What if", "Why" on their own (Figures 5, 6). To do

this, a theory is needed that explains the different learning activities addressed by different learning styles and the student's progression through the learning cycle.
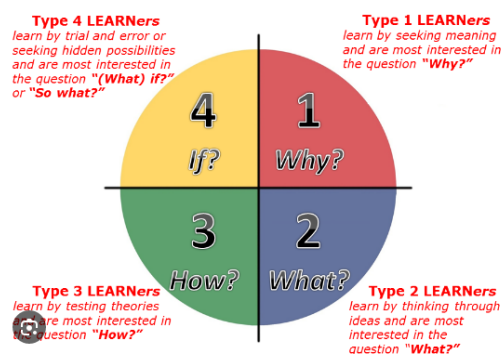

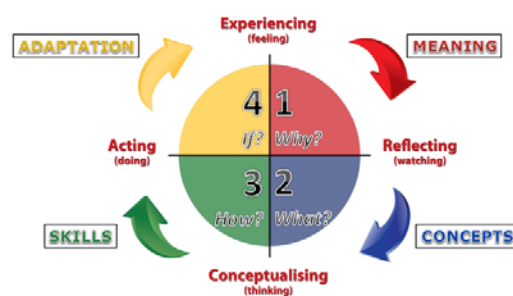*Figure 5. McCarthy model of learning* [15]

Figure 6. $MAT model (combined Kolb' and McCarthy' model) [6]

Kolb and McCarthy's learning theory is based on the hypothesis that learning occurs best when a student moves through all four quadrants of Kolb's learning cycle. In this cycle, at the stage of "concrete experience" (CE), when answering the question "Why?" a learning need is created that requires "reflective observation" of experience. "Reflective Observation" (RO) is accompanied by the question "What?" and processing concepts so as to integrate direct experience with what learners already know. After integration, "abstract conceptualization" (AC) arises, which is used using the question "How?" to move to the "active experiment" (AE) for verification. This is followed by the "What if?" question, preparing the transition to a new "concrete experience" (CE). Its results are involved in new events, and the cycle repeats again. Thus, movement through the cycle of cognition can be associated with answers to interrelated questions: "Why?", "What?", "How?" and "What if?" Movement through the learning cycle can be guided by selecting suggested activities that relate to four different learning styles. The needs of all students are best addressed through a variety of actions identified across all four sectors.

Thus, the formation of reflective competence is possible on the basis of a student-centered approach, where special attention is paid to the cycle of cognition and reflection. At the same time, the teacher must create a reflective environment, that is, create situations where students become subjects of reflective action and organize their own reflective activity. With the help of the latest information technologies (in particular, AR, VR, and MR), such a reflective environment turns into a real smart learning environment.

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OVERCOMING THREATS TO NATIONAL SECURITY IN CONDITIONS OF WAR

[a]OLEG BATIUK, [b]MYKHAILO PUZYROV, [c]KOSTIANTYN SPORYSHEV, [d]IHOR YEVTUSHENKO, [g]GANNA VLASOVA

[a]*Lesya Ukrainka Volyn National University, 13, Voli Ave., Lutsk, Ukraine, 43025, Lutsk, Ukraine*
[b,c]*National Academy of the National Guard of Ukraine, 3, Maydan zakhysnykiv Ukrayiny, 61000, Kharkiv, Ukraine*
[d]*Yaroslav Mudryi National Law University, Hryhoriia Skovorody Str, 77, 61024, Kharkiv, Ukraine*
[e]*Borys Grinchenko Kyiv Metropolitan University, 18/2, Bulvarno-Kudriavska Str., 04053, Kyiv, Ukraine*
email: [a]oleg.batiukibrlpnt@gmail.com, [b]m.puzyrov@gmail.com, [c]sporkos@ukr.net, [d]Igor.260288@ukr.net, [e]gannavlasova78@gmail.com

Abstract: The article examines evolution and shifts of paradigms of warfare and, accordingly, national security. The phenomenon of modern network centric warfare and extremely complex weaving of various players' interests is considered, and conclusion about systemic nature of national security patterns is made, implying corresponding modification of the methods and approaches to overcoming threats. The case of current Russia-Ukraine war is used for illustration of some suggested provisions.

Keywords: national security; warfare paradigm; network centric warfare; hybrid peace; national interests.

1 Introduction

War is an invariable companion of human history. Up to 95% of all societies known to history have used military action to resolve external or internal conflicts. According to scientists, over the past 56 centuries there have been about 14,500 wars, in which more than 3.5 billion people died [11]. To achieve 'the most desired results' in wars, the means of waging them, weapons and military equipment, tactics, strategy, and the like were constantly improved. An analysis of the nature of armed struggle, especially in recent decades, indicates a sharp increase in the impact of these components on the course and results of military operations. One can confidently say that weapons and military equipment today form the basis of the combat power of the armed forces of any state and are a decisive factor for success in a potential war or armed conflict.

Weapons must meet the most modern technologies, taking into account the nature of modern wars, which has changed significantly compared to even the recent past. While until recently the main goal of war was the destruction of the enemy through armed struggle and the seizure of its territory in order to use its industrial, raw materials, and labor resources for one's own purposes, a modern war can be waged and achieve its goals without this. Economic, political, informational, ideological, psychological, and other methods of conducting it are becoming increasingly important. Characteristic features of modern wars are also the following:

- A combination of military actions according to the rules of military science with partisan and terror-related actions
- Selectivity of objects to be damaged
- Increasing the role of remote combat with the use of high-precision (guided and unguided) weapons
- Carrying out targeted strikes on key facilities critical to the economy and infrastructure of the enemy state
- A combination of military and powerful political-diplomatic, economic, informational, cybernetic, psychological, humanitarian, and other influence on the enemy, and the like.

All this accordingly changes the landscape of national security in war conditions, and overcoming threats requires special maneuverability and agility, as well as a systemic vision, the ability to conduct retrospective and prospective analysis, take into account the interests of all stakeholders and the dynamics of the global geopolitical landscape, etc. [10; 15-20].

At the same time, the primary issue when considering security problems is the distinction between such important and fundamental categories as national security and national interests. Without realizing the fundamental difference between them, effectively overcoming threats to national security in war conditions is practically impossible [22; 27].

National interests represent a certain result of awareness of the values of the existence of a particular nation. Without national interests, a nation does not exist; it turns into a population, a people - an "open society" living in a certain territory, satisfying its narrow utilitarian needs. The presence of national interests indicates that a nation identifies itself as such, it distinguishes itself from other nationalities or ethnic groups, and most importantly, it proclaims the intention of further existence and progressive development in its own way based on its own historical traditions and way of life [12]. In turn, national security is nothing more than a type of social activity, the main purpose of which is to create favorable conditions for the implementation of these interests. Therefore, security as such, on the other hand, can also be considered as a national interest.

This means, in particular, that national security should be distinguished from global security, putting military security in its place along with many other equally important but different priorities. In its classical form, national security involves the defense of nation states from military aggression. More precisely, as Article 2(4) of the United Nations Charter states, it is about preventing or countering "the threat or use of force against the territorial integrity or political independence of any State." However, nation states now face other threats, including cyber attacks and terrorism, although in general such attacks are usually sponsored by one state against another, with the aim of threatening the territorial integrity or political independence of the country. Consequently, these threats can indeed be classified as subsets of military security [28].

Greater participation in global security efforts is also increasingly breaking down the boundary between "domestic" and "international" affairs and politics. Health, the environment, energy, cybersecurity and criminal justice have traditionally been considered domestic affairs, while issues relating to defense, diplomacy and development are viewed by foreign policy and security experts as entirely separate areas, involving relations between countries and international organizations. But this distinction is gradually being erased, and thus the circle of national security stakeholders is expanding, and to the maximum extent precisely in conditions of war. One should not forget about the so-called proxy wars, which experts define as "conflicts in which a third party indirectly participates in its own interests, providing one of the two conflict actors with military, organizational, resource, political, or other support" [29]. There is also another phenomenon that has become increasingly important lately - double proxy wars. It is about clashes in which the third party, behind which the state hides its participation, are transnational corporations (TNCs) that have in the country of conflict any interests in the or private military companies [27]. That is, even the actions of allies in war can pursue their own latent selfish interests. This can especially be observed, in particular, in the relations between various EU countries and the United States during the current war unleashed by the Russian Federation against Ukraine. Arms supplies to Ukraine inevitably imply changes in the military-industrial complex and approaches to the military-technical potential in these countries, which affects the interests of many players in economic, political, and military terms.

The above clearly demonstrates the critical complexity of the landscape of ensuring national security and overcoming threats to this security and, accordingly, the need to use the systemic and Agile paradigms.

2 Materials and Methods

The research was based on the works of various authors devoted to methodological and general theoretical problems of politics, geopolitics, military policy, state and military management, as well as research on the problem of ensuring national and military security of the state in sixth generation wars, in particular, under a network-centric nature of war.

In the process of work at various stages, a complex of theoretical and empirical, as well as applied and special methods of political science research was used (system activity approach, dialectical, systemic, comparative analytical, historical and logical, induction and deduction, normative and positive analysis and synthesis). But the system-activity approach, which acts as a synthesis of systemic and activity-based approaches, appeared to be the most effective, the main methodological tool, specifically in political science research.

3 Results and Discussion

An assessment of the military-political and military-strategic situation in various regions of the world shows that the transformation of the forms and methods of warfare that began more than twenty years ago has become increasingly relevant in recent years. In addition, understanding the significance of the strategy of "controlled chaos" led to certain changes in strategy: today, global players are increasingly striving to achieve their own goals not through direct conflict, but through the initiation and maintenance of conflict zones. The networking of the social structure of society, the emergence of radical semi-partisan groups in it, seeking to implement their own ideological principles, as well as the use of these new players in the interests of the main geopolitical centers of power leads to the fact that traditional security forces (both military and special) are increasingly losing the ability to operate effectively in new conditions of environment [1]. Events in Iraq, Libya, Syria, and other countries have shown that often an army built on traditional principles simply does not have time to carry out deployment activities and loses its combat effectiveness within the first hours after the start of the conflict.

It should also be noted that the duration of scientific and technological development cycles, as well as the costs of R&D in the field of defense has significantly increased. This leads to the fact that the latest models of weapons and military equipment are developed in a time frame that is unacceptable for the pace of development of modern society and the changing military-political situation (a good example is the fate of the American F-35 fighter project). In addition, the conflicts of recent years have also shown that many European countries, over the years of NATO membership, have lost the ability to independently plan and conduct operations with the large-scale use of military force. In cases where the development of the military-political situation led to the involvement of the armed forces of one or more European states outside the NATO bloc in the conflict, their use was not effective enough. The example of Ukraine is especially "textbook" in this regard - the country's military-industrial complex turned out to be unprepared for a military invasion of the Russian Federation, which created and continues to create a crucial threat to the national security of Ukraine in war conditions - the combat effectiveness of the army critically depends on the supply of weapons from the allies.

Also, the key way to such a non-military form of struggle is information warfare. On the one hand, the tools and methods of information warfare make it possible to obtain a highly effective and low-budget means of, if not victory, then influence. A powerful information-psychological impact on the personnel of the armed forces and the population of the country will significantly weaken the systems of state and military management and make the task of ensuring the sustainability of management one of the main ones. Thus, to successfully counter targeted destructive information influences on the system of state and military control, it is necessary to develop and implement fundamentally new decision-making algorithms and secure technical control tools, preferably domestically produced [9].

In the sphere of direct military conflict, aerospace weapons, as well as high-precision weapons, will become dominant, which will lead to the fact that the struggle for supremacy in the air and space will largely determine the development of operations on land and sea. The key systems in this case will be space communications, navigation, meteorology, optical and electronic intelligence systems [3]. At the same time, the historical experience of the 73-day war in Yugoslavia and especially the current war in Ukraine has shown that armed forces, technically equipped according to the model of the seventies and nineties of the last century, can successfully maintain combat capability even in conditions of almost complete enemy air superiority, but this requires fundamentally different approaches to ensuring the mobility of troops, as well as fundamentally different requirements for camouflage. All this, in turn, entails a change in technical means, technologies, and regulations for all types of communications at all levels of military and government administration - passive radar, reconnaissance and communications systems should dominate. In addition, the requirement for high mobility of troops simultaneously with the lack of access to satellite communications and navigation will require significant changes in the organization of communications, for example, the resumption of widespread use of tropospheric communications and the widespread introduction of inertial navigation systems [14].

The specificity of modern information technology revolution in military affairs is that it is based on a significant technological breakthrough specifically in the field of information technology. While previously the main efforts were concentrated on improving the strike and combat components of the armed forces, now advanced improvements affect, first of all, command and control systems, as well as intelligence systems. The technical side of the modern revolution in military affairs is based, first of all, on advances in the field of computer science and electronics, on improving the accuracy and range of weapons, the completeness and efficiency of reconnaissance and surveillance, increasing the ability to counter and suppress enemy defenses and effectively control troops.

Despite the initial focus on the technical aspects of the information technology revolution that had begun in military affairs, this process led to a fundamental revision of the entire military structure. The emerging opportunities to improve the technical characteristics of control systems make it possible to modernize not only individual types of weapons, but also the principles of control, use, and organization of the armed forces themselves. At the present stage, the ratio of political-diplomatic, economic, informational, psychological, and military means of struggle in the international arena has changed significantly. The importance and share of non-military means have increased evidently. In the context of globalization, the latter have become more purposeful and coordinated, and their technological equipment, scale and effectiveness have increased. In recent decades, in the course of confrontation in the international arena, entire states and coalitions of states have begun to collapse without the direct use of armed force. The main reason for this was crisis phenomena in certain countries and their internal instability, aggravated by the influence of external factors [25]. Such events in the international arena have at least an indirect and sometimes direct impact on the national security landscape during the war, as is clearly evidenced, for example, by the fluctuations in the political course of Turkey, which took on the role of the main intermediary in communication between Ukraine and the Russian Federation during war.

In general, the characteristic differences in the conduct of military operations within the framework of the traditional concept of warfare and the so-called "concepts built on the revolution in military affairs" are reflected in Table 1.

Table 1: Characteristic differences in the conduct of combat operations in traditional and new concepts of warfare

Components	Concepts built on revolution in military affairs	Traditional concept of "big battalions" (decisive role of force)
Task	Put the enemy's will, perception and assessment of what is happening under control	Gain decisive military superiority over enemy forces and assets
Purpose of military force	By controlling the enemy's will and ability to orientate, deprive him of any ability to act or respond to blows	Defeating the enemy by achieving superiority over his military potential
Scale of military power	It is possible to be inferior to the enemy numerically, the main thing is to have a decisive advantage in technical equipment, combat training, and methods of warfare	Large, well-trained and equipped forces with overwhelming superiority in technology and weapons
Scope of application	Universal	Faction versus faction combat (as well as support operations)
Speed	Is of fundamental importance	Desirable
Losses in manpower	May be slight on both sides	Potentially significant on both sides
Combat techniques	Paralyze the enemy's will, stun him, demoralize him, fetter him, destroy him	Systematic destruction of enemy personnel and equipment. In some situations, tactics that exhaust the enemy may be used

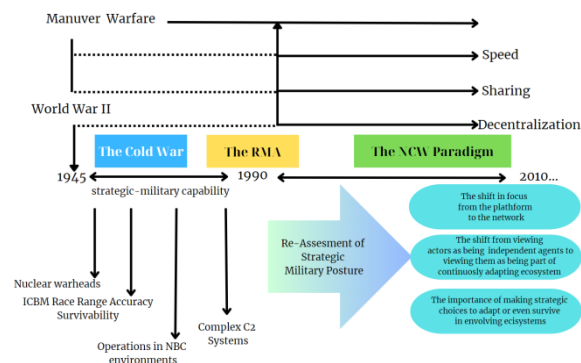Schematically, the evolution of the warfare paradigm is depicted in Figure 1 below.

Figure 1. Trajectory of modern strategic-military evolution [5]

Thus, in essence, there is a Kuhnian "paradigm shift" in military affairs, and accordingly, just as research methods change in science when paradigms change, so methods must change in neutralizing threats to national security.

The legislation of a number of states considers an immediate threat of aggression as a basis for introducing martial law. At the same time, none of the known legislation contains an exhaustive definition of the immediate threat of aggression, leaving the solution of this issue to the discretion of the competent government authorities, which have the right to impose martial law throughout the country or in its individual localities. However, in any country, a martial law regime is distinguished by centralization of leadership and strengthening of the powers of military authorities, restriction of the rights and freedoms of citizens, and strengthening of legal liability measures in order to ensure this regime, maintain public order and security. In the territory where martial law has been introduced, all necessary measures are taken to organize the production of products, the

performance of work, and the provision of services for state needs, meeting the needs of the Armed Forces, other troops, military formations and bodies in accordance with wartime standards. Such transformations in themselves create new threats to national security - these are threats of a social nature, threats of excessive arbitrariness of security forces, marginalization and growth of discontent among certain categories of the population, the danger of splits in society, etc., as well as direct threats to the economic security of the state.

The curtailment of democracy, the virtual absence of real opposition, and the formation of a legal framework solely in the interests of the ruling oligarchy creates a real threat to the legal and internal security of the country as a whole when being in the conditions of war. Combined with the skillful activities of foreign intelligence services, this can lead to internal conflict and low-intensity civil conflicts.

The need to ensure a high standard of living for the population in post-industrial countries leads to the fact that the military-political leadership of the United States and Western European countries will only be able to afford to transfer the entire state to wartime mode only as a last resort. In the strategic deployment of the armies of developed countries, the main emphasis will be placed not so much on mobilization activities, but rather on the regrouping of combat-ready troops (forces) using their increased strategic mobility, ability to hit the enemy from long distances, including from advanced military bases, from aerospace space and from the World Ocean. At the same time, to achieve surprise in actions, strategic deployment can be carried out under the cover of air operations that have begun [23]. For states lagging behind in military-technical terms, strategic deployment is reduced mainly to the mobilization of a significant part of the population. The success of its implementation will depend, first of all, on the morale of citizens and their attitude towards the war. Thus, American psychologists and sociologists note that military personnel, mobilized under the threat of being held accountable and against their will, in situations involving risk to life, tend to get out of control, desert or surrender [28].

In a modern military conflict, such concepts as front and rear, line of combat contact, flanks, area of concentration, line of attack, and other terms undergo significant changes [9]. Analysis of the development of means of armed struggle allows concluding that the novelty of future operations will be determined, first of all, by the transfer of armed struggle to new spaces - real and artificially created [13]. The concept of a theater of military operations will lose its exclusively geographical meaning and will be perceived as a combat space that unites land and water areas, often separated by hundreds of kilometers, airspace, space, and the information environment [29]. The battlefield is being transformed into a kind of operational space, decomposed into small fields. When conducting combat operations, the effect of small battles arises between fully or partially autonomous groups. They can be separated by territory containing non-combatants, potential adversaries, and life support facilities for the population. As a result, the possibility and necessity of creating a continuous front line disappears; troops (forces) will have to be in constant readiness for a clash with the enemy, a quick transition from offensive to defensive and vice versa. The numerical advantage in each specific case will be created not by the overall large number of personnel, but by their mobility and the reach of weapons [23]. The current Russian-Ukrainian war, in fact, is the first real practical example of these assumptions.

It should also be noted that the high efficiency of weapons and the dynamics of changes in the situation during an armed struggle will increase the significance of management errors, and in some cases will not leave time and resources to correct them, so the need for proactive intelligence information will rapidly increase. To reduce the time delay between receiving information and its implementation, reconnaissance and destruction means should be integrated into unified systems by telecommunication networks connecting spatially distributed elements [9].

Fighting in future wars will become more difficult to classify as strategic, operational, or tactical, since the activity of each will have a direct impact on the overall situation. This has happened before, but now the close interconnection of events at the local, regional, and global levels has become the norm. An attack by a group of militants or the behavior of a soldier participating in a humanitarian operation can be replicated by the media and in a matter of minutes have an impact on the situation in a crisis zone. This fact confirms the conclusion about the "compression" of elements of the strategic, operational, and tactical levels within the scope of one conflict. Increasingly, actions at the tactical level affect the course of the entire operation, which leads to strategic consequences [26].

The importance of operations to ensure the safety of the territory and population from various destructive impacts on critical infrastructure will increase. For example, in the current war in Ukraine, air defense systems and other means of defense capable of protecting critical civilian infrastructure have acquired previously unheard-of importance, and are not inferior in strategic importance to offensive military equipment (fighters, etc.).

In the context of further strengthening of economic, environmental, demographic, and humanitarian interdependence of members of the world community, no state can afford victory at any cost. For the leading countries of the world, losses among personnel are becoming unacceptable, not to mention the threat to the safety of their civilian population. In addition, when starting hostilities, the future winner will have to think about the vanquished. After all, casualties among civilians can cause a serious international outcry, provoke a massive resistance movement, and the destruction of the economy is fraught with the transformation of a defeated country into a territory of permanent instability. The time factor also becomes critical, since prolongation of hostilities leads to loss of initiative, the risk of expanding the conflict, both in territory and in the composition of participants, and increased economic, moral and political costs [6].

From the point of view of methods and strategies for conducting military operations in the current, sixth generation, the ratio of direct and indirect actions changes most significantly. Indirect actions related to political, economic, and moral-psychological influence on the enemy, methods of disinformation and undermining from within, have always played a large role.

However, in the conditions of wars of the fourth and fifth generations, based on the ideas of total war, direct military actions often turned into an end in themselves, relegating indirect influences of an information-psychological and economic nature to the background.

In modern conditions, when nuclear weapons are turning into a deterrent, and the main goal of war is to defeat the economic potential of the enemy, the role of indirect actions increases significantly. It is about greater flexibility in the art of war, a more complete use of the entire variety of means and methods of warfare, including non-military and non-traditional ones.

A special place in the system of indirect actions is occupied by special methods of warfare, starting with psychological operations, subversive actions and ending with the operations of special forces. The entire armed struggle is permeated with extensive information warfare [24].

Thus, information warfare is increasingly becoming an integral part of combat operations. Without an advantage in this area, even the militarily stronger side will face serious difficulties in organizing and conducting combat operations. In technical terms, disabling the control system will be considered an important condition for defeating the enemy. Even before the start of hostilities, complete information superiority must be achieved, and with their start, the task is set to achieve "paralysis" of the enemy's control system in the shortest possible time.

Disruption of communication lines, massive failures in the operation of computer systems and failures of radio-electronic equipment will not allow the opposing side to conduct combat operations in an organized manner. The military-political leadership, military personnel and civilian population of the enemy are subjected to massive psychological influence in order to push them to consciously or spontaneously commit certain actions. Active propaganda is aimed both at its own population and at residents of "third countries" to create favorable domestic and foreign policy conditions for further warfare [14].

Therefore, in order to overcome the threats of IPSO, the leading and determining ones should be socio-political measures that help to gain the support of the main part of population.

Further development of views on the conduct of war shows that today's war is, firstly, a systemic war; secondly, war, where the main ones are the complex effects of the entire system.

Accordingly, patterns of countering threats to national security in a modern war must also be systemic in nature and be capable of launching entropy processes in the enemy's system of complex actions and at the same time achieving a synergy effect in overcoming threats. Such a task is very complex and requires continuous monitoring, analysis, forecasting, and agility.

The peculiarity of wars in the 21st century is that during the war, not only military facilities and troops come under enemy attack, but at the same time the country's economy with all its infrastructure, civilian population, and territory. A situation inevitably arises when the presence at least in one of the warring parties of insufficiently effectively defended and unprotected critical infrastructure facilities (hydroelectric power plants, nuclear, chemical, oil and gas storage facilities, and other similar economic facilities) can become a catastrophic environmental threat to all surrounding countries, and not just the warring ones. In this case, the goal of war shifts from the physical destruction of the enemy and the occupation of his lands to the subordination of the enemy to own will and inclusion of him in the sphere of influence on acceptable terms. The first example of the "practical implementation" of such a concept of war was the Russian invasion of Ukraine.

The Russian Army systematically launches missile attacks on critical infrastructure in Ukraine, especially in winter, trying to inflict maximum economic and social damage.

Thus, new remote methods of warfare include disrupting the functioning of the control structures of the attacked country, initiating a split in its political elites, and disrupting social stability through a combination of subversive psychological, economic, and social operations.

A new remote method of conducting armed struggle is the remote destruction of the economic potential of the state, at any distance from the enemy.

At the same time, the sequence of defeating the enemy may change: while previously it began with a decisive attack on the border groupings of ground forces, prospective means of high-precision destruction will make it possible, already during the initial operation, to disable the most important elements of the administrative and military control system, the military-industrial complex, transport and energy throughout the country [9]. In this regard, the spatial characteristics of the armed struggle are changing. Military actions are acquiring an increasingly pronounced volumetric (three-dimensional) dimension [11]. Ballin et al. [4] suggest the extension of classical concept of security as follows (see Figure 2).
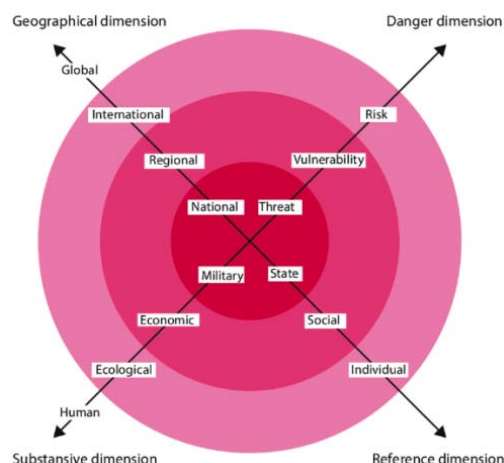
Figure 2. The extension of classical concept of security [4]

Heerden and Goosen [8] present more 'narrowed" and practice-oriented vision of modern national security (see Fig. 3). It coincides with the above one in its essence, but restructured for practical rather than purely theoretical level.
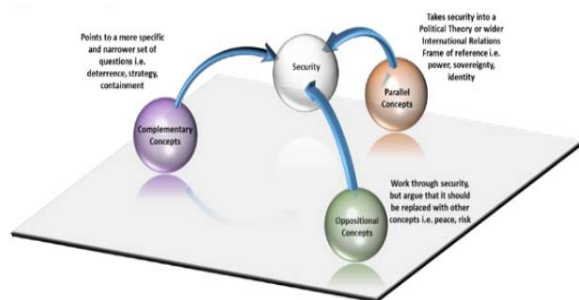

Figure 3. Security's adjacent concept [8]

According to a number of American military experts, a new look at the threats of the 21st century is that today, even among traditional states, the difference between hostility and non-hostility is practically leveled out, since new methods of influence (such as intrusions into computer networks) make it difficult to accurately determine the time of the outbreak of hostilities [23]. In addition, it is assumed that in the future the main threat will come not from the regular armed forces of different countries, but from all kinds of terrorist, criminal, and other organizations, including non-state ones, whose participants are united on the basis of network structures [2].

Over the next 10 to 20 years, militaries will have to operate in an environment of increasing complexity, unpredictability, and dynamism. The use of asymmetric strategic concepts by a potential adversary and the widespread proliferation of remote weapons (primarily high-precision missile systems and means of information influence) will create an additional burden on all components of the armed forces and government. In the future, the conduct of combat operations will require not only an increase in the degree of interaction of forces and means, but also greater participation in them of other government agencies, departments and coalition partners. To achieve success in new conditions, it is necessary to have the ability to dynamically integrate a wide variety of forces and means to implement new capabilities that can potentially be obtained both by using the internal resources of the armed forces themselves, and by involving other government agencies, etc. It is necessary to reduce internal formal approval procedures in the interests of increasing the adaptability of the armed forces to new conditions. At the same time, increasing the level of integration of forces and means should be extended to the lowest level of management [7]. As the model of threats changes, the role and place of the armed forces in armed struggle also changes. A

greater emphasis is placed on conducting non-military operations, which requires increasing the importance of the information sphere of confrontation, as well as close interaction with non-state organizations and structures.

It should be noted that the end of the Cold War marked a change in the interpretation of issues of security. It is not surprising that its military component is changing as weapons systems improve and new ways of fighting emerge. For example, in the 1990s, the term "information security" and "information warfare" appeared in a specifically military sense. It is more important to pay attention to the expansion of content due to fundamentally new threats. In addition to the military block (hard security), a non-military block (soft security) began to be distinguished. Based on the scale and consequences, experts began to talk about the global dimension of security. This includes threats that require efforts to neutralize not just one state, even the most powerful, but many [3].

Current neorealism, instead of constantly increasing strength, places emphasis on the necessary level of state security. Security is interpreted in a relative sense: states strive to provide only such a level of power that allows them to survive [21]. Only the most powerful states can afford unilateral actions, so in ensuring security, for most countries, there is room for cooperation, albeit limited. In this new capacity, security is based on the cooperation of states, whereas in the traditional sense, national security was achieved through unilateral actions in conditions of competition. Meanwhile, a broad interpretation of security gives rise to additional practical difficulties that can only be resolved within the framework of the concept of "hybrid peace".

The security dilemma is formulated as follows: when the costs of attack are assessed as lower than those of defense, the likelihood of war increases. If at the moment it is more advantageous to attack, then two states with equal forces cannot be equally secure, which provokes a mutual build-up of forces, an arms race, and in the future leads to war. Even if a state seeks security, the idea of a preventive strike against the enemy remains attractive to it. The advantage of an attack provokes power diplomacy, de facto politics and erroneous conclusions about the enemy, which in certain circumstances also bring war closer.

However, when a state, for reasons of profit, begins to invest in defense, it does not reduce the security of its opponents. It becomes possible to simultaneously strengthen the defense of many countries with a general stabilization of relations. Conditions for cooperation are created and the threat of attack is reduced. Relatively weak states may make attack by stronger opponents unacceptable if victory comes to them at too great a cost. Moreover, these weak states have favorable chances to strengthen this cooperation precisely during the war, in the wake of the political "halo" of allied assistance.

This provides the government with many key issues. The first step is to identify and prioritize: how can it continue to rank the many claims to national and international security? What sectors include essential public interests that need the government to assume a public role (as director or otherwise), and which do not? Securitization processes are driven in part by the development of the security agenda. It is consequently critical to prevent against 'normative overdemand' on the government. Naturally, prioritization is ultimately a matter of making political and normative decisions. However, reasonable considerations based on relevant knowledge and public discourse are required when making those judgments in order to take successful action and secure public support.

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Primary Paper Section: A

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PUBLIC MANAGEMENT OF THE DEVELOPMENT OF THE HIGHER EDUCATION SYSTEM IN UKRAINE

[a]SVITLANA KRYSHTANOVYCH, [b]IRYNA GAVRYSH,
[c]IRYNA TAMOZHSKA, [d]VOLODYMYR TROBIUK,
[e]NATALIIA HRODZ, [f]OLEKSANDRA KHLTOBINA

[a]*Lviv State University of Physical Culture named after Ivan Boberskyj, 11, Kostyushka Str., 79007, Lviv, Ukraine*
[b,f]*H.S. Skovoroda Kharkiv National Pedagogical University, 29, Alchevsky Str., 61002, Kharkiv, Ukraine*
[c]*V. N. Karazin Kharkiv National University, 4, Svobody square, 61022 , Kharkiv, Ukraine*
[d]*National Academy of the National Guard of Ukraine 3, Maidan Zahysnykiv Ukrainy, 61001 Kharkiv, Ukraine*
[e]*Hetman Petro Sahaidachny National Army Academy, 32, Heroiv Maidanu Str., 79026, Lviv, Ukraine*
email: [a]s.krischtanovich@gmail.com,
[b]*Irinagavrysh@gmail.com, [c]itamoska@ukr.net, [d]d1ss@ukr.net, [e]nate.881504@gmail.com, [f]xo1tobina@ukr.net*

Abstract: The article considers core challenges and problems of public management of Ukrainian higher education system within the global landscape of higher education development. Systemic analysis of factors influencing higher education system in Ukraine is carried out based on complex vision, including social and political factors. Overall trends and practices observed in higher education of different countries is carried out, with outlining of the state-of-the art and prospects of Ukrainian higher education on the background of this landscape. Penta helix model is mentioned as one of potentially effective directions to be included in public management of Ukrainian higher education system development.

Keywords: higher education system; public management; penta helix; international student mobility; university; ranking.

1 Introduction

At the present stage of development of Ukrainian society, an important place is given to education as a universal value and as one of the main national projects. Education as a sociocultural phenomenon reflects the state and prospects for the development of the state and society as a whole and at the same time influences them. The Ukrainian education system, in terms of its historical and economic indicators, cannot be isolated from the world education system. Because of this, the beginning of the 21st century is marked by its rapid integration into the continental and planetary educational space on the legal basis, ideas and principles accepted by the European and global scientific and educational community as priorities. The education system of Ukraine solves problems similar to those facing the national educational systems of other countries [11-16]. These include: modernization of the existing education system in the state in order to give it greater flexibility and mobility, a harmonious combination of unified world indicators and national identity; designing of criteria and procedures for examining the dynamics of development of this system, development of effective modern mechanisms for its state support; improvement of legislation in the field of education, etc. [21; 25; 27].

The system-forming principle of modern university management technology is the internationalization of education, covering almost all aspects of educational activity. Modern technologies for managing universities represent an innovative process that includes scientifically developed goals and practical methods for solving existing problems. Internationalization as an innovative management technology in the field of education is applied at the national, regional, sectoral, and institutional levels. Through the use of this technology, the goals, functions, and mechanism for providing educational services become international in nature. Currently, the internationalization of education is included in state policy aimed at solving national, political, social, and economic issues. All this greatly complicates the landscape of public management of the development of higher education in comparison with the management of higher education characteristic of the 20th century.

In a world with globalization trends, where the knowledge economy has become the basis for the development of states, the demand for higher education not only is increasing quantitatively, but also becoming more diversified and adapted to the new needs of the modern economy, which generates new industries due to the development of innovative technologies and is characterized by "globalizing professions". As a result, in the context of globalization, leading to the erasing of economic boundaries and, to a certain extent, the boundaries of national jurisdictions, the global higher education market as a whole, including its components - national higher education markets - has become a separate sector of the world economy with billions in sales volumes and millions of consumers. The competition of national higher education systems in the global higher education market has become a key element in the global competition of national economies, while issues related to generating income in the global higher education market have been considered in recent decades by a number of countries (for example, the USA, Great Britain, France, Germany, and other countries) as part of their foreign economic policy.

Thus, changes in the content and scope of state activities in the management of higher education in the context of the functioning of the national and global higher education market urgently require scientific research into this issue. Meanwhile, as statistical data show, the competitiveness of Ukrainian higher education on the world stage does not show any pronounced positive dynamics. In addition, the potential of the triple helix mechanism, and even more so the quadruple- and penta helix, is poorly used. A number of Ukrainian universities do not have any officially registered scientific topics at all. Of course, it cannot be said that research is not conducted at all in such universities. But still, the absence of this very registered scientific topic (even if it is a research topic that does not necessarily require funding from the state) indicates that not all universities consider science to be a priority activity, in contrast to educational activities, which, naturally, leaves a negative imprint on the quality of higher education in terms of its compliance with the digital society and Industry 4.0. Thus, comprehensive studies of the problems and prospects of public management of the higher education system in Ukraine represent a very urgent scientific task.

2 Materials and Methods

The methodological basis of the study is represented by a set of general scientific and specific scientific methods adapted for the purposes of this study - in particular the dialectical method, problem-based, specific historical, statistical methods, and a number of others.

The study is based on the paradigm that the multifunctionality of modern higher education determines the existing variety of methodologies for its research, focused around pedagogical, philosophical, sociological, economic, historical, etc. paradigms, each of which analyzes its own aspect of the development of this complex phenomenon.

The overall methodological basis of the study is a system of knowledge about systems (open and closed), patterns and principles of development of education systems, their national and supranational characteristics. Works in the field of pedagogical and public management research methodology that reveal the essence of the systems approach serve as a general scientific methodology.

Consideration of management of the development of education as a component of the education system, which in turn is a component of a system of a higher degree of community (society, state), allows identifying the main directions of state management support for the development of the domestic education system, focused on state support for the development of education and its advanced sustainable nature.

3 Results and Discussion

In the conditions of a modern, dynamically changing society, education is rightly considered as its foundation and the most important institution of socialization. A developed national higher education system becomes an indisputable competitive advantage in the intellectual capital market, a resource that ensures the implementation of planned reforms in all spheres of public life. That is why the education system is always in the focus of attention of government authorities and civil society institutions, and plans for its modernization initiate lively discussions about the model of modern education and the need for its modernization. Interrelated projects for the transformation of both secondary and higher schools are especially actively discussed [17]. Projects of transformation of higher education, capable of responding to the challenges of our time, are of increased interest. Modernity here is understood as an era of change in the technological and educational paradigm, initiated by the fourth technological revolution, the prospects of which are difficult to predict [18]. In these conditions, the fate of the classical university, its role and significance in new historical conditions acquires special significance.

A significant historical function of the university at all times has been and remains its influence on the formation of a new sociocultural reality, in which many of the most important social institutions are created and transformed [24]. In the university environment, conditions are emerging for the formation of a new way of life. Scientific research directly related to the pedagogical process, the creation and application of new information technologies, the special atmosphere of university communication, the internationalization of education and teaching methodology become factors in the production of intellectual capital, an essential component of the response to global historical challenges.

Higher education, research, and innovation play a critical role in maintaining social cohesion, economic growth and global competitiveness. The growing demand for the skills and competencies of future specialists, for the productivity of scientific research, for projects to transform the university ecosystem sets new goals for the higher education system in developing strategies for its modernization at the level of the state and universities, and mechanisms for its implementation. At the same time, the dependence of state policy in the field of higher education observed in Ukraine on very dynamic and sometimes momentary political interests and vectors has a very negative impact both on the global competitiveness of national higher education and on the functions of higher educational institutions as drivers of positive sociocultural dynamics and formation of high-quality social capital in Ukraine.

In the unstable conditions of our time, in a situation of unpredictability, the public demand for education is changing. The sociocultural needs of the modern era determine the nature of the formation of an innovative educational paradigm, its content and structure [20]. The challenges and threats of the modern scientific and technological revolution set new directions for the development of education, require the expansion of new educational models/projects, the development of tools and forms of internationalization of higher education in full-time and distance learning formats that can respond to new needs of society. These requests must be answered by a classical university, whose role is not limited to educational and research functions. Its sociocultural mission, which forms a specific scientific, educational, intellectual environment, is of great importance. In many countries, modern universities are considered centers of development of post-industrial society due to special characteristics that distinguish them from any other higher education institutions. The high level of training of specialists at the university is due to students obtaining basic knowledge in the field of fundamental sciences, in an optimal combination of teaching natural sciences and humanities [2]. In the university space, the ability for scientific research is developed, the need to 'serve the truth' in its most developed form - scientific and theoretical - is cultivated. At a classical

university, a special intellectual environment is created in which not only highly professional, but also the moral qualities of an individual and his motivation for creativity are formed. University education is becoming the most important resource for solving modern technological problems through the application of transdisciplinary methodology at the intersection of sciences based on deep fundamental research. The results of such research are used in many sectors of the economy, production, as well as ensuring technological and environmental safety. But the main result of a university education is specialists capable of creating such products. The value of a modern classical university lies not only in the development of fundamental science and the presence of highly professional teaching activities, but also in attracting leading scientists and talented students from different countries through academic mobility tools. These tools are necessary for the implementation of an interinstitutional educational project with the participation of representatives of the state, national institutions of higher education, business, and civil society institutions, whose joint efforts are necessary for developing a strategy for higher education at the state level. In Ukraine, quality indicators of students mobility and dynamics of higher education international rating are quite alarming. As it is evident from Figures 1-4, the top ten of countries of origin of international students in Ukraine are countries of the "second" and "third" world, the so called "Global South", while many Ukrainian students strive to enter the universities of the USA and EU. Moreover, the number of Ukrainian students studying abroad is higher than the number of international students in Ukraine. Let us emphasize that these data do not include period of the current Russia-Ukraine war, that is, they are determined not by extreme factors of war condition, but purely by specific factors of social, economic, political, and educational factors in Ukraine. This evidently demonstrates not sufficient level of Ukrainian higher education competitiveness.
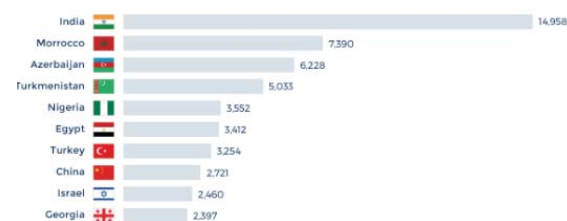

Figure 1. Top ten sending countries of international students in Ukraine [7]

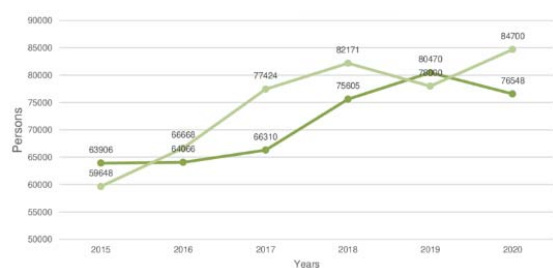*Figure 2. Number of international students in Ukraine by their country of origin* [6]

Figure 3. Dynamics of the number of foreign students in Ukraine and Ukrainian students abroad in 2015-2020 [1]
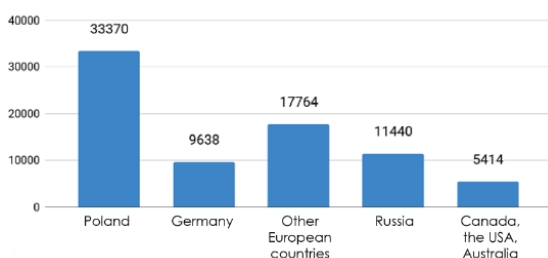

Figure 4. The number of Ukrainian students studying abroad, 2016/2017 academic year [4]

Overall, the international competitiveness of Ukraine's education system appears to have declined in recent years. "While the country ranked 25th in the 2012 ranking of national higher education systems by the Universitas 21 network of research universities, it dropped to position 38 in the same ranking in 2019" [7]. Such situation of dropping in the position by 13 points just in seven years requires immediate taking 'emergency' measures on a state level and radical change of public management paradigms concerning development of higher education system.

Results of the latest reforms in the higher education system in Ukraine can be briefly summarized as follows [19]:

1. KPIs were introduced in contracts with rectors. It includes a number of key performance indicators and deadlines for achieving them. Among the indicative components, there are the following: the level and dynamics of student employment and internships; increase in extra-budgetary revenues for scientific activities, increase in teaching in English.
2. The university funding formula has been changed. Instead of a one hundred percent correlation with the number of students, a formula of five criteria was introduced: regional coefficient, scale of the university, attraction of extra-budgetary funding, international recognition indicator, and number of students (the weight of this indicator was reduced to 80%, in the future it will be equal to 50%). At the same time, some specialties require additional equipment for the educational process. Therefore, one engineer "costs" 60% more than an economist. This "encourages polytechnics not to chase after lawyers" [19].
3. Indicative cost has been introduced. The indicator went into effect in 2019 and provides that the cost of training for contract students will gradually become equal to the cost of training a student who receives government scholarship. The anti-dumping measure (Vinnitsa Agrarian University offers training in computer science for eight thousand hryvnia per year) will redirect contract students to universities that can provide high-quality knowledge.
4. Consolidation of universities. In 2019-2020, three mergers of universities took place. In Kriviy Rig, the Economics Institute merged with the Metallurgical and three other colleges. In Lviv, the Institute of Economics and Tourism joined the University named after I. Franko, a branch of the University of Banking in Kharkov joined Karazin

University, and the university itself moved from Kyiv to the capacity of its branch in Lviv.

The opposite experience of Estonia shows what results can be achieved if to be consistent in reforming education. Having begun to change the system in 1993, the country with a population of 1.3 million people already in 2006 was ahead of post-Soviet countries and most other participants in the PISA rankings. And, for example, the University of Tartu (Estonia) now occupies 285th place in the QS World University Rankings (the top achievement of Ukraine - occupying 477th place in this ranking - belongs to Karazin Kharkov University). The success of the Baltic country is explained by radical, unpopular and, importantly, continuous reforms [8].

Of particular note is the extremely negative impact of politicization on the field of higher education. For example, the recent shocking scandal surrounding the teacher of the Lviv Polytechnic University Irina Farion is an unacceptable phenomenon in the modern higher education system, negatively affecting the image of national education at the international level. Former Ukrainian MP and linguist Irina Farion expressed conviction that only those who communicate in Ukrainian can claim to be Ukrainians. Previously, she accused Ukrainian soldiers, including the Azov fighters, for speaking Russian and has implored the President of Ukraine, the Commander-in-Chief of the Armed Forces, and the Minister of Defense to take action against the 'rude behavior' of Azov commanders [22]. However, similar scandals periodically arise in a number of southern US states over the racist statements of some professors. Such phenomena are the product of latent drivers of tension in society and should also be the object of close attention from government regulatory bodies in the field of higher education - in particular, tolerance, inclusion, and cross-cultural competence should become one of the most important pillars of public management policy for higher education system. Without this, even the most advanced scientific research and development, including within the framework of the triple helix mechanisms, do not contribute to improving the image of the country and its educational system at the global level, as is clearly demonstrated by the example of the Russian Federation and China.

At the same time, when projecting government programs for the development of the higher education system, national security issues should not be ignored. For example, in May 2021, Hungary announced plans to open a branch of the Chinese Fudan University in Budapest. This new campus marks the first time China has opened a branch of its university in an EU member state. The announcement of these plans followed the 2019 liquidation of the Central European University (CEU) graduate school in Hungary, which was 'successfully' forced out of the country through changes to education law. Since then, it has moved to the capital of Austria, Vienna. Both of these events sparked public protests in Hungary; protesters argued that the country's own higher education system was being dismantled in favor of the illiberal policies of Prime Minister Viktor Orbán. For China, the move is part of its One Belt, One Road (BRI) geopolitical strategy aimed at gaining a leadership role in globalization, developing its higher education system and research institutions, and attracting talented scientists by establishing academic partnerships with Western institutions. While these goals are often achieved through completely legal means, the authoritarian nature of the Chinese regime raises concerns about its actual motives and tactics to achieve its goals.

Ukrainian researcher Halyna Todosova back in 2013 rightly noted that the transition from state to state-public management of education will create conditions for expanding the management capabilities of civil society. That is, the role of, first of all, organizational mechanisms is growing. Dialogue with the public is a mechanism through which it is possible to create conditions for the free and constructive exchange of information, as well as the successful implementation of development programs of each educational institution, education for sustainable development. To achieve such a goal, it is necessary to adhere to the basic principles of interaction, namely: the

principle of trust and the principle of openness (information must be conveyed to all participants in the development and decision-making process interested in receiving it) [26].

Regarding the improvement of the mechanisms of state-public management of education, Todosova considers it necessary to supplement the system of state management of education with new public mechanisms, taking into account the European experience in the use of such mechanisms. Since the modernization of education is a coordinated position of the Cabinet of Ministers of Ukraine, in order to achieve a certain goal it is necessary to improve management mechanisms at the level of legislative initiative and the use of power. One of the important political mechanisms should be an analysis of state policy in education, which should take into account changes in the labor market in Ukraine over the past decades: changes in the nature of work; a reduction in the level of long-term contract employment and an increase in the level of employment itself; the growth of unemployment among those who have not received the knowledge necessary in the new economic conditions; shortage of qualified labor; the influence of new information and communication technologies; the growth of internal and external labor mobility [26].

With every new technological breakthrough, problems arise that cannot be solved by previous methods. Emerging methodological crises initiate a reassessment of past knowledge, which forces the state to adjust the tasks of managing the higher education system and the scenarios for its future. The modernization of the classical university is recognized as an urgent task, and the search for its solution is determined by the development strategy of the country as a whole and the education system in particular. The modernization of national higher education is understood as a response to a global scientific and technological challenge, the analysis of which allows developing an adequate project of transformation, increasing the competitiveness of a classical university without losing its national identity [5]. When developing public policy in the field of higher education, it is critical to ensure its continuous alignment with the processes of scientific-technological progress, which has extremely fast pace today. This applies not only to purely engineering and natural sciences, but also to the humanities, since technical progress is inseparable from social progress, and Industry 4.0 and Society 5.0 are mutually generating and mutually defining phenomena.

Meanwhile, dictated by the desire to make higher professional education an important factor in socio-economic renewal, state policy in Ukraine focuses on supporting a selected limited circle of universities, on encouraging their ambitions in the space of global competition, as well as on tightening the systemic conditions of existence for outsider universities. The side effects of influence on the bulk of state universities that arise against this background create certain risks for the development of the university system as a whole.

The race for leadership in international rankings - with a short-sighted assessment of this process and the absence of compensating efforts to support and develop the institutional environment itself - increases the risks of stagnation of the higher education system. Rating makes sense only in conditions of "comparability" of universities, in conditions of the presence of common essential features. Therefore, interest in rankings contributes to the emergence of interest in describing the institutional diversity of higher education systems. Conversely, understanding institutional diversity creates a qualitatively different basis for comparison. In this regard, the experience of European countries is indicative: the creation of a new U-multirank ranking, which was officially presented in January 2013 at a conference under the auspices of the European Union in Dublin, was preceded by many years of work by a consortium of researchers to study the institutional diversity of European higher education and develop a classification of European universities U- Map. The close connection of the two projects, including a single development team, made it possible to combine two tools: U-Map - a tool that helps to understand what

a university is doing, and U-Multirank - a tool that allows understanding how well it does it by implementing those the very principle of "comparability" [18].

The synergy relationship between the university as academia, industry and government is known as the triple helix. The triple helix concept was first introduced by Henry Etzkowitz and Loet Leydesdorff in analyzing the relationship between universities, industry and government. The Triple Helix innovation model focuses on the university-industry-government relationship. Today, the development of the helix consists of five related elements which are called the penta helix. The five elements are universities, government, industry, mass media and communities. The synergy relationship between university/academia, government and industry is a mutually beneficial relationship if executed properly, which is evidenced today even by the experience of developing countries. In particular, in Indonesia, the Product Design Study Program is one of the study programs in the Samarinda State Polytechnic Design Department. Since its establishment for nearly 20 years, it has had positive organizational dynamics.

In the penta helix model, the government regulates every step made by universities and industries in the realm of education. In general, the media aids in the promotion of all activities conducted by academics, business, and government in the subject of vocational education. With the use of mass media, information about all actions will be more rapidly accepted by the environment/community. This community participates in activities that address societal and environmental issues. In reality, this is a practical application of public discourse and civil society participation in the formation of a state-level higher education plan. For example, in the aforementioned Product Design Study Program, the government, as a regulator of the Penta Helix element, is entrusted with developing regulations and overseeing their execution as a regional or national activity. "The perceived role of the government in the Product Design Study Program is related to the regulation of regulations on universities. Regulations regarding tertiary institutions such as the minimum education for lecturers are master education, nomenclature management, as well as several rules in campus activities that affect the space for this department" [23]. The government also gives monetary support to facilities, both physical and non-physical. Facilities and pre-class facilities are examples of physical resources, whereas non-physical resources include scholarship support for faculty and students, as well as help such as research grants and community service.

The integration of science and education is extremely important: thanks to the synergistic effect, improvements occur in both sectors - both the productivity of research and the quality of education increase, and at the same time the level of trained scientific and pedagogical personnel. The teaching staff is being updated and strengthened by increasing the influx of young personnel by enhancing their involvement in the field of research and development. By increasing the effectiveness and quality of research, opportunities are opened for commercializing the results of applied projects, which also contributes to the efficiency of spending state budget funds [9; 10]. Since science is a key driver for the development of knowledge-intensive industries and determines the vector and level of development of the country's economy, in the most progressive countries science is an integral part of university education [3].

Higher education, being one of the leading culture-forming elements in developed societies, due to its specificity, requires comprehension from the perspective of various methodological approaches, therefore modern concepts of higher education operate using the methods of hermeneutics, structural functionalism, structuralism, comparative studies, diachronism and synchronism, systemic, institutional, organizational, cognitive, conflictological, and other approaches, trying to consider the essence of higher education and its state regulation from their own point of view. However, it is clearly obvious that one of the most important areas of activity of a modern social state in Ukraine should be the competent regulation of the

development of the education system, in particular higher education. It should be noted that a significant number of problems in the higher education system of Ukraine arise precisely in connection with the insufficient quality of its state and legal regulation. In this context, the striving to guarantee the necessary level of legal and organizational support for the development of the higher education system determines the need to increase the efficiency of higher education management on an appropriate scientific and theoretical basis, as well as to improve the forms and methods of government influence on legal relations in the educational sphere. The role of the state in this process is not only to develop a legal framework and attract the required resources to the education sector, but also to create effective mechanisms to ensure the functioning of the higher education system, which is a set of methods and tools for management in this area of public life. Modernization of today public administration system should contribute to the creation of optimal conditions for the functioning of the higher education sector in the conditions of innovative development and integration into the European educational space and the establishing and strengthening of Society 5.0.

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INNOVATIVE TECHNOLOGIES IN THE WORK OF A TEACHER OF PHYSICAL CULTURE AND SPORTS

[a]SVITLANA KRYSHTANOVYCH, [b]FEDIR ZAHURA, [c]ANDRIY DULIBSKYY, [d]OKSANA ILKIV, [e]IGOR ODNOVORCHENKO, [f]VIKTOR CHYZH

[a-d]*Lviv State University of Physical Culture named after Ivan Boberskyj, 11 Kostyushka Str., 79007, Lviv, Ukraine*
[e-f]*State University "Zhytomyr Polytechnic", 103, Chudnivska Str., Zhytomyr, 10005, Zhytomyr, Ukraine*
email: [a]s.krischtanovich@gmail.com, [b]zaguraf@gmail.com, [c]dulibskyy.andriy@ukr.net, [d]oilkiv.63@ukr.net, [e]kfvsoiv@ztu.edu.ua, [f]kfvschvv@ztu.edu.ua

Abstract: The article represents an attempt to investigate modern theoretical provisions and best practices in the field of introduction of innovative technologies into the work of physical culture and sports teachers. Both didactical and technological aspects are considered based, in particular, on some case studies and empirical research. The importance and expediency of AR/VR technologies in teaching physical culture and sports are emphasized, as well as the relevance to addressing some elements of professional sports training practice.

Keywords: innovative teaching technologies; innovative approach; physical culture; sports; virtual reality.

1 Introduction

In today world, it is difficult to deny the importance of introducing innovative technologies into various spheres of science, culture and education; many scientists adhere to the same position. The thesis about the positive impact of introducing various innovations into physical education practice that have already shown their effectiveness runs like a red thread through many scientific articles devoted to advanced methods in physical education.

Every physical education lesson, whether at school, university, or in other educational institutions, sets one of its primary objectives to strengthen and maintain the health of students. Health-saving educational technologies can be called the most significant among all other types of technologies. In addition, when playing sports using the latest and improved methods, the risk of many diseases is reduced.

For example, about 45% of modern schoolchildren notice symptoms of physical inactivity. Possible consequences of physical inactivity are an increased risk of deterioration in the functioning of the musculoskeletal, digestive and nervous systems, a 40% increase in the risk of premature death within 15 years of work associated with long (more than 6 hours per day without preventive breaks every hour of work) sitting in front of a computer monitor, the occurrence of pulmonary embolism, circulatory disorders in the pelvic organs, etc. [7]. The reasons for physical inactivity, in addition to such large-scale and well-known one as scientific and technical progress, thanks to which the emergence of the global Internet took place, and as a consequence, the involvement of a large percentage of people in the so-called "network life" or the development of communication systems, is urgent addiction (lack of time), the problem of procrastination (a condition characterized by constantly postponing important things until later), the presence of depression (depression as a long-term depressed mental state has a "fettering" effect on the individual, which in most cases prevents his physical activity), low level of stress resistance. Advanced methods in the field of physical education can not only prevent the development of physical inactivity in the early stages of its occurrence, but also reduce the manifestations of existing symptoms.

In addition, innovative technologies in teaching physical education and sports help to reveal the multifaceted abilities of students. Often people themselves do not know what they are really capable of. Physical education classes can help students realize their potential in various physical disciplines, which, with the right approach, will allow them to successfully participate in competitions.

At the same time, the innovative activity of teachers can be considered as one of the parts of innovation in various types of its manifestation, such as the development of innovative methods, organization, management, selection and implementation of original means. When choosing an innovative approach, a teacher must first of all rely on creating conditions for the development of the creative potential of each student and on the requirements of educational standards. The use of the very term "innovative" in methodological publications and scientific articles characterizes the innovative processes occurring in physical culture.

Today, specialists are required to have new ideas in teaching culture and sports. Effective implementation of an integrated approach to physical education of students into the educational process involves the use of innovative pedagogical technologies based on the best experience of not only university pedagogy, but also the pedagogy of professional sports, as well as an interdisciplinary approach and the use of the latest digital technologies.

2 Materials and Methods

The methodological basis of the research is the theory of functional systems, the theory of pedagogical management, the concept of activity physiology, the concept of individual self-realization in the process of sports activity, as well as general scientific and special theoretical and methodological provisions of the sports training system.

The study also used the main provisions of the systems approach, pedagogical theories of problem-based, contextual and collective learning, university didactics, theory and methods of physical education and private methods.

3 Results and Discussion

Different types of lessons, forms of their implementation, the integrated use of frontal, group, individual forms of work, the use of various methods and techniques of teaching, including non-standard lessons - lesson-games, lessons-contests, lessons-competitions - all this allows stimulating students' interest in physical education not only in the classroom, but also in their free time.

Information and communication technologies make it possible to organize the educational process at a new, higher level. These technologies help solve another problem - to interest students in obtaining information about the formation of a healthy lifestyle, the history of the development of physical education and sports.

Physical education lessons include a large amount of theoretical material, for which a minimum number of hours is allocated, and the use of ICT allows to effectively solve this problem through explanations of the technique of performing training movements, historical documents and events, biographies of athletes, covering theoretical issues.

Moreover, the use of interdisciplinary connections not only helps to create a holistic picture of the world, but also contributes to the development of an aesthetic attitude towards sport as an art, cultivating, in particular, a sense of patriotism [3].

The teacher's task is to choose teaching methods that would allow each student to show own activity, creative abilities, and to intensify the student's motor and cognitive activity. The use of new information technologies and Internet resources allows one to achieve maximum results in physical education lessons.

The main task is to attract every student to study their body, to understand the potential inherent in it. A physical education

teacher must help students to discover their potential. Group learning technologies help optimize the learning process – it implies the use of small groups (3-7 people) in the educational process. The main condition for group work is that direct interaction between students is carried out on a partnership basis. This creates comfortable communication conditions for everyone and ensures mutual understanding between group members. Possessing a fairly powerful motivating force, group learning technologies can optimize the learning process, making it more effective. In particular, the use of group technologies when teaching the "Sports Games" section of curricula makes it possible to increase the 'motor density' of lessons and activates the cognitive activity of students [27].

The following sports can be used as non-traditional innovative methods of conducting classes:

1. Yoga. The practice of this system includes physical relaxation techniques and muscle tension techniques that are based on concepts such as relaxation, stretching, increased circulation, deep breathing and concentration. The asanas that make up yoga help improve physical strength and flexibility and have a relaxing effect. Yoga can be combined with other physical exercises and is applicable even for students with some disabilities.
2. Nordic walking. It is a highly effective type of physical activity that involves the use of a specific walking technique and exercise technique using special sticks. It engages and develops about 90% of all muscle groups, maintains muscle tone in the body, reduces pressure on the spine and joints, promotes the dynamic functioning of the lungs and heart, improves the sense of balance and is a good method for correcting posture. A separate advantage of Nordic walking is the ability to practice it anywhere and at any level of physical fitness.
3. Stretching exercises. Their basis is static stretching of muscles and joint-ligamentous apparatus, which helps prevent and correct postural disorders. Stretching helps increase joint mobility, muscle elasticity and improve blood circulation [9].
4. Step aerobics. It is a type of aerobics in which the movements performed on the stepper are performed through maximum tension of the leg muscles, rather than the back muscles. Regular exercises in the form of dance movements help prevent arthritis and osteoporosis, recover from knee-joint injuries and improve mental well-being.
5. Pilates. It includes a series of exercises that help increase flexibility, restore physical fitness, improve posture, develop and strengthen muscles and improve coordination.

The use of a variety of innovative methods of physical education contributes to a significant improvement in the physical fitness and health status of students, and also increases their level of motivation for physical education [22; 23].

Innovative technologies in physical education and sports offer a wide range of tools and applications that help improve the training process, analyze data and increase the effectiveness of training. Here are some examples of such technologies [8]:

1. Portable devices for monitoring physical activity. These can be fitness trackers, smart watches or specialized sensors that can track the number of steps, distance traveled, heart rate, calories, activity level, and other parameters. These devices help students and athletes monitor their physical activity and improve their performance.
2. Virtual reality and augmented reality. These technologies enable the creation of immersive training environments in which students and athletes can simulate different situations and training conditions. For example, they can train on virtual tracks or ranges, compete against virtual opponents, or receive feedback on their technique.
3. Analysis of movements and biomechanics. Using special cameras, sensors and software, it is possible to analyze the movements of students and athletes, evaluate their technique of performing exercises and identify errors or shortcomings. This allows coaches and teachers to give more accurate

recommendations and adjust technique to achieve better results.
4. Interactive simulators and gaming platforms. These can be special exercise equipment or gaming platforms that combine physical activity with gameplay. For example, students and athletes can train on exercise bikes, where they compete with virtual opponents or go through various game tasks, which makes the training more interesting and motivating.

These are just some examples of innovative technologies in physical education and sports. Every year, new developments and opportunities appear that help improve the training process and achieve better results. Thus, continuous tracking of new developments and systematization of best practices are of crucial importance.

Modern pedagogical science and practice includes a fairly wide range of educational technologies. The most important components of new educational technologies are personality-oriented ways of interaction between a teacher and a student. So, as an example, let us consider educational technology based on the personal orientation of the pedagogical process. It provides for a pedagogy of cooperation, a humane-personal approach, as well as technologies for the formation of personality based on the activation and intensification of the activities of those involved. Much attention is paid to problem-based and communicative learning.

Also, experts highlight a direction related to pedagogical technologies based on effective management and organization of the educational process. The main components of this direction are technologies for individualization of training, cultural-educational technology of training according to the interests of students, promising advanced technology of training using support schemes with commented control, technology of software training and computer technologies.

The next direction is pedagogical technology based on didactic improvement and reconstruction of the educational process. The technology of self-developing learning is interesting because it includes such important areas as self-education, self-affirmation, self-expression, self-determination and self-actualization in achieving personal and social goals and adaptation in society.

One of the best means of expressing all these pedagogical technologies in the educational process of physical education of students is, in our opinion, the system of creating sports sections in universities according to the interests and preferences of students.

It should also be noted that various types of fitness practice in the physical culture and health activities of students are most popular, they are distinguished by accessibility and a positive emotional background in their implementation, as well as a wide variety of means and methods. Fitness technologies have huge potential for diverse and effective effects on the body of those involved, which makes them attractive to students.

Fitness technologies are a set of physical exercises, dance elements, steps, techniques, grouped into a certain algorithm of actions, implemented in a certain way in the interests of increasing the efficiency of the health process, ensuring guaranteed achievement of results, based on a free motivated choice of classes using innovative means, methods, organizational forms, modern inventory and equipment [24].

Many authors note that when elements of fitness technologies are introduced into habitual physical education classes, students' interest raises and attendance at physical education classes increases [9]. It is possible to introduce fitness technologies at a university as follows:

1) During the educational process of physical education of university students;
2) In elective classes that are a continuation and addition to the training sessions included in the curriculum;

3) Within extracurricular time in the form of classes during the day, in sports sections and general physical training groups;
4) As a form of independent work at home, fitness centers, gyms, sports complexes.

As practice shows, the greatest interest arises, subsequently develops and consolidates during the educational process, in physical education classes, and later develops into independent work [20; 24; 25; 30].

With regular fitness classes, coordination abilities and abilities of the musculoskeletal system develop, the respiratory and cardiovascular systems develop, growth indicators improve, weight is controlled and maintained, and posture improves. Fitness has a positive effect on the condition of the body as a whole, and it does not require much effort. Therefore, the introduction of fitness primarily increases the student's preparedness for future work. Also, these classes help to increase the student's interest in regular sports activities, because it is exciting forms of physical education that can enhance the emotional component, general and motor density of the lesson, as a result increasing the efficiency of the learning process [3].

The challenges of modern education are: the concept of continuous development; unlimited access to information for students; clip thinking. At the same time, today learning is built around the student, not around the material. It is not enough to simply present new material - it is important to integrate it into the student's existing body of knowledge. This is only possible in interactive formats. After all, when making a mistake, a student becomes aware of "ignorance", which motivates him to search for new information, the value of which becomes obvious to him. This forces him to actively participate in the educational process. At the same time, the challenges of today's physical education are physical inactivity and poor motivation.

Over the past few years, in overall, classrooms have undergone significant changes. Workbooks, handouts and PowerPoint are a thing of the past. They have been replaced by gadgets and advanced educational technology tools. Although all these things have changed in the classroom, physical education has largely remained the same, so often physical education classes are unattractive to both schoolchildren and students, and they try to avoid taking these classes.

It is logical that University 3.0 should have methods of teaching physical education and sports that correspond to this paradigm, in particular those based on the use of virtual and augmented reality.

Specifically, the benefits of VR include the following [5]:

1. Involvement: due to the effect of presence. VR transforms the educational process, making it significantly more interesting.
2. Immersion: a person finds himself in a three-dimensional space and interacts with believable avatars and objects, and not with flat photographs on the screen.
3. Focusing: VR provides complete isolation from external stimuli, as well as the ability for the teacher to control the student's focus.

   In addition to watching sports through virtual reality, viewers can become athletes themselves by immersing themselves in the virtual reality sports arena. Virtual technology has made sports games more immersive. Earlier,, Nintendo's Wii allowed gamers to play tennis in their living rooms. Now VR can create a much better experience that is more fun and interactive. Oculus Rift, HTC Vive and PlayStation VR have created virtual gaming platforms. VR Sports Challenge and BoxVR are representative examples of VR sports games.

4. Training of athletes and sports teams. Most available VR learning environments are designed to facilitate cognitive learning.

Virtual reality can create significant benefits for training from both an athlete's and a coach's perspective. The key to modern athlete training technique is to capture and understand the player's movements as fully as possible. VR technology allows coaches to observe their team members from different angles to better understand behavior, while athletes can also observe their performances in real matches and training [2]. At the request of the coaching staff, a certain situation on the virtual field is simulated to analyze game behavior. The user must make the right choice: where to run, for example, help in achieving the goal, and so on. If the player sees over and over again what is around him, how he stood, what the mistake looked like, then in the future he will be able to make better decisions.

CoPeFoot, for example, is designed to help players learn and practice tactical decisions in soccer. CoPeFoot uses context-based reasoning as a learning platform in which player-activated avatars perceive, decide, and react to various situations on the football field. Avatars in CoPeFoot were designed to simulate the decision-making process of star players in a real-life setting. In the CoPeFoot system, whenever the avatars are faced with a tactical problem, the player will act and interact with them to find an appropriate solution. This decision then becomes the one which the enemy avatars will use against the player in training in the future. When the player makes a move that creates a similar tactical problem, the opponent's avatar reacts to it with a counter-decision, which creates a new tactical problem for the player.

VR provides many opportunities for safe training, especially in contact sports such as football.

Heart rate, respiratory rate and sweating are important physiological indicators of the effect of physical activity on the human body. They are also often used as indicators of whether a person is exercising. Standards based on these indicators, especially heart rate, are used as platforms on which the effects of physical activity are assessed for both adults and children. In recent years, VR technology has been seen as an opportunity to study and improve physiological responses to exercise in a safe, controlled and motivating environment. Research shows the positive impact of using VR on participants' task commitment and performance, since while performing physical activity, it is difficult for trainees to know their energy levels in real time, and virtual reality provides them with information about their behavior and physiological reactions [4].

Using a virtual image in the mirror, users can visually monitor themselves and check how they are performing exercises. To generate an image in a virtual mirror, the participant's appearance is scanned in advance in 3D and transferred to an artificial figure, an avatar. In a virtual mirror, the user does not just see himself from the front. The mirror can be rotated on demand to see the other side of oneself, allowing the user to better judge whether the exercise is being performed correctly.

With the help of virtual technologies, one can visualize things that are usually impossible to see. The system can provide the user with visual training cues, such as highlighting specific body parts with color in a mirror. For example, when the user lowers during a squat, the thighs on his avatar turn red until they move to the correct end position. The system also points out mistakes: Some mistakes made during movement exercises, such as bending the neck too much during a squat, are exaggerated in the mirror to draw attention to the mistake. Users can also see a demonstration of the exercise: an additional translucent figure is superimposed on the user's avatar in the mirror and performs the exercise along with the corresponding user. The user can then simply follow the movements performed by this second figure, which allows him to know the correct sequence of movements.

Thus, the traditional method of teaching through a teacher is complemented by the acquisition of knowledge and skills through the interaction of students with the information environment, and learning becomes individual. Virtual reality in physical education lessons can not only save learning time, but also give direct and real results. Students are trained to enhance

their capacity for self-learning and innovation, unlocking their potential by avoiding accidents while practicing and overcoming time and place constraints. The use of virtual reality technology in physical education turns lessons into fun so that learning becomes more comprehensive.

Liang et al. [19] examined the impact of augmented reality in physical sustainable education on learning behavior and motivation. The authors developed a strategy exhibiting AR education material functionalities interface mapping incentive to enhance skills and skill acquisition (see Figure 1). The results of this study are as follows: First, the experimental group (using AR) outperformed the control group in terms of motor skill acquisition. The experimental group also has greater learning motives and performs better in motor skill tests than the control group. Finally, the experimental group has a more favorable attitude regarding using the educational materials, and they find the materials more acceptable than the control group.
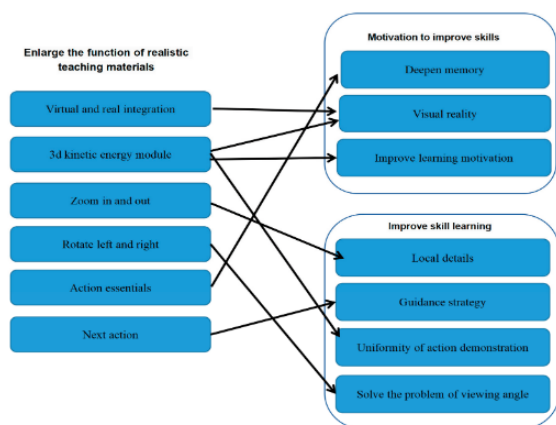

Figure 1. AR teaching material functions interface mapping motivation to improve skills and skill learning [19]

With the fast growth of artificial intelligence technology, it is now possible to integrate information technology, databases, and multimedia equipment to create an educational environment that blends technology and education. Teachers may use design and processing to present students with mini courses that incorporate graphics and words, making the instructional content more intuitive and vivid. This not only increases the pupils' excitement for learning, but it also broadens their comprehension of sports expertise. In addition, professors can create a group discussion concerning micro courses for students to join. Before and after class, they may upload the prepared AI teaching courseware to the group chat for students to see and consolidate. If they don't comprehend anything, they can write it down. The instructor would reply quickly when they saw it, which improves the connection between teachers and pupils [29]. Yu and Mi provide IoT and AI applications for creative college sports practices. As shown in Figure 2, the teaching system collects data from sports teaching activities in real time using IoT, sensors, and wireless networks before transmitting it to the data center, where it is loaded into an intelligent computer for processing and analysis. Finally, teachers plan teaching activities based on the outcomes.
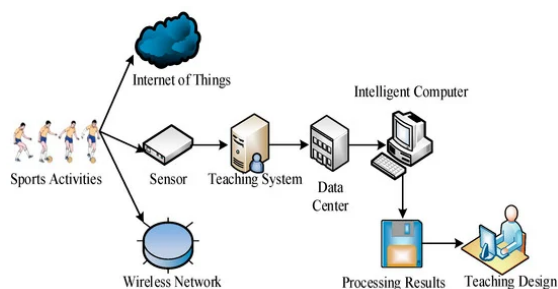

Figure 2. Overall architecture of teaching system based on IoT and AI [29]

Furthermore, physical education teachers might implement the sports game teaching style. The sports game approach refers to teachers combining reasonably attractive and competitive games with the sports training process in order to maximize sports teaching and training modes. Sports games may successfully alleviate the dullness and monotony in the training process, and play essential roles in capturing students' attention [28]. Aside from that, it allows students to acquire and perfect certain sports abilities while participating, which can help them reach their training objectives. Training via sports activities may not only increase students' interest in learning, but it can also create a more lively teaching atmosphere, making it easier to guide students through sports events on their own. When planning sports events, physical education teachers must keep in mind that the relevant training goals should, to some extent, be met by students or their teams. This necessitates students continually improving their athletic abilities and focusing on the training objectives they may reach in order to entice students to engage in sporting events. Students' psychological and physical well-being can be changed by involvement in sports games, allowing them to participate fully in the lesson.

College sports are an immensely essential part of student life at American campuses, whether it's watching the university's team face a rival college team or participating on a team with friends. It provides a social experience for both fans and collegiate athletes. Most American universities split sports into three categories: intramural, club, and varsity or "NCAA" sports (National Collegiate Athletic Association). Intramural sports allow students of all athletic abilities to compete against friends and classmates from the same college. Club sports are typically significantly more competitive. A student who wishes to participate in a club sports team must often try out and be chosen by the club's captain. Varsity level or "NCAA" sports are similar to many professional teams in that great athletes are recruited by colleges to participate on their top teams.

Many students at universities around the United States join intramural sports teams to meet and engage new friends while also staying physically active. Many of these teams are "co-ed", which means that both men and women compete on the same squad, but there are also distinct men's and women's teams. The most popular intramural sports include volleyball, soccer, softball, dodgeball, football, kickball, and basketball. Every season, each sport's teams compete in a tournament against other teams from the same institution. The teams with the best record in each sport at the end of the season frequently get a trophy.

Club sports are typically more competitive than intramural sports. Most club sports teams need students who want to participate competitively to attend a tryout held by the club team leaders. If a kid makes the squad, he must attend mandatory practices to secure his spot in the club. Club teams from various colleges compete against one another in competitions and matches. Although this may be true for most club sports, not all are competitive. Many club sports merely allow students to study sports that they were not exposed to when they were younger. Martial arts clubs are among the fastest growing at major colleges, owing to the rising popularity of mixed martial arts events throughout the world.

Varsity sports are for the most gifted athletes in a specific sport. A major number of these athletes were recruited from their high school to play for a university's team, although some tried out for a spot on the squad. Varsity sport competitors, unlike professional athletes, are not paid to compete, but many do get scholarships. A chosen few athletes who excel in collegiate sports will be drafted by a professional club. For the remaining athletes who are unlikely to pursue a professional career, participating in a varsity sport provides them with the opportunity to compete for a title. These contestants desire to win not just for personal glory, but also for the honor and reputation of their alma institution.

American football is the most popular varsity sport for students to watch. Every fall, students dress in their university colors and

travel to stadiums to watch their football teams compete against other education institutions in their conference. Students spend entire Saturdays preparing for the game. Extremely ardent supporters will dress up in crazy costumes or shave their heads in the style of the university insignia to show their support for their team.

All of these elements make college athletics essential for surviving life as an American college student. It allows students to escape the demands of class, unwind after a hard week, and just make new friends.

Effective implementation of innovative educational technologies in physical education lessons is impossible without a sufficient level of development of the following criteria for the pedagogical preparedness of a physical education and sports teacher [1; 6; 10-17; 21; 26]:

1. Coaching. It consists of the ability to demonstrate motor stability and variability of the technique of the chosen sport and perform motor exercises of an increased level of complexity.
2. Reflective pedagogical. It consists of the ability to study and analyze best practices in the field of physical education and effectively solve current pedagogical problems within educational institutions.
3. Recreational and creative. It is a skill in the creative organization of recreational work, taking into account the age, gender, and individual personal characteristics of students.

Successful implementation of innovative methods in physical education classes is impossible without increasing the level of professional competencies of a physical education teacher, which requires the use of appropriate innovative technologies. This makes it important to use innovative methods at all levels of education.

Increasing the scale of innovative activities in educational institutions, involving more students in classes using the latest technologies, creating a favorable infrastructure in places designated for the experimental use of innovative methods and technologies of health, humanistic education and organizing leisure time for students, which involves the humanization of sports and its combination with art, contribute to the formation of students' research skills during independent sports and recreational work in physical education classes and increase the quality and effectiveness of physical education.

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THE POSITION OF MUKHAMMAS GENRE IN XIX CENTURY AZERBAIJANI LITERATURE

ªNAILA MUSTAFAYEVA

ANAS Institute of Manuscripts named after Muhammad Fuzuli, 26, Istiglaliyyat Str., Baku, AZ1001, Azerbaijan
email: ªnai1emustafayeva@yahoo.com.tr

Abstract: The literature of Azerbaijan in the 19th century reached the heights of realistic reflection of the socio-political life of the country. Many of the poems describing the thoughts and feelings of a person, the life of the people were written in the genre of mukhammas (the Fivefold). Poets of the 19th century wrote in this genre a number of famous works on patriotic, historical, lyric-love, philosophical, religious, etc. fields. In a number of mukhammas Abdurrahman aga Shaira, Mujrim Kerim Vardani, Mirza Bakhish Nadim verses, the historical themes are touched. In these verses, the historical past of the people is patriotically reinterpreted. Almost all Azerbaijani writers of the 19th century Muhammad touched the theme of love poetry. In these verses, the truth is sung, as well as sincere feelings for specific beauties of their time. In the mukhammas of the 19th century, as in all the poetry of this period, the strong influence of oral folk art can be felt. The language of these poems becomes simpler. Such famous poets as Gasim bey Zakir, Mohammed Amin Dilsuz, Seyyid Azim Shirvani wrote satirical mukhammas.

Keywords: literature; poem; poet; mukhammas; satire.

1 Introduction

The Azerbaijani literature of the 19th century is one of the richest periods in the centuries-old literary history of Azerbaijan, both in terms of content and form. During this period, Azerbaijani literature successfully continued the traditions of classical Eastern poetry and oral folk literature, and created "valuable centuries" in both directions. In the 19th century, Azerbaijani literature was integrated into the process of world literature development - progressive ideas from Europe, ideas of enlightenment were spread through literature, and satirical poetry became very important. Since the 19th century, the literary method of realism has become the leading method of literature. Literature and poetry try to reflect realistically all the aspects of social and personal life, the richness of feelings and emotions, all the issues and problems surrounding a person.

In the 19th century, works written in the form of epic poetry from the classical poetic genres played an important role in reflecting the reality of life and social life. The development of the Mukhammas genre in this century is evident in its importance, use, variety of themes and changes in form within the genre. Prominent artists of the time turned to the mukhammas genre and wrote works on various subjects. It is known that the mukhammas genre, which appeared in the native Azerbaijani literature from the 14th century, was more widely used and developed in the poetry of the 18th century. After a careful study of the Azerbaijani literature of the 19th century, we can assuredly say that the mukhammas genre was more widely used and developed in the poetry of the 19th century than in the poetry of the 18th century.

2 Method

The main research method is historical and theoretical. Also, the need to operate with multiple literature sources forced us to turn to comparative typological analysis. The research is systematic in nature and covers the content and aesthetic aspects of Azerbaijani literature.

3 Results and Discussion

Among the artists who lived and created in the 19th century, there were Abdulla Jani oglu, Baba bey Shakir, Mustafa aga Arif, Kazim aga Salik, AbdurRahman aga Shair, Seyid Abulgasim Nabati, Gasim bey Zakir, Heyran Khanum, Abbasgulu aga Bakikhanov, Mirza Fatali Akhundzadeh, Seyyed MirHamza Nigari, Sadi Sani Karabagi, Mirza Ismayil Qasir, Mucrim Karim Vardani, Molla Gasim Zakir, Baba Bey Shakir, Andalib Garajadaghi, Muhammad Khalifa Ajiz, Zikri Ardabili, Haji Mehdi Shukuhi, Seyyed Reza Sabir, Padar Abdulla, Mirza Bakhish Nadim, Molla Agha Bikhud, Mir Mehdi Khazani, Muhammad Amin Dilsuz, Mir Mohsen Nawab, Mirza Nasrullah Dida, Mirza Alasgar Novras, Hajiaga Faqir Ordubadi, Hasani

Khan Garadagi, Adulhasan Vagif, Mustafa Agha Shukhi, Mirza Alakbar Saburi, Mirza Muhammad Katib, Abdulla Bey Asi, Seyyed Azim Shirvani, and many other poets who wrote the mukhammas. Teymur Karimli, who gives special importance to G. Zaki among the mukhammas writers of his time, writes: "In the 19th century, the traditions of the mukhammas genre were mainly continued and developed in the work of Gasim Bey Zakir" [6, p. 358]. We would like to add Baba Bey Shakir, Andalib Qarajadaghi, Abdurrahman agha Shair, Kazim agha Salik, Sadi Sani Karabagi, Mirza Ismayil Gasir, Mujrim Karim Vardani, Mirza Bakhish Nadim, Mir Mohsen Navvab, Seyyed to the list of poets of the centenary. In the literary heritage of Azim Shirvani, the works written in the genre of mukhammas play an important role. Sadi Sani Karabakh has 31 mukhammas, including three in the divan. In these poems, lyrical mukhammas on the theme of love predominate, but there are also mukhammas on the theme of patriotism, promotion of education, criticism of the faults of society, and apologies. The influence of Molla Panah Vagif's creativity and mukhammas is clearly visible in Sadi Sani's works, especially in his poem "I did not see". In general, it is an undeniable fact of the influence of Vagif and a number of other artists in the poetry and prose of the 19th century in Azerbaijan. In the last verse of his Mukhammas, written by Mirza Fatali Akhundzade at the request of Shikhli Ali Agha, he says that he wrote this work as the 18th century poet Agha Masih Shirvani:

Məndən sənə vəsf istəri şıxlı Əli ağa,

Dedim səni vəsf etməyə manəndi-Məsiha [1, p. 162]. *(If you want praise from me, handsome Ali aga, I said, he stopped me from glorifying you-Messiah).*

As we can see, the poets of the period under study, in addition to Vagif, considered the works of other predecessors, including Aga Masih Shirvani, as examples of their creations and mukhammism. We see that Sadi Sani Karabakhi, Vagif's successor, expanded the scope of his works. The number of his mukhammas on social themes is greater. The poet, who criticised the shortcomings and ugliness of the time in the poem "gormedim", addresses the theme of patriotism in his poem dedicated to Lanbaran. The poet has dedicated penitential poems to various themes in his life. As it is known, one of the characteristics of Mukhammism in the 18th century was that the artists of that time, such as Shakir Shirvani, Aga Masih Shirvani, Shakili Nabi, Molla Veli Vidadi, wrote historical verses in this genre. These verses reflect the landscape of a particular stage of Azerbaijan history and are equally instructive as they preserve what the authors personally saw in their memories. The reader is imbued with the idea that, in order for people to live well and freely, it is impossible to repeat the mistakes made, to be a slave of the soul and to sacrifice the highest values for the sake of position and wealth. The poets of the 19th century, continuing the traditions of their predecessors, also wrote such historical poems in the form of mukhammas, originally with patriotic content. One of the most valuable works in the history of Azerbaijani literature, imbued with the spirit of patriotism and historical themes, is the poem of Abdurrahman Agha Dilbaz oglu, who lived in the second half of the 18th century and the beginning of the 19th century. Although in the first paragraph of his work, which is a heroic epic in the true sense of the word, the author promises to tell the story of the "whell of fate" and "the adventure of Javad Khan", it is not about just one person. Along with the poet Javad Khan, he tells of the bravery of his son Huseyngulu Agha, of all the young people, and gives an artistic description of the history of the people's struggle for freedom. This work, which is narrated around a specific action, can also be called a poem. One of the characteristics of this work, which is of high artistic quality, is that Abdurrahman Agha, who closely followed the defence of Ganja, narrates various events one after the other. Taking into account the first four clauses of the poem, which talk about the injustice of the world, we can say that each of the clauses sheds light on or refers to a fact related to the incident described. Researcher Huseyin Baykara noted

that what is described in the work coincides with what is written in history books and in the works of Russian historian Kaspari [2, p. 18].

Speaking about this work, Ahmet Jafaroglu rightly called its author "a classical Azerbaijani artist who devoted all his poetic skills to glorifying Javad Khan's struggle against the Russian occupation" [3, p. 189]. In fact, this historical-patriotic work is a true example of poetry, the poet skilfully used the poetic imagery and means of artistic expression of classical literature. It is necessary to review in detail the texts written by Mirza Bakhish Nadim in the genre of mukhammas on the subject of history and patriotism. The first one of his historical essays, which consists of 44 paragraphs, describes the events that took place in the South Caucasus during the 30 years from 1803-1804 to 1833-1834, the invasion marches of the Tsarist Russian troops, the defeat of the Azerbaijani khans despite of their resistance. The poet talked about each of the various historical events in 1-2 paragraphs. It seems that the poet had a sober view of the events of that period, understood the reasons for them, understood the occupation policy of the regime, loved his homeland and cared for the welfare of his compatriots in his poems. He emerged as an aggrieved intellectual. The paragraphs of Manzuma devoted to the description of the heroic defence of Ganja under the leadership of Javad Khan prove this once again. They cover Mirza Bakhish's insulting letters from Sisyanov, the commander of the occupying Russian troops besieging Ganja, demanding the surrender of Javad Khan, Javad Khan and the fact that the young people fought heroically to the last drop of blood with the enemy, who was far superior in weapons and numbers, and the fact that in the end Javad Khan and the majority of the population died. He informs about the brutal killing of Shirvan, Baku, Guba and Iravan Khanates by his troops and the flight of the Khans abroad, realising their inability to resist. We would like to mention the poems written in the spirit of patriotism in the 19th century, which praise the nature of the native country, beautiful, brave people, and commemorate the disasters that happened in different parts of the country with heartache. Mujirim Karim Vardani, who is said to have lived in the first half of the 19th century, wrote a 16-stanza monogram "These Places" which evokes the impression of a unique poetic excursion to his native land. The poet seems to have wanted to cover the ancient history of Azerbaijan, the beauty of its nature, and the bravery of its children in one poem. At the beginning of the work, the author mentions that this place is the home of the heroes of Ferdowsi's Shahnameh - Sam, Nariman, Pishdad, Keygubad, and Faramarzin, as well as the Caesars and Khans. Then he praises the natural beauties of his native country with special warmth and pride in several stanzas.

Nəşvü nüma gəldi bahar yaz ilə,

Güllər açılmışdı bəsi naz ilə,

Bülbül oxur nəğmə xoş avaz ilə,

Sərvi-xuraman yeridir bu yerər [12, p. 50]. *(Nashvu has come with spring and summer, The flowers were blooming with flirtation, The nightingale sings a song with a pleasant voice, These places are a place of sarvi-khuraman)*

Later, in one stanza, he says that his homeland is the land of knowledgeable people, the possessors of knowledge, and praises the brave sons of his homeland. In these paragraphs, it can be felt that the author wants to encourage his compatriots who witnessed the bloody wars and occupation by Tsarist Russia in the 19th century, and instil an optimistic mood in them. He turns to the children of the country and says, "My blow scared Rustam, what are you afraid of?"

Rüstəmi zərbim elədi tərsnak,

Getdi cahandan ürəyi dərdnak,

Bəs nədi səndən ötəri munca bak? [12, p. 51-52]. *(Rustami was shocked, Gone from the world with a heartache, But what is it because of you?)*

In the last three stanzas of the poem, Musrim Karim says that due to the high value of his poems, heaven and earth bow down to him and that he is the only poet of his country.

Azerbaijani poets who lived in the 19th century wrote patriotic essays dedicated to the beauty of different places of their country and the positive qualities of its people. Sadi Sani Karabakh's poems dedicated to Lanbaran and Andalib Karajadagi's poems dedicated to Orduba can be cited as examples.

As in all genres of 19th century Azerbaijani poetry, most of the poems written in the mukhammas genre are on lyrical-love topics. The vast majority of these works are devoted to glorification of worldly love. It should be noted that most of the poets of the time wrote mukhammas about love. The number of these works is so large that it is difficult to list all the names of their authors. Benefiting from the legacy of Nizami, Rumi, Sadi, Hafiz, Jami, Navai, Nasimi, Fuzuli, and other classics, Azerbaijani poets of the 19th century valued love as a lofty emotion that uplifts an individual, being is one of the sources of progressive philosophical ideas, and promoted humanistic ideas about human freedom. Lyrical poetry had many diverse aspects and folk elements compared to medieval Eastern literature. Mukhammas, like ghazal, attracted attention as one of the main genres of lyrical poetry. Gasim Bey Zakir occupies a special place among the authors of lyrical themes written in the 19th century. Gasim Bey Zakir has written works with the same success in the genres of oral folk literature such as couplets, garayli, tajnis, classical poetry, ghazal, mukhammas, mustazad, tarjiband, tsajband, fable, and verse. When we consider his creativity, we see that Zakir gave special importance to the couplet genre, which came to the fore in the 19th century Azerbaijani literature, equal to the ghazal, and sometimes even superior to the ghazal in expressing the inner world of the person and various shades of thought. He wrote works on a lyrical-love or social theme. In the 19th century, oral folk literature and love poetry had a strong influence on mukhammas, a genre of classical Eastern poetry. The language of these works was simplified and clarified for the ordinary reader. In the studied period, the mukhammas began to occupy a middle position between the couplet and the ghazal to a certain extent. Mukhammas began to approach the genres of oral folk literature more than the ghazal. In the 19th century Azerbaijani mukhammas, including Zakir's mukhammas, we can see both the praise of high feelings of love, as well as the public theme, criticism of the shortcomings in society, satire, humour, gentle laughter. In addition, Mukhammas reveals all the breadth and instructiveness of thought, the power of expressing thoughts about various concrete events and objects in the poems on historical-patriotic topics. We cannot see these characteristics that appeared in the 18th century and strengthened in the 19th century in the 17th century Azerbaijani literature. In other words, the expansion of the possibilities of expressing feelings, excitements and various ideas in the mukhammas genre were the result of the changes that took place in the poetry of the period under the influence of 19th century reality. The most striking features of Gasim Bey Zakir's lyrical mukhammas are the praise of life's beauty, worldly love, description of real human relationships, simplicity of language, and naturalness in these works. In these poems, the author is an optimistic person related to life, tends towards beauty, sincerity, and kindness in human relationships and communication. His "Oynar" series, which he dedicated to the beauty playing at the party, attracts attention with its playfulness, skillful description of the beauty of a specific person, and its elegance. The work is reminiscent of Vagif's poems with a number of positive aspects, a realistic reflection of reality and high poetic taste, as well as a number of examples of love literature. At the same time, the influence of Fuzuli and Vagif can be felt in Zakir's poems. High imagery, artistic discoveries, and unexpected allusions are characteristic of these works. In the poem by Gasim Bey, which starts with the verse"*Bu gun yuz naz ile servim chikhib seyre heves ile*" ("*Today I will go out with a hundred beauties and watch with passion*"), we can observe that he is influenced by both Füzuli and Vagif. In this piece, where the author confidently employs colloquial language, there is a harmonious blend between classical

language and conversational language. Gasim Bey has demonstrated his artistic ability to convey mixed sentiments, sorrow and happiness in his "Gelecekdir" rafili mukhammas. On the one hand, the poet is happy to meet his other half, on the other hand, he remembers the sad and gloomy days he spent apart from her. Zakir's mukhammas, written under the influence of Vagif's ghazal, begins with the verse "*Ne xoshdur bir nigarin muddet olmag intizarinda*" ("*How it is nice to wait a long time for a beloved*"), although it does not have as much sensual detail as in Molla Panah's work, but the sensual scene is described in a veiled manner. Playfulness and harmony attract attention in the poems written in classical genres by artists such as Molla Gasim Zakir, Mujirim Karim Vardani, and Malikballi Gurban. Molla Gasim Zakir's poems, whom Firidun Bey Kocharli called a contemporary of Gasim Bey Zakir and Mirza Fatali Akhundzadeh [7, p. 457], are found in Huseyn Efendi Gayibov's collection, in Firidun Bey Kocherli's book "Azerbaijani Literature", in Salman Mumtaz's "El poets", as well as in the Institute of Manuscripts of ANAS it can be found in some preserved manuscripts. Molla Gasim's mukhammas, written under the influence of Fuzuli's ghazal "Gansy gulshan gulbuni sarvi-khuramaninca var", stands out for its sincerity and simplicity of language:

Hansı xurşidi-fələklər mahi-tabanıncadır,

Hansı dərya gövhəri-ləli-Bədəxşanıncadır,

Hansı qönçə sinəsi çarki-giribanıncadır,

Hansı xunriz xədəng ol növki-müjganıncadır,

Hansı nərgislər xümarı çeşmi-məstanıncadır [11, p. 43].

Molla Gasim Zakir's lines"*Ey gul, seni eshg ehline bigan deyiller*" ("*O flower, you are not indifferent to those who love you*"),"*Ey gul, bu letafetdə sene yoxdu qərinə*" ("*O flower, there is no century equal to you in this grace*") and in a number of other poems, the simplicity and sincerity of the language attracted the initial attention. The poet wrote these works in the form of an appeal, as if he wanted to engage his interlocutors, his lover in a conversation. The poet was able to create a playful and joyful speech with the help of tahqeeq and internal rhymes in the "Galin" radif muhammad. In the unpublished archive of Salman Mumtaz's personal archive kept at Molla Qasim's Institute of Manuscripts, in the "Istamaz" the poet compares his body parts with the blessings of nature while talking about the beauty of the soul.

We see that most of the new types of mukhammas genre that appeared in the 19th century are related to love poetry. Namely for this reason, the gigali mukhammas consists either of a mixture of syllables and aruze, or it is completely in syllables. A. Mirahmedov showed that each stanza of a mukhammas in written literature consists of sixteen syllables, and a mukhammas in Ashiq poetry consists of eighteen syllables [10, p. 149] in Ashiq Alasgar (1821-1926), Molla Juma (1854-1920), and other representatives of 19th century Ashiq literature. Its representatives have poems written in mukhammas form, in syllabic genre. The lyrical hero of Mujrim Karim Vardani mukhammas, who combines classical literature with love poetry in his work, prefers the beauty of life to the promised happiness of the afterlife. He sees the meaning of life in love, which enriches a person and considers it a great spiritual force. Mujrim Karim gave special importance to the mukhammas genre in his creations along with couplets, tajnis, bayati, murabbe, ghazal, and mustazad. His collection of poems, published by Professor Aziza Jafarzadeh, includes 14 poems collected from different manuscripts. In addition to these, we can consider a number of other works of the poet kept in the manuscript files of the Institute of Manuscripts. The influence of such poets as Firdausi, Khatai, Fuzuli, Vidadir, and Vagif can be seen in Mujirim Kerim's work. The playfulness of his "Geldi", "Olmusham", "Istamanam", "Eyledim", "Seversen", "Var", "Bu yerler", "Konlum seni istiyir", "Kusubdur" mukhhammas is evident. It stands out for its optimism and cheerfulness. The seven-stanza poem with the line "Geldi" is reminiscent of the beginning of

Shah Ismail Khatai's "Dahname".

Mövlayə şükür ki, yar gəldi,

Şirinləbü gülüzar gəldi,

Şahənşəhi-tacidar gəldi,

Can mülkinə şəhriyar gəldi,

Ol kakili şahmar gəldi [12, p. 42].

Molla Panah Vagif's influence can be felt in Mujirim Karim's expression of his love for worldly beauty, love with concrete features, and his desire to enjoy the blessings of life. The poet mentions the names of specific places he lived in and saw - Shaki and Ganja. His poems are noteworthy from the point of view of describing the various states, in particular, psychological states of the lover. "Bele galmaz" tells of the sufferings of hijra suffered by a lover separated from his beloved, and "Konlum seni istiyir" tells of the lyrical hero preferring his lover to the blessings of the world. Mujrum Karim's unpublished and unresearched manuscripts, which we found in the manuscripts kept at the Institute of Manuscripts, show once again that he is an artist who glorifies worldly love and is inclined towards realism in the depiction of reality. In the five stanzas, the last stanza of which is illegible, with the line "Oter", the poet describes a charmer who indifferently passes by his lover, whose beauty burns his heart. He asks the rhetorical question "*Is it possible to pass such a yard?*"

Dustlar, keçmək olarmı bir belə cananədən,

Tərk edər kafər özün, görsə dönər bütxanədən [4, v.15b].

In the 19th century Azerbaijani literature, the motifs of dissatisfaction with the era and complaints about the times were quite widespread. Poets complained about the laws and regulations of the feudal society, social inequality, and put forward humanist ideas that promoted personal freedom in various genres, including the mukhammas. Realist satire was one of the main branches of poetry of the time. In such works, social and national oppression in the socio-economic life of the country, protest against the colonial policy, self-righteousness of Tsar officials, local Khans, lords and dissatisfaction with bribery were the main themes. Since the Middle Ages, the use of satire in classical literature has increased. In addition to satires arising from feelings of enmity and hatred towards individual persons, there were also satires aimed at social ills, which can be considered a successful example of satirical poetry. In our opinion, Kamran Mammadov correctly pointed out that the authors of the 19th century used the word "hajv" to mean "satire". At the same time, we said, "Elbette, Zakir eleyim hajv tamam beyu gedavu khani". We value the word "hajv" as "satire". Zakir and his contemporaries used the word "satire". They distinguished between hajv and the satire in today's sense, and wrote "satire" as "hajv", which often comes as literary heritage and is widespread in Azerbaijani literature. Also, it should not be concluded that we are generally mixing satirical satire with hajv, which forms a certain stage in the development of satirical poetry. Under the half-open cover of satire, we often find useful social criticism that mocks society and sharply criticises the ruling classes [8, p. 85].

We would like to mention the satirical mukhammas of 19th century Azerbaijani poets Gasim bey Zakir, Baba bey Shakir, Mirza Bakhish Nadim, Seyyid Azim Shirvani, and Muhammad Amin Dilsuz. Other poets of the century, such as Kazim agha Salik, Mirza Ismayl Gasir, Sadi Sani Karabakhi, wrote public essays criticizing the flaws of society.

Zaman Askerli, demonstrating that satire emerged in Azerbaijani literature during the 19th century, writes: "Satire in Azerbaijani literature emerged during the 19th century. Its initial examples can be found in the literary legacy of poets like Abdulla Canığlu and Baba Bey Shakir. In the works of Gasim Bey Zakir and Seyyid Azim Shirva, satire is systematised as both a distinct form of artistic-aesthetic mirth and a style" [5, p. 200].

In the work of Gasim Bey Zakir, an outstanding representative of enlightened realism, satirical exposure is very strong alongside general criticism of the flaws in society. Despite belonging to the noble family, Qasim Bey, who was close to hardworking and ordinary people, could not tolerate the arbitrariness of the tsar's officials and local judges against them, and criticised and exposed them in his poems. Due to the pathos of the poet's complaint about the era, dissatisfaction with the people of the time, their faith and morals, the poem begins with the stanza"Gorun bu charkhi-dunperver ne nov ruzigar eyler", which is close to Vagif's poem "Gormadim". The poet examines the representatives of different classes and criticises their bad deeds, sees the main reasons for the current situation in people's loss of faith, their turning away from God and following the devil, turns to the Prophet Muhammad and asks for help.

In Baba Bey Shakir's "Satire of Nemirli Amiraslan Beyin", Emiraslan Bey, who bribed the commander and became the viceroy of Murov, spoke from the point of view of the oppressed people and exposed people who robbed people dishonestly and committed all sorts of indecent and cruel acts. Tahira Mammad has rightly pointed out that Baba Bey Shakir was well aware of the Tsar's methods behind the officials.

Mirza Bakhish Nadim's satirical poems are mainly in the genres of poems and ghazals. Among these poems, thereare 3-stanza mukhammas addressed to a ranger named Mahmud. While describing the oppressed situation of the peasant who has no rights, the author criticises the ruling classes for their inhuman attitude towards the hardworking subject. Muhammad Amin Dilsuz, the outstanding representative of South Azerbaijani literature of the 19th century, who began with the verse "O my dear, I have a lot of pain, I need you", with a sharp satirical pen exposes moral uncorrectness, hypocrisy, greed in their duties, doing illegal things, deceiving and robbing the people. Because of the pathos of the criticism in this mukhammas, which resonates with Vagif's "I didn't see" and Zakir's "Eylar" series of mukhammas, the wider sections of society, almost all the professionals working in Tabriz, were criticised.

Seyyid Azim Shirvani, who entered Azerbaijani literature in the 19th century as a prominent enlightener, realist and satirist, depicted in his satires the shortcomings of his time, the greed and hypocrisy of people of different classes - nobles, landowners, tsarist officials and clergy - and oppression, criticising their bribery. In his essay "To the Ignorant Who Rebuke Scientists", he ridiculed the ignorant who gossiped about scientists. In Seyid Azim's essay "On Shirvan's New Grooms", which is one of the most valuable examples of satirical creativity, false grooms and corrupt tsarist officials become the target of sharp criticism. The work gives a comprehensive picture of the situation in Shirvan, in the whole of northern Azerbaijan, of the various social classes, officials, the local population and the situation in the country in general in the mid of the 19th century.

4 Conclusions

Mukhammas represented one of the leading genres in the literature of that period, along with couplets and ghazals. Under the influence of Ashiq poetry, the types of mukhammasi-behri-tawil appeared in the oral folk literature of mukhammas, and under the influence of classical literature, the types of mukhammasi-bahri-tawil appeared. Compared to the poetry of the 18th century, the genre of mukhammas in the 19th century was more developed in terms of theme, covering different aspects of life, and form innovations. In particular, it is possible to see the influence of 19th century essays written on a satirical theme on the creativity of Azerbaijanian 20th century poets, on the poems they wrote in this genre.

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DYNAMICS OF THE MONETARY SECTOR OF UKRAINE DURING THE WAR AND ITS IMPACT ON THE EFFICIENCY OF THE BANKING SYSTEM

[a]MYKOLA DZIAMULYCH, [b]MYKHAILO KRUPKA,
[c]OLENA STASHCHUK, [d]TETIANA KOROBCHUK,
[e]NATALIIA MOSTOVENKO, [f]LIDIIA AVRAMCHUK,
[g]NATALIIA CHYZH, [h]OLEKSANDR TUR

[a,d,e,g]*Lutsk National Technical University, 75, Lvivska Str., 43018, Lutsk, Ukraine*
[b]*Ivan Franko National University of Lviv, 1, Universytetska Str., 79000, Lviv, Ukraine*
[c,h]*Lesya Ukrainka Volyn National University, 28, Vynnychenko Str., 43025, Lutsk, Ukraine*
[f]*National University of Life and Environmental Sciences of Ukraine, 15, Heroyiv Oborony Str.,03041, Kyiv, Ukraine*
email: [a]*m.dziamulych@lntu.edu.ua*, [b]*mkrupka@ukr.net*,
[c]*staschuk.olena@vnu.edu.ua*, [d]*tatianakor1970@gmail.com*,
[e]*mostovenko.n@gmail.com*, [f]*lidiyavr@gmail.com*;
[g]*chuzh1603@ukr.net*, [h]*tur.oleksandr@vnu.edu.ua*

Abstract: The article examines the dynamics of indicators of Ukraine's monetary sector after the beginning of the war and determines its impact on the efficiency of the functioning of banking institutions. The peculiarities of the use of currency and financial instruments by commercial banks of Ukraine in the conditions of destabilization of the banking sector due to the destructive influence of Russian aggression are considered. The dynamics of bank clients' transactions with foreign currency and the volume of interventions of the National Bank of Ukraine in the foreign exchange market since the beginning of the war were studied. The problems of commercial banks with attracting deposits to ensure the efficiency of operational activities are identified. An analysis of the dynamics of the index of rates for deposits of individuals, as well as the yield of bonds of the domestic state loan, as the main instruments for attracting funds in Ukraine's financial market, was carried out.

Keywords: foreign exchange market; financial instruments; banking sector; deposits; government bonds.

1 Introduction

The dynamics of economic processes, especially in the conditions of a military conflict, are determined by many factors, among which the functioning of the monetary sector is critical. At the same time, forecasting the change of such factors or the vector of their influence is challenging for financial analysts since this change significantly depends on events outside the plane of the economic system. Ukraine, which faced the challenges of military operations, got into a difficult situation in the context of ensuring the effectiveness of the banking system at the expense of monetary instruments. The lack of proper experience in regulating financial markets in global practice significantly complicated the process of stabilizing Ukraine's financial sector, as it required a thorough economic analysis of the changes occurring in the markets and the formation of a forecast of their dynamics.

As you know, the ability of the banking system to adapt and work effectively in martial law conditions becomes essential for ensuring the overall stability of the financial system and preserving the country's economic stability. A period of war is always characterized by instability in the financial sector, and this becomes the most difficult challenge to develop effective strategies for managing monetary resources. For Ukraine, achieving such efficiency is possible by studying the dynamics of the monetary sector and analyzing its impact on the efficiency of the banking system. This is because understanding and taking into account the critical aspects of the application of financial instruments will make it possible to determine the main factors that shape the stability of the country's financial system in conditions of instability and military threats. At the same time, it is necessary to focus particular attention on the importance of the proper functioning of the banking system in such conditions, as well as on the need to implement adequate regulatory and control measures to ensure financial stability and support economic growth.

In addition, an essential aspect of the analysis is the impact of military operations on exchange rates and the attraction of deposits by banks. In unstable and long-term uncertainty in the financial markets, exchange rates can be subject to significant fluctuations, severely impacting export-import operations and the country's general economic situation. Banks, on their part, face the problem of attracting deposits ensuring liquidity to support their day-to-day operations. Therefore, in a period of war, trust in financial institutions can undergo a great test, which leads to a possible decrease in the volume of deposits and changes in the strategies of their attraction by banking institutions. Therefore, analyzing these processes becomes necessary to understand how the banking system can adapt to war conditions and how this affects its efficiency and sustainability.

Thus, research and analysis of the dynamics of the monetary sector and its interrelationship with the banking system in conditions of war acquire particular importance in the formation of approaches to support the functional stability of the banking system and ensure its functional efficiency in situations of uncertainty.

2 Literature Review

The relevance of studying the dynamics of the monetary sector and its impact on the efficiency of the banking system attracts considerable attention from scientists and practitioners. At the same time, it is possible to note several critical studies in the field of the interaction of economic processes and the financial sector in crisis conditions, which consider the impact of market instability on the effectiveness of the functioning of banking institutions.

Thus, one of the critical aspects of this issue is the relationship between macroeconomic indicators and the banking system's stability in crisis conditions. This problem is quite widely revealed in the studies of A. Boiar [1], O. Neizvestna [11], J. Reitšpís [13], and O. Yatsukh [20], who determine that the instability of exchange rates and the drop in economic growth rates can lead to significant negative consequences for banks and other financial institutions. At the same time, there is an emphasis on the importance of ensuring proper macroeconomic management to secure the functional stability of the banking system in times of crisis.

Another direction of research revealed in modern economic literature is the role of monetary policy and regulatory measures, including martial law, in solving financial challenges during economic crises. In particular, studies by authors such as B. Danylyshyn [5-6], M. Masl'an [8], and T. Shmatkovska [14-17] show that only effective measures aimed at regulating and maintaining liquidity can affect the successful functioning of banking institutions in conditions of economic instability and negative changes in financial markets.

Separately, it is worth noting such an essential field of research as determining the impact of currency risks and strategies of banks in attracting and managing deposits in crisis conditions. In this aspect, it is necessary to note the research of scientists such as I. Britchenko [2-4], N. Kunitsyna [7], O. Ramos [12], O. Stashchuk [18], and V. Yakubiv [19], which emphasize the need for flexible and adaptive risk management strategies to ensure the stability of the banking system in conditions of uncertainty and external threats.

In general, it can be argued that all the mentioned studies form an essential contribution to the understanding of the dynamics of the monetary sector in periods of economic and financial crises and emphasize the need for an integrated approach to the management of the country's financial system in conditions of geopolitical instability. However, the specificity of the state of war in which Ukraine's banking system operates requires an in-depth analysis of these aspects to develop practical

recommendations to support the effectiveness of Ukraine's banking system during wartime.

3 Materials and Methods

To study the dynamics of the monetary sector and determine its impact on the change in the efficiency of the banking system during the war in Ukraine, a comprehensive methodology was applied, which includes the analysis of macroeconomic indicators, the assessment of monetary and financial policy, and other unique and general research methods.

In particular, an analysis of economic indicators of Ukraine's monetary sector during hostilities was carried out. These indicators included parameters such as currency operations of banks, exchange rate dynamics, the index of bank interest rates on deposits, the yield of government bonds, etc., which made it possible to reflect the change in the general state of the economy of Ukraine in its relationship with the monetary sector.

Evaluation of monetary and financial policy, within the framework of which the activity of the National Bank of Ukraine and its monetary and credit policy during the war were investigated. At the same time, critical decisions regarding ensuring the stability of the banking system and the need to ensure a sufficient level of liquidity for commercial banks and the banking system as a whole were studied.

An assessment of the strategies of commercial banks in wartime conditions was carried out, which involved the study of financial statements of banking institutions, based on which the method of managing currency risks and attracting deposits by banks was formed. Special attention was paid to banks' reactions to changes in the macroeconomic environment after the start of the war.

A documentary analysis of official reports and publications of the National Bank of Ukraine was carried out, as well as a study of scientific and analytical studies on this topic to ensure the validity and reliability of the results obtained.

Also, in the research process, the abstraction method was used to determine the main concepts and general principles that characterize the dynamics of the monetary sector during the war and the study of its impact on the effectiveness of the banking system in Ukraine. Thanks to the application of this method, it was possible to generalize the cause-and-effect relationships between economic, financial, and political processes during the war and to single out general trends and relationships between them.

In general, the data and results obtained make it possible to consider the dynamics of the monetary sector during the war and determine its impact on the efficiency of the banking system in Ukraine.

4 Results and Discussion

Russia's military aggression, which began in February 2022, caused catastrophic consequences for the economic and financial system of Ukraine. At the same time, the negative consequences of the war are observed not only in Ukraine but also have led to a general worsening of global growth forecasts, a reduction in world trade due to the destruction of supply chains, and increased threats to specific sectors of the world economy. The consequence of such destabilization was a general increase in threats to financial stability. At the same time, the negative impact on the economic system made it necessary to pay special attention to ensuring the financial stability of Ukraine's banking system, which became a significant problem for commercial banks and the National Bank of Ukraine.

In practical terms, the macroeconomic shock caused by the beginning of the war led to several forced steps by the Government and the National Bank of Ukraine. In April 2022, the NBU approved the "Basic principles of monetary policy for the period of martial law," which approved the change of the monetary regime and the goals of monetary policy for the period of the legal regime of martial law [9]. At the same time, the NBU also abandoned the regime of inflation targeting with a floating exchange rate and introduced temporary administrative restrictions on the foreign exchange market. Moreover, to ensure the smooth functioning of the public finance system under martial law, the National Bank approved the possibility of financing the state budget through lending through the purchase of government bonds on the primary market. Thus, for several months, there was an issue with funding the budget deficit in Ukraine, which was stopped with the start of financial assistance from partner countries, due to which the problem of covering budget expenditures was solved. However, financial instability during the war demonstrated a general decrease in the effectiveness of the discount rate as a monetary transmission tool of the regulator, as well as an increase in the threat of credit monetization of the state budget deficit.

The result of the war was the general destabilization of the national economy of Ukraine, which manifested itself in the following main changes:

1. A decrease in GDP in 2022 by 29.1% due to a reduction in absolute production volumes.
2. An increase in inflation rates for 2022 to 26.6%, as well as dollarization of the economy due to the devaluation of the national currency against the US dollar by almost 34%.
3. An increase in the unemployment rate to 21.1%, according to the results of 2022 [10].

At the same time, to stabilize the financial and, in particular, the banking system, the NBU applied several monetary, fiscal, and debt policy measures aimed at normalizing financial markets and ensuring the smooth functioning of banking institutions. At the same time, among the monetary measures of financial regulation, it is worth noting the following:

1. Cancellation of the restriction on setting the exchange rate at which commercial banks could sell foreign currency in cash to clients, as well as similar restrictions on setting the exchange rate at which banks debit money from client accounts in Hryvnia, provided payment is made with hryvnia cards abroad.
2. Temporary reduction of the monthly limit for withdrawing cash abroad from hryvnia accounts opened in Ukrainian banks from UAH 100 to UAH 50,000, or the equivalent.
3. Temporary ban on making payments abroad to buy securities, shares, and bonds and pay for brokerage services for these transactions, which are carried out using cards issued by Ukrainian banks.
4. Redemption of government bonds by the NBU.
5. Change in the discount rate from 10% to 25%.

The result of taking the mentioned measures was stabilizing Ukraine's financial sector. In particular, as a result of the adaptation of the exchange rate policy, there was an increase in competition in the foreign exchange market, an increase in the liquidity of its legal segment, as well as a decrease in the volume of illegal transactions and a decrease in the amplitude of exchange rate fluctuations in its cash segment. Several transformations also contributed to reducing the risks of unproductive capital outflow, reducing the possibility for speculation and bypassing currency restrictions. The general consequence of such actions was the practical preservation of Ukraine's international reserves [11].

Let's evaluate the dynamics of the NBU discount rate since the beginning of the war (Figure 1).
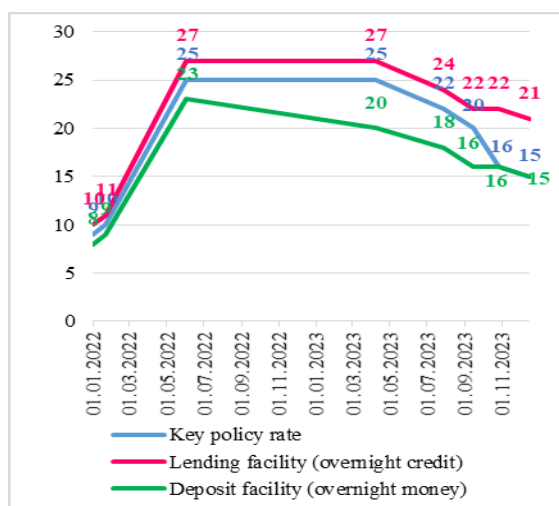
Figure 1. Dynamics of the National Bank of Ukraine discount rate for 2022-2023, %.
Source: [10]

As you can see, since the beginning of the war, when the National Bank of Ukraine adopted significant restrictions on the movement of capital and currency funds, there has been no change in the discount rate. Only at the beginning of June 2022, when the market stabilized, the NBU sharply raised the discount rate to 25%. At the same time, it is worth noting that in 2015, when the first stage of Russian aggression was ongoing, the accounting rate was 30%. So, the NBU tried to stabilize the financial market based on previous years' experience. At the same time, within a year, the National Bank has started easing the monetary policy, lowering the interest rate first to 22% and, by the end of 2023, to 15%. It is also worth noting that the rate on overnight loans has undergone less significant changes since its value, after increasing to 27% in June 2022, decreased by only 6 points to 21%. That is, we can see that the National Bank of Ukraine, trying to stimulate economic activity, behaves quite cautiously with "short" money, limiting the possibilities of situational speculation by market participants.

In general, it can be argued that the increase in the discount rate and refinancing rates during the war was entirely justified, as it allowed the National Bank of Ukraine to prevent the rise in the speculative demand of banks in the foreign exchange market and thereby, forced them to focus their attention on smoothing one-day liquidity gaps to fulfil daily banking LCR and NSFR regulations.

Therefore, it is also necessary to investigate the changes that took place in the foreign exchange market, considering the restrictions on the movement of capital and currency funds, as well as the interventions of the National Bank of Ukraine to maintain the stability of the national monetary unit – the hryvnia (Figure 2).

Figure 2. Balance of operations with foreign currency of bank clients and NBU interventions for 2022-2023, billion dollars.
Source: [10]

As you can see, after the resumption of market activity in the summer of 2022 and the growth of the discount rate, the National Bank introduced the first stage of easing the requirements for regulating the established restrictions. At the same time, to avoid a speculative surge in currency operations, the NBU made significant foreign currency interventions to ensure the economy's stability. However, despite the initial positive balance of clients for foreign exchange operations, constant pressure was felt on the foreign exchange market, which relates to the destructive impact of military actions on the real sector and the growing need for imports. Similarly, to smooth the situation, the NBU had to significantly increase the volume of currency interventions at the end of 2022 and 2023. In particular, at the end of 2023, the National Bank's interventions amounted to 3.6 billion dollars, aimed at ensuring the controllability of the foreign exchange market.

In general, it can be stated that the application of the fixed exchange rate regime in the conditions of military operations, as practice has shown, has justified itself. The stability of the foreign exchange market reduces the risk for exporters, so under such conditions, they can plan their activities without expecting sharp fluctuations in exchange rates. Therefore, the banking system ensured the stability of the functioning of the national economy in the crisis period of 2022-2023.

However, these changes certainly impacted the exchange rate dynamics, which significantly differed from the official one in a certain period (Figure 3).

Figure 3. Exchange rates of the hryvnia to the US dollar for 2022-2023
Source: [10]

As you can see, from the beginning of the war until the first stage of removing currency restrictions by the National Bank of Ukraine in July 2022, there was a significant gap between the official and cash exchange rates, which reached a value of 28.2%. At the same time, even the easing of restrictions did not lead to the normalization of the situation, and the equalization of exchange rates lasted almost a year. Initially, the gap decreased to 17%, and only at the end of 2023 it was reduced to 2.3%. The consequence was decreased commercial banks' operations with individuals' foreign currency funds. At the same time, it is also worth noting the low general activity of banks on the foreign exchange market since the rates on foreign currency deposits throughout the period remained at an extremely low level, reaching the value of 0.01% per annum. This shows that due to instability in the foreign exchange market, banks did not want to take currency risks due to significant restrictions on these transactions by the regulator and their unforeseeable changes in the future.

Let's also consider the dynamics of rates for hryvnia deposits offered by Ukrainian banks after the start of the war (Figure 4).
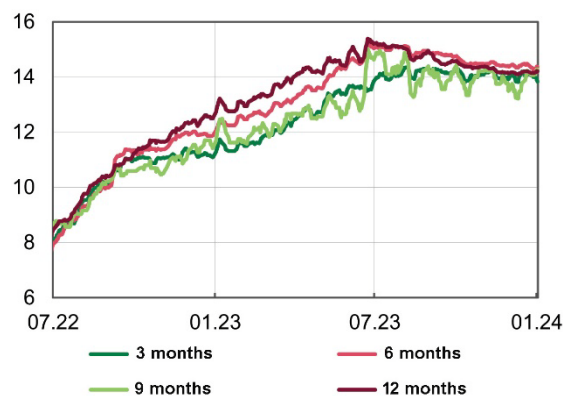
Figure 4. Ukrainian rate index for deposits of individuals for 2022-2023, %
Source: [10]

From the analysis, we can see that the growth of the discount rate forced commercial banks to increase the yield on deposits and other hryvnia income instruments to ensure the inflow of funds from the population. At the same time, at the end of the analyzed period, banks' interest rates closely approached the National Bank of Ukraine rate for overnight deposit certificates, which is evidence of the regulator's effective policy in this area. In addition, such dynamics of rates on deposits of natural persons indicate the general stabilization of the money market, as it forces banks to actively attract funds to finance their current operational activities. It is also worth noting that if in the first half of 2023 there was a noticeable gap between short-term and long-term interest rates, by the end of the year, it significantly narrowed, and deposit rates approached the levels of differentiation that existed before the start of the war.

We will also evaluate the yield dynamics of domestic state loan bonds, which remain one of the most liquid instruments of the money market (Figure 5).
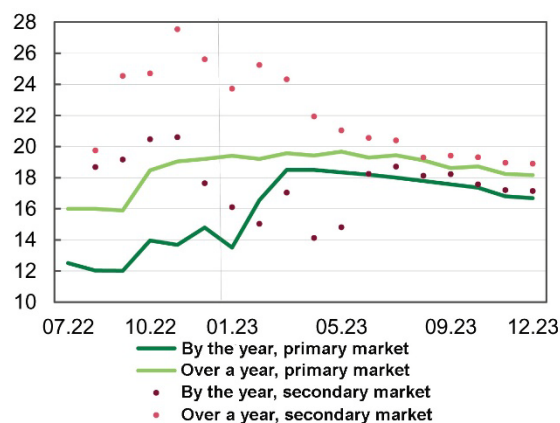

Figure 5. Yield of hryvnia Bonds of domestic government loans for 2022-2023, % per annum
Source: [10]

From the figure, we can see that the increase in the yield of government bonds occurred at a slower pace than the increase in the discount rate of the National Bank. However, by March 2023, this yield increased by almost 6% - from 12% to 18%. At the same time, the yield on the secondary market at the end of 2022 was nearly 28%. Such yield dynamics have led to domestic government loan bonds being the most attractive investment debt instrument for commercial banks. At the same time, according to the NBU, operations with three-month Bonds of domestic government loans (BDGL) are the most attractive, and the overall demand for them remains high despite the decrease in yield at the end of 2023.

In general, it can be stated that the activity of commercial banks in the BDGL market allowed, on the one hand, to cover the government's needs in financing the state budget deficit, and on the other hand, it provided banks with stable profitability of transactions with securities in conditions of a significant reduction in overall activity on the stock market.

5 Conclusion

Thus, we conclude that the National Bank of Ukraine, under challenging conditions, managed to ensure the effective implementation of the macroprudential policy by using the monetary channels of the transmission mechanism not only to ensure macroeconomic stability but also to limit the effect of systemic risks to prevent a financial crisis and reduce losses from the destructive impact of the war on the national economy. At the same time, it made it possible to ensure the effective functioning of the banking system, which became a determining factor in ensuring financial stability in Ukraine. As evidenced by the dynamics of the main components of the monetary sector, the banking system in crisis managed to respond effectively to challenges and threats, which affected the general stabilization of the economic situation in Ukraine.

At the same time, it can be argued that overcoming threats to financial stability in wartime forces the National Bank of Ukraine to transition to a countercyclical monetary policy, oriented towards a rigorous use of key monetary policy instruments and the transmission mechanism. The implementation of this policy will enable the NBU to effectively influence the recovery of the national economy and maintain support for macroeconomic balance by balancing the money and credit market.

In the upcoming periods, the National Bank of Ukraine should focus on reducing the key interest rate and expanding the supply of credit resources in the money and credit market. This will also require it to liberalize the conditions of the foreign exchange market to facilitate the access of commercial banks to the financial resources of the global financial market. Such access will provide cheaper hryvnia loans and stimulate the general economic activity necessary for the post-war recovery of Ukraine's national economy.

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THEOGONICAL SEMANTICS OF THE IMAGE OF PROPHET NOAH IN AZERBAIJAN FOLKLORE

[a]AYNUR AYDIN KIZI FARAJOVA

Azerbaijan Technical University, 25, H.Javid Ave., AZ 1073, Baku, Azerbaijan
email: [a]aynurferecova@aztu.edu.az

Abstract: Azerbaijani legends about the prophet Noah are very similar to the "Quran". But there are also differences. When the image of Noah became folkloric in religious texts, it was mixed with the theogonic-mythological views of the Oghuz-Turkish deity belief system, and this ensured its entry into the theogonic-mythological genealogy. In the Azerbaijani folklore texts about Noah, he is presented more as a mythical first ancestor and cultural hero than as a prophet, which shows that this image is mixed with the theogonic ideas of Oghuz divinity, for the first ancestor is directly related to the "Son of God" archetype. The image of the prophet Noah in Azerbaijani folklore is in many ways reminiscent of the image of the Oghuz kagan (khan) in the Oghuz epic-mythological tradition. These two figures seem to be very close in many ways. The prophet Noah is a religious figure, but when he became folkloric he acquired many new epic-mythological features. In this respect, it is legitimate for him to adopt the characteristic features of the Oghuz Khagan (Khan), who embodied the Oghuz theogonic-mythological encounters. The practical-visual features of the Noah-Oghuz union are detailed at the levels of 'first ancestor', 'prophet', 'first hero-saviour', mythical 'cultural hero' archetypes and 'family internal opposition'.

Keywords: Azerbaijani folklore; theogonic images; folklorization; Noah; prophet; son of God; Oguz; first ancestor; cultural hero.

1 Introduction

Azerbaijani folklore contains theogonic images related to revelation religions, such as Judaism, Christianity, and Islam. According to the belief, Almighty God sent books like the Torah, Bible, and Quran to Earth through His prophets (Musa Kalimullah, Isa Ruhullah, and Muhammad salawatullah). These books contain stories about various prophets, which have been passed down through generations and they have become part of folklore, myth, and epic.

There are numerous legends about prophets, including Adam, Noah, Solomon, Moses, Abraham, Jacob, Jesus, Corcius, and others in Azerbaijani folklore. All prophets were messengers of God on Earth, directly related to Allah/God. Therefore, images of prophets and other saints in folklore that have any connection with God can be viewed as theogonic images. However, this matter is not straightforward as it is connected to mythical-theogonic images. Consequently, religious prophets of revelation cannot be viewed as direct theogonic images. The key distinction lies in the contrast between the depictions of prophets in revealed religions and their portrayal in folklore. While the former presents them as actual historical figures, the latter blends them with mythological elements, reshaping them through the lens of poetic creativity and transforming them into theogonic-mythological constructs. At times, the prophet images in folklore have no connection to the real prophet images, except for their names. As a result, when the images of prophets in the religions of revelation became part of folklore, they mainly took on the characteristics of mythological heroes, such as the first father, first ancestor, cultural hero, and saviour. Therefore, the images of prophets in the religions of revelation, when they became part of folklore, also acquired mythological and theogonic features. For instance, the image of Prophet Noah in folklore and the image of Oghuz Kagan in Turkish mythology appear to be associated with each other at certain points. Azerbaijani folklore contains many epic texts about messengers or prophets, including saints. Each of these images exhibits theogonic characteristics to some extent. However, discussing the theogonic semantics of all of them in detail is not feasible in frames of one article. Therefore, this study will examine the theogonic semantics of the image of Prophet Noah in Azerbaijani folklore.

The importance of researching the theogonic semantics of the image of Prophet Noah in Azerbaijani folklore is due to the abundance of legends and narratives related to this image. Noah is a common figure in Azerbaijani folklore, with folklore texts about him found in every regional folklore environment that makes up the folklore area of Azerbaijan. There is a need to include Azerbaijani folklore tradition regarding Noah in international scientific publication. Additionally, investigating the relationship between traditional thought and folklore creativity in the Nakhchivan region of Azerbaijan and the tradition of Prophet Noah is necessary. The folkloric environment of Nakhchivan is rich in legends and narratives about Prophet Noah. This image has influenced the folklore life of the region, including toponymy, traditions, and collective memory. The tradition of Prophet Noah in Azerbaijani folklore combines religious and mythological traditions in an interesting way. This combination enables the study of how myth and religion converge in the image of Noah, forming a single meaning model in folkloric environments closely related to religious traditions.

2 Method

Historical-comparative, comparative-descriptive, and descriptive-typological approach methods were mainly used in the article. The historical-comparative approach to the problem is based on the dynamic nature of the theogonic images and images of Prophet Noah in folklore. Therefore, studying the image of Noah involves analyzing its development in a historical-diachronic context and comparing different levels of development and transformation.

To approach the problem in a comparative and descriptive manner, it is necessary to provide a semantic description of Noah's character, including both internal developmental levels.

On the other hand, the descriptive-typological approach is determined by the non-uniformity of Noah's image from an ideocultural perspective, as well as the transformation of various religious and mythological ideologies into Azerbaijani folklore. This requires describing the image of Noah and defining his typological characteristics.

In the article, the materials used are mainly divided into three groups: 1) Azerbaijani folklore texts about Prophet Noah (mainly legends and stories); 2) Materials presenting the heavenly-religious tradition about Prophet Noah; 3) Current research on Prophet Noah.

3 Results and Discussion

The image of Prophet Noah is widely recognized in both heavenly and non-heavenly religions, as well as in folklore and mythology around the world. According to S.S. Averintsev, Noah is portrayed as the hero of the stories about the world flood in Jewish and Christian narratives. He is depicted as a believer who survived the flood and built the ark for salvation, and as the savior of the world's animals and birds. Averintsev argues that Noah is also the first ancestor of the post-flood human generation, as exemplified by his sons [3, p. 224].

This religious-mythological image of Noah highlights three important details: Noah is portrayed as 1) God's messenger or prophet; 2) he is depicted as the saviour of the living generation from the world flood; and 3) his image emphasises the establishment of a new human race after the flood.

According to C.C. Frazer's work "Folklore in the Old Testament", flood legends exist in almost all cultures, including those living in remote jungles without contact with modern civilization [15, p. 63-147].

V.N. Toporov also shows that the fairy-tale folklore of various traditions widely reflects the flood theme. Among them, there are more typical plots such as Noah's ark, the rescue of different pairs of animals, sending of birds in search of land, stopping on the mountain, Noah's wife, and the devil [25, p. 326].

The Quran contains an extensive narration about Prophet Noah, with Surah "Hud" (verses 25-49) and Surah "Nuh" discussing

the flooding of the world. Surah Hud recounts the story of Noah, who was chosen by God as a prophet to spread the religion of monotheism to his people. Despite his efforts, Noah was largely ignored and considered a liar. He warned the people of the impending calamity sent by God and built an ark to save himself, his followers, and a pair of each animal. However, Noah's son Canaan did not believe and perished in the flood along with those who rejected Noah's message. After drawing the water, the ship stops at Mount Judi. The new generation of people and animals begins again with the creatures on the ship [7, p.18].

The world flood is mentioned in the "Oguzname" epic. Fazlullah Rashideddin's "Oghuzname" (14th century) is the genealogical history of the Oghuz people, beginning with Prophet Noah. In that genealogy, Oguz Khan follows Yafet, Dib Yavku Khan, and Gara Khan [20, p. 25]. In Abulgazi's "Oghuzname" genealogy, Prophet Adam is first, followed by Prophet Noah in the 10th place, Turk in the 12th place, and Oghuz Khan in the 19th place [12, p. 47-51].

S. Rzasoy states that in these chronicles, Turk and Oghuz Khan, the great-grandfathers of Azerbaijanis, are directly linked to Prophet Noah. This approach forms the basis of incorporating Prophet Noah as an integral structural element of the Oghuz-Turkish mythological-epic tradition [24, p. 4]. The text explains how religious images related to revelation religions, including the image of the prophet Noah, were included in the theogonic-mythological tradition. The genealogy of the Oghuz generation by 14th century historian Fazlullah Rashiduddin and 17th century historian Abulgazi Bahadir Khan is apparently combined with the genealogy of the revealed religions. The genealogy of Oguz Khan is a theogonic genealogy that begins with God. The combination of this genealogy with the genealogy of the prophet Noah, of religious origin, shows the inclusion of prophets in the theogonic-mythological genealogy in the folklore tradition. In other words, the religious image of Noah was transformed into folklore and included in the system of theogonic images.

Azerbaijani legends regarding the Prophet Noah bear a striking resemblance to the Quran, although there are some differences between them. According to Aynur Babek, information about Noah's flood can be found in the Quran and in earlier holy books. However, it is noteworthy that the flood in Noah's story is not depicted as a creative element in religious texts. Conversely, in folk legends, water is associated with creation [4, p. 55].

The author highlighted a significant concern with this viewpoint. The role of water as a living entity is linked to mythological traditions. In religious texts, the portrayal of Noah was blended with mythical traditions from folklore, which secured his place in the theogonic-mythological lineage.

F.Bayat examines the story of Noah's Flood in the context of mythological memory and the stories of the Quran and Torah. Bayat shows that Noah's Flood, which is widespread in Azerbaijani folklore, has evolved over time and led to the creation of legends and tales with new motifs that do not correspond to the holy book [6, p. 95].

The text discusses the transformation of the image of the prophet Noah in folklore, leading to the emergence of new texts related to him. It is important to note that these transformations resulted in the acquisition of mythological and theogonic features.

Legends about prophet Noah are widespread in Azerbaijan, particularly in the Nakhchivan region. Noah's name is well-known in Nakhchivan folk art, with many toponyms in the region, including mountain names, being related to his name. The legends of Noah in Nakhchivan often associate the creation of the land and region with his name. Maharram Jafarli even referred to Nakhchivan folklore as "Nakhchivan folklore that started with Noah and the myth" [8, p. 7].

S. Rzasoy has identified the following motifs in the plot line of related Azerbaijani legend texts about Noah:

1)   News about the flood;
2)   Making the ship;
3)   Forgetting the wife;
4)   Adventures on board;
5)   Land search;
6)   Nakhchivan mountains named by Noah;
7)   The beginning of a new life [24, p. 21-36].

The image of Noah in Azerbaijani epic texts has two significant aspects. Firstly, Noah is considered as a prophet of God in all folklore texts. Secondly, in those texts, Noah has already become a hero of an old myth, in addition to being a prophet of God. Rather than a prophet, he acts more like a "primitive ancestor - cultural hero" in mythic thought. This shows that he was transformed into an epic-mythological ancestor, patron-savior, and son of God as a prophet. In other words, the religious image has already turned into a mythological-theogonic image.

The legends about Noah follow the "cosmos-chaos-cosmos" scheme of creation found in mythological texts. This involves a transition from space to chaos, resulting in the destruction of the world, followed by a transition from chaos to space, resulting in the re-creation of the world. In the science of mythology, the creation of the world is referred to as "cosmogony", while its destruction is referred to as "eschatology".

The poetics of the epic texts about the prophet Noah are related to eschatological myths. According to V.K. Afanasyeva, eschatological myths refer to myths that discuss the end of the world and its destruction. These myths, along with cosmogony, make up the primary content of archaic mythology [2, p. 670-671].

It should be noted that cosmogony and eschatology are closely related, as creation and destruction are constantly replacing each other in a chain process of space and chaos, birth and death. This is exemplified in the legends about Noah, which describe the destruction of the old world by floods, storms, and stones, and the subsequent creation of a new world. In these legends, Noah is portrayed as a theogonic figure. "It is said that the prophet Noah knew that a storm would occur and water would cover the world. So he decided to build a big ship" [14, p. 66; 9, p. 63].

One important aspect of these texts is that the news of the flooding of the earth was conveyed to Noah in the form of mythological news, rather than being presented exactly as it is in religious texts. In the Quran, Prophet Noah warns the non-believers that they will be punished, but the texts do not provide any information about God. Therefore, religious information has been transformed into mythological information. Noah is portrayed more as a mythical ancestor of God's genealogy than as a prophet of God. This is further supported by the image of the Hungry wrestler in the texts collected from Nakhchivan. The text says that wood was needed to build the ship. The trees in the forest were very tall. A wrestler named Adj lived in the forest. He was very strong. He ate a bull every time. Noah convinces wrestler by named Adj to cut wood from the forest in exchange for giving him enough food [14, p. 66].

The story of Noah and a wrestler named Adj is not found in religious books. In terms of content, it resembles the heroism of the first ancestor. In myths, the first man always becomes a famous hero by defeating his strongest opponent. Noah's subjugation of Adj wrestler reminds us of the plot of those myths. Therefore, in legends, Noah is more like a mythical first ancestor. The first ancestor is typically considered to be the son of God.

Since the legends about Nih have their roots in religious books, particularly the Quran, it is inevitable that this image retains some religious features. Therefore, other legendary texts explain the reasons for the storm-flood in the same way as the Quran.

The text describes Noah as a man who warned people about the flood in order to prevent them from straying from the right path. He constantly warned people about the flood in order to prevent them from the bad path: "When the time comes, let the water

flood this earth" [22, p. 48].

"God saw that mankind became unry... God told Prophet Noah that it was necessary to build an ark" [22, p. 49].

"Allah-tala instructs Noah that the earth will be covered with water, you go and build an ark" [26, p. 38].

However, it is noteworthy that there is a reason for God's anger towards people in these texts, which is not found in religious books. They defiled Noah's ark by using it as a toilet, and as a result, God inflicted wounds on their bodies. Surprisingly, their own excrement was the only medicine for those wounds. It is important to note that people did not leave excrement on the ship; instead, they cleaned it and used it for medicinal purposes [22, p. 48-49; 21, p. 34].

Therefore, it is evident that in Azerbaijani folklore, texts about Noah is mixed with the prophet of God with theogonic-mythological meetings of the Oghuz deity, incorporating him into the system of Azerbaijani theogonic images.

The image of Prophet Noah in Azerbaijani folklore embodies the mythical archetype of the "first ancestor - cultural hero". It is important to note that the images of "first ancestor" and "cultural hero" in mythology serve different functions despite being represented by a single image. According to Y.M. Meletinsky, the first ancestors are regarded as the initial parents of tribes and communities, serving as a model for the social group. On the other hand, cultural heroes are mythological figures who create or obtain various items such as fire, cultivated plants, and tools for the benefit of people. They also teach people the rules of hunting, agriculture, crafts, and art. Social and religious rules, ceremonies, holidays, and marriage rules determine their way of life [17, p. 638]. It is evident from this concept that the initial progenitor represents different stages of development of a cultural hero (the first person). The myth hero is referred to as the first ancestor because all other individuals are his descendants. This is the primary role of the mythical hero. The first ancestor then establishes the guidelines for the life of the people he creates, including the rules, the first objects, the first hunting tools, and so on. This is the cultural building activity of the first ancestor. Due to this activity of the first ancestor, he is already referred to as a cultural hero [13, p. 26-27].

The theogonic system includes the first ancestor, who is represented as 'the son of God' in the genealogy of God. According to Y.M. Meletinsky, the cultural hero, like the first ancestor, can evolve into the image of the god-creator or the epic hero [17, p. 638].

In folklore texts, Noah is portrayed as a first ancestor and a cultural hero. The events on the ship and the aftermath of the storm involve the re-creation of the world and its elements. For instance, in one of the texts, the swallow becomes a "snake" after biting the bee's tongue, then a "crossed tongue' after biting the snake's tongue, and finally, the snake tries to catch the swallow's tail, which becomes a "crossed tail"" [1, p. 200-201]. In another legend, the White Raven bites and tears out the tongue of the Swallow that scolded Noah for not fulfilling his task [18, p. 34-35]. According to the legend, three craftsmen built an ark for Noah in exchange for his daughter's hand in marriage. Noah had only one daughter. When the work was completed, the donkey and dog belonging to Noah also transformed into females and were married to the craftsmen. The descendants of Noah's donkey and dog are said to have inherited their respective animal characteristics [16, p. 3].

According to one legend, on the ark Noah transformed the snake into a reptile due to its troublesome behaviour, and the chicken - into a flightless bird because it was deceitful [9, p. 49].

The legend collected from Masalli region explains the origin of different languages. According to the legend, the people on the ship became impure and defiled it. As a result, God inflicted wounds on their bodies. The people's excrements were used as medicine to heal the wounds. After the people disembarked from

the ship, they were unable to understand each other's languages, resulting in the birth of 72 nations speaking different languages [5, p. 76-77].

One text reports that Noah was informed of the events of Karbala and the martyrdom of Imam Hussein [10, p. 50].

Legends collected from Nakhchivan associate the creation of lands and mountains with Noah. In one of the texts, it is mentioned that 'ark arrived at the location of Nakhchivan. The place where Noah arrived is now known as Nakhchivan [23, p. 49].

According to Nakhchivan legends, the name Nuhdaban originated from Noah's heel hitting the ground when he disembarked from the ark [7, p. 71]. The legends also associate the names of the mountains Kemki and Balka with Noah: "Noah's ark is still in trouble a long way from where it passed. Noah says:

This mountain is no less than that mountain.

The mountain was named "Kamki"" [11, p. 36].

During their journey with Noah's ark, they came across this mountain. Noah remarked, "Perhaps this is the same mountain we approached before". – "Maybe it is the mountain. From that day on, the name of this mountain became "Balki dagi". This mountain is in Ordubad district" [11, p. 36].

These texts reveal Noah's creative function as a first ancestor and cultural hero. He accomplished this by giving names to places and transforming them into new inhabited areas. Additionally, the transformation of animals in Noah's ark and the creation of different nations and languages demonstrate Noah's creative function as the first ancestor. In mythology, the first ancestor or cultural hero is believed to possess divine powers due to being the son of God and included in the theogonic genealogy. The image of the prophet Noah in the religions of revelation has become folklore and entered the system of theogonic images, acquiring features of the first ancestor or cultural hero archetype.

The depiction of Prophet Noah in Azerbaijani folklore bears striking similarities to the portrayal of the Oghuz kagan (khan) in the Oghuz epic-mythological tradition. These two characters appear to share many similarities. It is believed that these similarities are legitimate and have a basis.

Prophet Noah is a religious figure who has also become a part of folklore. As a result, he has acquired many new epic-mythological features. It is therefore reasonable for him to adopt the characteristic features of the Oghuz khagan (khan), who embodies the Oghuz theogonic-mythological meetings. Azerbaijani folklore is based on Oghuz folklore, which in turn is based on the myth of the Oghuz khagan/khan. This forms the core of the mythology of the Oghuz Turks, who are considered the great-grandfathers of the Azerbaijani people. The Oghuz myth was transformed into Oghuz folklore, then evolved into Azerbaijani folklore. In this regard, when the image of Prophet Noah in religion became folklore, he naturally adopted the traits of Oghuz Khan. Noah became a theogonic image by accepting the traits of "first ancestor - cultural hero" as his "son of God" since Oguz Kagan was considered the "son of God".

These are the theoretical aspects of the matter. The practical-visual features of the Noah-Oguz confluence are mainly evident in the following details:

1. The "First Ancestor" archetype. The Oghuz khagan is considered the first ancestor and father of the Oghuzs in both the mythical version of the epic "Oghuzname" (in the Uyghur "Oghuzname") and in the Muslim versions. In the Uyghur "Oghuzname", Oguz is generally the first person. Prior to this time, there were no inhabitants on Earth. The individual in question arrives on Earth as a "son of God". While the name of his father is not specified, his mother is identified as Ay Khagan. In folklore, Prophet Noah is often compared to Oghuz Khan in Muslim versions as they both represent the "first ancestor"

archetype. While there were people before Oghuz Khan in these versions, they were considered unbelievers as they did not believe in God alone. The lineage of Oghuz, who were believers in God and Muslim, begins with his family. Similarly, there were people before Noah, but they perished in the flood as they did not believe in God and were considered infidels. The current generation can trace its origins back to those who were saved in Noah's ark or descended from Noah's family.

2. The "Prophet" archetype. Just as Prophet Noah preached his religion among people by God's command, Oghuz Khan preaches Islam in the Muslim versions of "Oghuzname". He is born as a Muslim, he does not suckle his mother for three days. Every night, entering his mother's dream, he invites her to become a Muslim. He does not suck until his mother accepts the invitation. "Allah!" he says. Here myth and religion are combined. In other words, Oguz Khan actually acts as a prophet. This connects Noah and Oguz in a single theogonic line.

3. "Opposition within the family" motive. The initial opposition to the invitations to religion by both Noah and Oguz Khan arises from within their families. While Noah's family accepts God, his son Canaan does not and perishes in the flood without entering the ark. Similarly, Oguz's two cousins, whom he married in turn, are the first to oppose him. After his marriage, Oguz offers his elder cousin the opportunity to convert to Islam. She declines the offer and he does not have a family life with her. It is revealed that he marry his second cousin, and the same incident is repeated. Eventually, the third cousin accepts the offer and becomes Oguz's true family. During this time, Oguz's older cousins inform their father that he is spreading Islam. As a result, his father and uncles fight him, but Oguz emerges victorious. It appears that Noah and Oguz are united in this theogonic line.

4. The "first hero-savior" archetype. One of the motifs present in all heroic epics is the "first heroic" plot. This act is a crucial condition for being a hero. In the "Dada Gorgud" epics, a man in Oguz society could not name himself by simply "cutting off head and shedding blood"; he could not become a hero or a brave man. This archetype is also observed in the imagery of Oghuz and Noah. Oguz Kagan rescues the forest creatures by defeating the one-horned creature, Kiyat, which had been destroying the animals and birds in the forest. This archetype is also found in the folkloric image of the Prophet Noah. According to the legend collected from Nakhchivan, Noah received news that the world would be flooded and decided to build an ark. However, the trees in the forest were too tall for people to cut down. A wrestler by named Adj lived in the forest. Noah subdued the wrestler, who was said to be able to eat an entire ox in a day, and convinced him to work as a lumberjack in the forest [14, p. 66-67].

The story of Noah and Adj wrestler is not found in religious texts. Upon careful examination, it becomes clear that Adj wrestler, whom Noah subdued, and the Kiyat, defeated by Oghuz, are equally malevolent forces. Kiyat, who resided in the forest, ruthlessly consumed the animals and birds there. "The job of Adj wrestler was to harm the wealth and prosperity of the people" [14, p. 66].

5. Mythical "cultural hero" archetype. As the image of the prophet Noah became folkloric, it acquired the characteristics of the "cultural hero" archetype of Oguz Kagan. The naming of different places and mountains by Noah and the naming of different tribes, peoples, and places by Oguz Kagan 'repeat' each other.

It appears that while the image of Noah in religion became folkloric, Oguz Kagan also adopted the theogonic-mythological features of the "first hero-savior" archetype. The distinction lies in the fact that Noah, being a prophet of God, overcomes Aj wrestler with a miracle, whereas Oguz overpowers Kiat with his physical strength.

S.Rzasoy concludes that in the ancient Oghuz epic-mythological genealogies, Prophet Noah holds a significant place in the Oghuz-Turkish national ethnic thought as part of the universal scheme of divine creation of humanity. According to these schemes, Prophet Noah marks the beginning of post-flood history. In Oghuz genealogies, Turk and Oghuz Khan, the great-grandfathers of Azerbaijanis, are directly linked to Prophet Noah. This approach forms the foundation for the integration of Prophet Noah as an organic structural element within the Oghuz-Turkish mythological-epic tradition. While Azerbaijani legends contain various depictions of Noah that draw from the imagery and motifs found in the Quran and other divine texts, it is important to note that these texts are not mere folkloric adaptations of Quranic narratives. In terms of structure, these legends synthesize ancient Turkish cosmogonic and eschatological concepts with religious information about Noah. They combine archaic mythological ideas and religious ideas into a single poetic form. Azerbaijani legends about Noah form a complex image-plot that combines the new history of mankind, which began with Noah, with the mythological history of the Turkish ethnos [24, p. 36]. In addition to accepting this author's opinion, we would like to add that Noah, who came from a religious background, adopted theogonic semantics in the process of folklorising the story and image. Noah, a prophet and the first father of a new generation of humanity, has been transformed into an epic hero in folklore, based on the archetype of the "first ancestor - cultural hero". At the heart of the "first ancestor - cultural hero" archetype in Azerbaijani folklore, there is the image of Oghuz Kagan/Khan, the Son of God. The reason for the parallels between the image of Prophet Noah and the image of Oghuz Khan is related to this: although Noah retains his name in folklore texts, in many cases he was transformed into the image of the son of God, Oghuz Khagan/Khan.

4 Conclusions

There are theogonic images related to revelation religions in Azerbaijani folklore. According to the belief, books such as the Torah, Bible, and Quran were sent by Almighty God to the earth through his prophets. These books contain stories related to various prophets, which have been spreading among the people for centuries and have been subjected to folklore, mythification, and epicification. Some numerous legends about prophets such as Adam, Noah, Solomon, Moses, Abraham, Jacob, Jesus, and Corcius are in Azerbaijani folklore.

Azerbaijani legends about the Prophet Noah are very similar to the "Quran". But there are also differences between them. When the image of Noah in religious texts became folkloric, it was mixed with the theogonic-mythological views of the Oghuz-Turkish deity belief system, and this ensured its entry into the theogonic-mythological genealogy.

In Azerbaijani folklore texts about Noah, he is portrayed more as a mythical first ancestor and cultural hero than a prophet. This suggests that his image is intertwined with the theogonic ideas of the Oghuz belief in divinity. This is because the first ancestor is directly linked to the "son of god" archetype.

The depiction of Prophet Noah in Azerbaijani folklore has striking similarities to the portrayal of the Oghuz kagan (khan) in the Oghuz epic-mythological tradition. Despite their religious and mythological differences, these two characters share many common traits. As a religious figure, Prophet Noah has acquired numerous epic-mythological attributes in folklore. In this regard, it is acceptable for him to adopt the defining traits of the Oghuz khagan (khan), who embodied the Oghuz theogonic-mythological gatherings.

The practical and visual features of the Noah-Oghuz union are evident in the details of the "first ancestor", "Prophet", "first hero-savior", mythical "cultural hero" archetypes, and "family internal opposition".

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RESEARCH AND MANAGEMENT OF THE PRICE POLICY IN THE FIELD OF MARKETING SERVICES OF THE ENTERPRISE USING MODERN INFORMATION TECHNOLOGIES IN THE CONDITIONS OF SUSTAINABLE DEVELOPMENT

[a]INNA ARAKELOVA, [b]NATALIIA SHULPINA, [c]VALENTYNA TOKAREVA, [d]OLENA NAHORNA, [e]OLHA SHULHA, [f]NATALIIA KHOMIUK, [g]RUSLANA SODOMA, [h]TETIANA SHMATKOVSKA

[a,c]*Mariupol State University, 6, Preobrazhenska Str., 03037, Kyiv, Ukraine*
[b]*Kyiv National Linguistic University, 75, Velyka Vasylkivska Str., 03150, Kyiv, Ukraine*
[d]*National University of Life and Environmental Sciences of Ukraine, 15, Heroyiv Oborony Str.,03041, Kyiv, Ukraine*
[e]*Borys Grinchenko Kyiv Metropolitan University, 13-B, Levka Lukiyanenka Str., 04212, Kyiv, Ukraine*
[f,h]*Lesya Ukrainka Volyn National University, 28, Vynnychenko Str., 43025, Lutsk, Ukraine*
[g]*Lviv State University of Life Safety, 35, Kleparivska Str.,79000, Lviv, Ukraine*
email: [a]iarakelova@mu.edu.ua, [b]nataliia.shulpina@knlu.edu.ua, [c]tokareva.valent@gmail.com, [d]nahorna_olena@nubip.edu.ua, [e]olha.shulha@kubg.edu.ua, [f]nataliiabillous@gmail.com; [g]sodomaruslana@gmail.com, [h]shmatkovska2016@gmail.com

Abstract: The article determines that in modern conditions of a competitive market environment, effective management of price policy is a crucial aspect of strategic marketing of enterprises. Modern approaches to pricing management in marketing services using modern information technologies are considered. Data analysis, price modelling tools, and automated management systems are essential to optimise pricing strategies effectively. The importance of considering demand, the competitive situation on the market and the total cost of services when setting prices by the enterprise is proven. The influence of digital platforms and online channels on the formation of prices and consumer value of the final product is analysed. The need to develop pricing strategies has been identified to enhance competitiveness and meet the needs of the modern market for marketing services.

Keywords: pricing policy; marketing services; information technology; pricing management; competitiveness.

1 Introduction

In today`s dynamic business environment, effective pricing strategy management is particularly important for companies in marketing services. In particular, a complex management landscape is being formed at the intersection of price policies and marketing services, requiring constant market dynamics and strategic adaptation research. All this determines the objective need of business entities to research and manage price policy within the scope of marketing services based on the application of modern information technologies to increase the efficiency and competitiveness of the enterprise. At the same time, the importance of pricing strategies in marketing services is rather difficult to overestimate. This is because prices reflect services' value proposition and influence consumer behavior, market positioning and overall profitability. That is why modern enterprises must effectively maneuver between many factors that determine commercial efficiency: market demand, competitive dynamics, cost structure and consumer preferences. The main goal of this maneuvering is the formation and implementation of effective pricing strategies for the essential products of the business entity.

At the same time, the significant spread of modern information technologies has led to a real revolution in enterprise price policy management. In particular, advanced analytics, pricing optimization algorithms, and automated management systems provide previously unforeseen opportunities for understanding market dynamics and adjusting enterprise pricing strategies accordingly. Therefore, using big data and machine learning algorithms, enterprises can obtain detailed information about consumer behavior, competitive pricing trends and market demand patterns, allowing them to make more informed and sophisticated pricing decisions. Thus, analyzing price management problems in the marketing services sector requires

business entities to pay special attention to modern information technologies in forming price management strategies. In practice, this is realized by researching pricing dynamics and forming management methods for enterprises seeking to optimize their pricing strategies.

In general, it can be argued that in modern conditions, the need to study the theoretical foundations of pricing strategies in marketing services, which requires the study of their key concepts, such as value-based pricing, cost-based pricing, and competitive pricing, is of particular relevance. Accordingly, with the help of modern digital and information technologies in price management, enterprises can transform the existing potential of data analytics and form new algorithms for optimizing pricing and automated pricing systems.

2 Literature Review

Studies of modern principles of price policy management are sufficiently widely covered in specialized scientific literature. Moreover, the relevance of scientists and practitioners to this issue has been growing significantly recently in connection with the widespread of digital and information technologies, which makes it possible to solve the pricing problem at a qualitatively new functional level.

In this aspect, it is worth noting that research in the field of price policy is a strategic tool for the marketing and management activities of the enterprise, which is presented in the works of researchers such as I. Britchenko [1-10] and S. Koshova [20-21], M. Masl'an [25], J. Reitšpís [28], R. Sodoma [33]. In particular, the authors examine various aspects of pricing strategies, including cost analysis, competitive dynamics, and pricing strategies. At the same time, in general, the peculiarities of the influence of price policy on consumer behavior and the enterprise`s profitability are also determined.

In addition, it is necessary to pay attention to the research of such scientists as Y. Danshina [11] and M. Kryshtanovych [23], T. Mirzoieva [26], T. Shmatkovska [30-32], O. Yermakov [35] who are devoted to using information technologies in price management. At the same time, the authors analyze which specific tools and software can be used to analyze market data, forecast price trends, and automate pricing processes. They also consider the challenges and opportunities of implementing information technology in pricing management.

Another area of study of the peculiarities of the application of information technologies is the study of the influence of digital platforms on the price policy of the enterprise, which is outlined in the works of M. Dziamulych [12-19], T. Kravchenko [22], N. Kunitsyna [24], O. Ramos [27], M. Rudenko [29], A. Tiurina [34] and A. Zielińska [36]. In particular, the authors investigate the role of digital platforms in forming the business entity`s pricing strategies. At the same time, it analyses how e-commerce platforms, online advertising and other digital channels affect enterprises` pricing and competitiveness in the marketing services field. The authors also consider essential aspects of customer interaction and strategies for building consumer value through digital channels.

It can be argued that the existing developments in this direction are an essential basis for further research in price policy management in marketing services using modern information technologies. At the same time, there is an objective need to improve the informative context and methodological approaches for further research into managing the company`s price policy.

3 Materials and Methods

The methodology of research and management of pricing policy in the field of marketing services includes several approaches and methods based on the study of the influence of modern information technologies on the formation of relevant marketing strategies. At the same time, various methods were used in the research and management of the price policy in the enterprise`s marketing services, including the abstract method, the method of analysis and synthesis, and the comparison method.

In particular, the abstract method was used to formulate general principles and approaches to managing the company`s price policy. This method made it possible to identify the critical aspects of pricing and setting prices in marketing services without going into details or specifics but focusing on general concepts and strategies.

The analysis and synthesis methods were used to analyze complex situations and problems related to pricing based on the application of information technologies. The analysis of market data, competitive activity and consumer demand made it possible to obtain an objective picture of the conditions and factors affecting pricing in the context of the formation of digital marketing. Synthesis of these data helped develop pricing strategies that consider various aspects and requirements of the market and modern business processes.

The comparative method was used to analyze and evaluate different pricing strategies and approaches based on digital technologies. This made it possible to identify the most effective and suitable strategy for enterprises in the context of determining their specific conditions and goals. Using these methods in the research and management of pricing policy can also contribute to developing innovative and effective pricing strategies that consider the complexity of market conditions and consumer needs.

In general, the combination of the abstract method, the method of analysis and synthesis, and the comparison method made it possible to determine a comprehensive approach to managing the price policy based on digital marketing, which considers various aspects and requirements of the modern marketing services market.

4 Results and Discussion

Marketing policy is a critical element of the general economic policy of the enterprise, the formation and improvement of which is one of the most essential tasks of every enterprise. At the same time, prices and pricing act as a critical tool of the market mechanism. The price policy of the enterprise is determined primarily by its potential, technical base, availability of sufficient capital, qualified personnel, and production organization, and not only by the state of supply and demand.
In today`s competitive market environment, the effective management of pricing policy is a decisive factor for the success of enterprises in strategic marketing. This is reflected in several aspects that cover strategic planning, consumer interaction, market competitiveness, and enterprise profitability. At the same time, the pricing policy determines how the company is perceived in the market and how its products or services are compared with competitors. Price can be a strong signal of quality or affordability. For example, a high price may encourage consumers to assume a high-quality product, while a low price may attract more customers looking for more affordable alternatives. Accordingly, pricing policy can be a vital tool for influencing consumer behavior. Special offers, discounts, loyalty programs and other price incentives can motivate consumers to make specific purchasing decisions and cause a particular reaction in the market. In addition, the pricing policy determines the competitiveness of the business entity. Setting prices that match a product`s or service`s consumer value while remaining competitive is critical to ensuring success in the marketplace. At the same time, enterprises must carefully analyze the competitive situation, the cost of production and the

prospects of consumer demand to make optimal pricing decisions.

In addition, the pricing policy has a direct impact on the profitability of the enterprise. It can determine the margin of products or services and affect sales volumes. Optimal pricing can ensure maximum profitability, while inefficient pricing can lead to losses for the business entity. Therefore, enterprises increasingly turn to modern information technologies to manage the price policy effectively. Analytical systems, software tools for forecasting demand, integrated CRM systems and other technological tools allow modern enterprises to analyze large volumes of data, consider various factors and make informed pricing decisions.

Therefore, effective pricing policy management is critical to strategic marketing in today`s competitive environment. Appropriate determination of pricing strategies, consideration of competitive factors, use of modern technologies, and constant improvement of pricing models are critical components of a successful enterprise in today`s market. At the same time, the management of the price policy of business entities takes place based on its functional structuring (Figure 1).
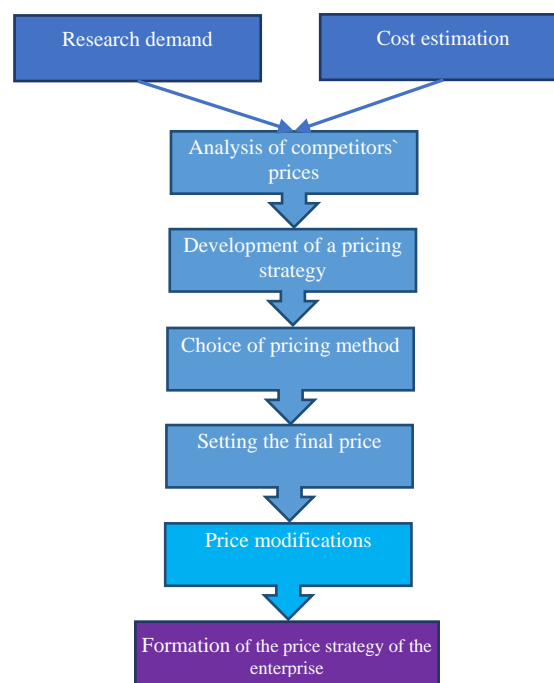

Figure 1. The functional structure of the enterprise`s price policy management
Source: generated by the author

It should be noted that in modern economic conditions, in which the competition in the market of marketing services is exceptionally high, the effective management of pricing is critically important for ensuring the commercial success of enterprises. At the same time, thanks to the dynamic development of information technologies, new functional opportunities are emerging for introducing innovative approaches to the price management process. Considering such approaches to pricing management in the field of marketing services based on the use of modern information technologies, several key ones can be identified:

1. Big Data Analytics – Big data analytics allows businesses to gain deep insights into service demand, consumer behavior and competitive dynamics. By analyzing large amounts of data collected from various sources, including internal systems, social media, websites and other sources, businesses can identify new pricing opportunities, predict changes in demand and adapt prices in real time.

2. Machine learning and artificial intelligence – using machine learning and artificial intelligence methods allows enterprises to develop complex pricing models that can automatically adapt to functional changes in market conditions. Machine learning algorithms can analyze large volumes of data to determine optimal pricing strategies, considering consumer price sensitivity, seasonality, geographical differences, etc.
3. Dynamic pricing - with the help of modern information technologies, enterprises can implement dynamic pricing, that is, change prices in real time depending on market conditions. In practice, this can be implemented using algorithms that automatically set prices based on data about demand, competitive activity and cost of production.
4. Personalized pricing strategies – modern technologies allow businesses to form personalized pricing strategies for different consumer segments or each client. In particular, by analyzing data about purchases, interaction history and other personal parameters, businesses can develop price offers that best meet the needs and preferences of each customer.
5. Automation of pricing management processes - using modern information systems and software allows enterprises to automate many aspects of pricing management, including monitoring competitor prices, analyzing the results of pricing experiments, and implementing pricing strategies.

In general, we can see that modern information technologies open up many new opportunities for enterprises in marketing services to manage the pricing process effectively (Figure 2).
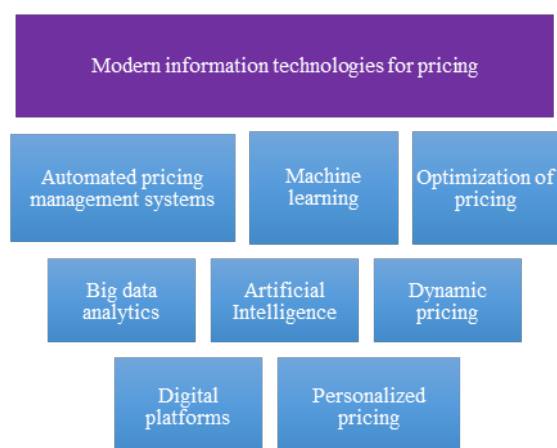

Figure 2. Modern information technologies used in the field of pricing
Source: generated by the author

From a practical point of view, the most critical components for ensuring the effective optimization of pricing strategies in the modern business environment are data analysis, price modelling tools, and automated management systems. This is because data analysis allows businesses to understand market trends, consumer demand, competitive activity and other factors that affect pricing. By collecting and analyzing large amounts of data, companies can identify patterns and trends to help them make informed pricing decisions. Price modelling allows enterprises to consider various factors and scenarios when determining optimal pricing strategies. The use of pricing models also allows for the prediction of the impact of various pricing decisions on profit and consumer behavior, as well as determining optimal prices, taking into account multiple constraints and goals of the enterprise.

If we talk about automated pricing management systems, modern conditions allow enterprises to effectively perform functional tasks of monitoring competitors` prices, analyzing data and making pricing decisions. They also help provide convenient and quick access to information needed for decision-making. They can automatically perform several tasks,

simplifying employees` work and reducing the risk of errors. Generally, it can be argued that data analysis, price modelling tools, and automated management systems are essential so enterprises operating in dynamic business environments can optimize their pricing strategies. They help businesses better understand the market, make informed pricing decisions, and respond more quickly to changes in the competitive environment. These tools and technologies are now integral to a successful pricing strategy in today`s business.

In the intensive development of digital and information technologies, digital platforms and online channels significantly influence the formation of prices and the consumer value of the final product in the modern business environment. In practice, this is realized due to several factors, including the new opportunities these technologies provide. In this aspect, the following elements should be highlighted:

1. Global access to information, when online platforms allow consumers to access a wide range of goods and services anywhere in the world. This makes the market more competitive as consumers can easily compare prices and features of products from different manufacturers or suppliers. Businesses face increased pricing pressure in this environment as they compete for consumers` attention and money.
2. Dynamic pricing involves the formation of online channels based on tracking their changes in real time depending on various factors, such as demand, competition, time of day, etc. Thanks to this, businesses can optimize their prices to maximize profit or consumer value, considering the actual state of the market.
3. Personalized price offers based on online platforms allow businesses to collect large amounts of customer data, including shopping habits, browsing history, geographic location, etc. This will enable enterprises to create personalized price offers that meet each customer`s needs and preferences.
4. Functional systems of rating and reviews, which are the basis of online platforms and allow consumers to exchange opinions about goods and services. As sales practice shows, this affects the consumer value of the product, as consumers are more inclined to trust and buy products with high ratings and positive reviews.
5. The availability of alternative offers gives consumers more choices, and businesses must compete for their attention and money, directly impacting the pricing process.
6. Marketing campaigns and discounts, when online platforms are often used to conduct marketing campaigns and distribute promotional offers. This can affect the consumer value of products, as it is known that consumers may perceive a product as more attractive if it is offered at a reduced price or with additional benefits.

In general, we see that in modern business processes, digital platforms and online channels significantly impact the formation of prices and consumer value of the final product due to changes in market dynamics, competition and the availability of alternative offers. These technologies are becoming necessary for a successful business strategy in the modern digital world, forming a digital marketing system (Figure 3).
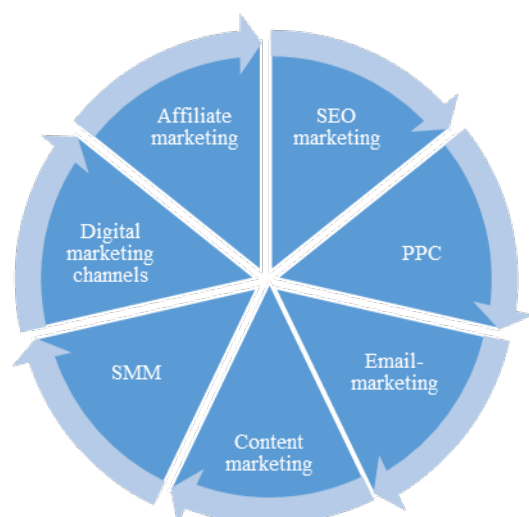
Figure 3. Structure of digital marketing
Source: constructed by the author

Thus, it can be argued that in the conditions of intensive digitization of the marketing sphere, business entities should focus on applying the most optimal pricing strategies to ensure increased competitiveness and meet the needs of the modern market. Such strategies include the following:

- competitive pricing strategy;
- strategy of differentiated prices;
- price leadership strategy.

At the same time, it should be noted that each of the mentioned digitalization strategies has advantages and disadvantages. Therefore, the choice of a specific plan should be made, taking into account the specific goals and conditions of the enterprise, as well as the characteristics of its products or services and the competitive environment. This approach will allow business entities to effectively form prices, meeting the needs of the modern marketing services market and ensuring their competitiveness.

5 Conclusion

Thus, we conclude that rapid changes characterize the modern business environment, and introducing innovative information technologies becomes a critical success factor for enterprises. Extensive data analysis, machine learning, digital platforms, and other tools allow businesses to effectively analyze market trends, determine optimal pricing strategies, and quickly respond to changes in the competitive environment. We should also note that modern information technologies allow enterprises to manage pricing effectively, increase customer satisfaction, and improve their brand communication experience. At the same time, personalized pricing, dynamic pricing and other strategies allow businesses to create price offers optimized for customers` specific needs and preferences.

Successful implementation of price management strategies requires the possession of modern technologies and the correct selection and implementation of strategies that meet the specifics of business and market needs. Therefore, businesses need to consider the ethical and legal aspects of pricing to maintain consumer trust and maintain a positive brand image. In general, the management of pricing policy in marketing services using modern information technologies is an integral part of a successful business strategy implemented based on digital marketing. In turn, using the latest digital tools allows enterprises to be more flexible, adaptive and efficient, which in turn helps to increase their competitiveness and the successful functioning of business processes in a dynamic market environment.

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THE MORPHOLOGICAL WAY OF DERIVATOLOGY IN THE DIALECTS AND ACCENTS OF NAKHCHIVAN

ᵃZULFIYYA ISMAYIL

Nakhchivan State University, AZ7012, Nakhchivan city, University campus, Azerbaijan
Nakhchivan Branch of the Azerbaijan National Academy of Sciences, Heydar Aliyev Ave., 76, AZ7000, Nakhchivan city, Azerbaijan
email: ᵃismayilzulfiyye@yahoo.com

Abstract: It is known that morphological suffixes play a decisive role in the formation of words. Such suffixes are more common in the dialects of Nakhchivan than in the literary language. In the studied dialects, in the process of morphological creation of words, features different from the literary language are manifested. Here, a number of word-correcting suffixes, which are not observed in Azerbijani modern literary language, differ from some of the common suffixes. Word-deriviting suffixes used in these dialects can be grouped as following: name-deriviting suffixes; verb-deriviting suffixes; adverbial-deriviting suffixes. Name-deriviting suffixes themselves are divided into two parts: a) name-deriviting suffixes themselves; b) suffixes that creats verbs from verbs. In conclusion, we must note that the verb has more characteristic feature in the main parts of speech in Nakhchivan dialects and accents. These features mainly observed in derivative verbs, verb tenses, command, wish and conditional forms of the verbs, and its structure types. Those categories have relatively well kept the ancient forms and historical function of Azerbaijani language and generally in Turkish languages. Most of the verbs met in Nakhchivan dialects and accents are used in Azerbaijani modern literary language in the same way or with phonetic changes, and some of them are completely different from Azerbaijani literary language semantically as well as phonetically, while other are considered archaism from the point of view of Azerbaijani modern literary language.

Keywords: Nakhchivan; word creation; dialect; morphological; suffixes.

1 Introduction

As in Azerbaijani modern literary language, in the dialects of the Nakhchivan group, word creation occurs in three processes. Professor Salim Jafarov grouped the word creation of the Azerbaijani language and the new lexical units created on the basis of this process, according to its own internal development laws, as following:

1. The process with lexical way of the formation of the words.

2. The process with morphological way of the formation of the words.

3. The process with syntactic way of the formation of the words.

Later, the author noted that *"These three ways of our language, which have continued since the ancient and most ancient times, and continue to develop new features in our modern language, cannot be thought of as special ways that are isolated from each other and have no connection. All three ways of the word creation process in our language are connected to each other in terms of their development history, and one of them played a great role in the creation and development of the other. Even now, we clearly observe that there is a close connection in the process of formation of new lexical units [words] either lexically, morphologically or syntactically"* [8].

2 Method

The synchronous characterization of the morphological system of dialects with the identification of the territorial distribution of the analyzed phenomena led to the use of descriptive and linguogeographical methods. In order to explain individual linguistic phenomena, the comparative historical method is used. In essence, the study used methods of areal linguistics, which are valuable because they make it possible to generalize a huge disparate material that requires its own theoretical understanding.

3 Results and Discussion

Word creation with morphological way in the dialects and accents of Nakhchivan

The word creation with morphological way in the modern literary language of Azerbaijan is an extremely complex process, so it has many different forms. In morphological way, words are formed mainly by means of word-deriviting suffixes. Let us pay attetion on some of them:

-çı. In these dialects, the variant suffix -çi in Azerbaijani literary language is used with a thin vowel -çi. This suffix, which has the ability to create more words than other suffixes, creates the concept of profession, art, specialty. This suffix also means a certain tool, object, etc. It creates the concept of the one who produces and uses this and other professions [8, p. 75]. For example: aşığçı-ashig player, toyçu [wedding man], təfligçi /çağrışçı [the man who invites the guests to the wedding], əbəçi [obstetrician], iməci [helper], işığçı [electrician], arıçı-beerkeeper, sağınçı [milkmaid], tələyçi [meditator], hayçı, küyçü [fuss maker], çürüyçü- nuisance, dərgezçi [a man who cuts grass], qırçı [greedy], çərənçi [a man who talks a lot], xarmənçi-farmer, süpürgəçi-sweeper, solğuncu [troublemaker, thief] [2, p. 252], tapılçı [a man who collects grass] tapılçı otu yığır bir yerə tapıl eləyir - grass collecter who gathers the grass and makes a tapil [2, p. 255], layxorumçu – otu bir yerə yığan adam - a man who collects grass [Didivar] [6, p. 29], dəmçi [Şahbuz] - züy tutan- yes-man. This word is used in the same sense in Meraza dialects [6, p. 18].

Sometimes the suffix -çi is added to words even when it is not needed, it does not create a new meaning in the word: oxuyançı-singer.

As to the suffix of -ma, -mə, in Azerbaijani language, mainly the following group of new words were formed by means of this suffix: for example, words denoting the name of an object - duy-ma, dol-ma, süz-ma, etc., words denoting the term - addition, exchange, approach, etc., mutual business name and words denoting signs - striking, knocking, braiding, etc.

Let us pay attention to the language facts which are formed with suffixes of -ma, -mə in the dialects and accents of Nakhchivan: Bəsdəmə [to put on sour cream for riding, to fatten] [Nehrəm] [6, p. 11], Bəsləmə - kökəldilmiş, bəslənmiş-fatten [in the meaning of small and large horned cattle; Asma - hand towel hanging peg, tool [the hand towel must be on peg] [Şada]; Addama [Cəhri] – a stone placed in certain places for crossing a river or ditch; Atma – a beam placed on top of a shed [tövlənin tikib qurtarandan sonra üstünə ağac qoyurux, ona da atma deyərik - After building shed we placed a beam on it and named it atma [Cəl.]; Bəsləmə - bəslənmiş-fatten, kökəldilmiş qoyun, at və s- - a fatten sheep, horse etc. [Nehrəm]; Ağızgəlmə -milk ulcer etc.

The modern literary language of Azerbaijan has a wide range of opportunities to create words with morphological way. Currently, more than a hundred suffixes are used to create new words. Of these, about forty are noun-deriviting suffixes.

In the beginning of the 20th century, some suffixes, which are considered unproductive in the literary language, and actively participate in word creation in dialects, played a major role in the enrichment of the modern literary language of Azerbaijan. Let us consider some of them.

-gə. This suffix is mainly used to form nouns by joining verbs. *"Even though the painters are sorted by parts of speech in the modern language, in terms of diachrony, such differentiation among them was weak. Even today, some suffixes are used in the paradigm of both adjective and noun, or both noun and verb. This characteristic increases even more as we get older"* [4, p. 103]. In fact, it is still derived from the suffix -qaql-kək, ğağl-gəg, with the dropping of the last consonants q and k, and it gradually loses its productivity, and sometimes it disappears by

mixing into the composition of the word, e.g.: the word qabırğa ["rib"] is formed from the elements "gap-ir-ga" [8, p. 89].

Let us pay attention to the words formed with the suffix -*gə*: *Bəlgə* [*First engagement things sent from boy's house to girl's house*] [6, p. 11]; *Əmbərgə - hair band*; çəngə [Qarabağlar] - a handful; *bərəlgə - the place where the animal to be hunted passes, pusqu-the ambush, bərə-the ferry* [Ordubad]; *sısqa-thin, tilişgə-lick, cöngə-bull, sızqa-leaky, ürgə [at]-urge* [*the name of horse*], etc.

The words formed with the suffix -*gə* are widely used in other dialects and accents of Azerbaijan language, e.g.: *külgə* [Cəbrayıl, Xanlar] çenkə [Şəki Bərdə, Daşkəsən, Şəmkir]

The suffix -*qı* is used for creating nouns from verb. S.Jafarov agrees with the opinion that this suffix is derived from the suffix -qıq/-kik/-quq/-kük [8, p. 90]. M.H.Giyasbeyli, who talks about the wider distribution of this suffix in the Oghuz languages than in the Kipchak languages, also notes that this suffix creates meaningful words in the Azerbaijani language.

-*ənək*. Through this suffix, attributive and substantive nouns are formed from verbs. According to S.Jafarov, who noted that the suffix –anaq, -ənək is a complex suffix [an+aq; - ən+ək] in terms of etymology, the first part of this suffix -an, -ən is not an adjective suffix. The specificity of Azerbaijani language is mother tongue; The suffix -anaq; -ənək, which is part of the element -an, -ən, gives a reason to conclude that the verb is derived from the type suffix. So, just as the verb is the basis for the grammatical categories, it can also be the basis for the derivation of these or other names. The suffix -anaq; -ənək, is also formed with the suffixes -ın, -in, -un, -ün - the return form of verb or when the suffix -aq, -ek is added to the unknown type, it is formed by turning the type suffix into -an, -ən element due to its influence. For example, *Boğunaq-boğanaq, əkinək-əkənək* [3, p. 16] Some nouns are formed with the suffix- *anaq* in the literary language of Azerbaijan: *dəyənək-stick, sızanaq-ance, biçənək-hayfield, boğanaq-hurricane, tozanaq-dustbowl* etc.

This suffix attracts attention in Azerbaijani accents for its activite role: *ağanax* [Nakhchivan, Ordubad, Sharur] - a murky, muddy pond where buffalo lie in summer, *bicənək-hayfield* [Ordubad], *bicəngə* [Julfa] - *hiyləgər-sly, boğanaq-hurricane* [Sharur, Kangarli, Babak], *cəvcənəx* [Sharur] - *chin, cücənək* [Nehram] - man clothing similar to a woven woolen structure, *çərtdənək* [Kangarli] - chest, *çökənək* [Qarabağlar] - *collapse.*

-*ıntı*. Substantive nouns are formed from verbs with this suffix. Speaking about this suffix, S. Jafarov writes: *"There is no doubt that the first element of this is the indefinite or reflexive suffix of the verb"* [8, p. 81]. In the modern literary language, the words formed with the suffix -*ıntı* indicate that this suffix is productive: *çöküntü- sediment, kərənti [karanti]-a tool for cutting grass, gəzinti- walking, əyinti-deflection, yeyinti- food, ərinti- alloy, tapıntı- finding, qazıntı- excavation, yığıntı-pullution, girinti-çıxıntı- recess-protrusion* etc. We meet the words made by this suffix in the accents of Azerbaijani language: *biçinti* [Naxçıvan] – small pieces left over from sewing clothes, *birənti* [Kəngərli] - 1. together; 2. aggregate, sum; 3.yolayrıcı- crossroads, a place where different roads meet.

-*ti*. This suffix serves to form substantive nouns from verbs. S.Jafarov disagrees with N.A.Baskakov's opinion that this suffix is derived from the suffix -dıq/-dik/-duq/-duk, and puts forward the opinion that it is derived from the suffix -ı/-i/-u/-ü: *"Its closeness to that suffix in terms of form can justify that it is true"* [10, p. 95]. Meeting, sprouts, greens, etc. used in modern Azerbaijani literary language are words formed through this suffix.

In the dialects of the Azerbaijani language, we meet less the words formed with the help of this suffix: *çalatı* [Shaki] - yogurt yeast, *çıpırtı* [İmishli, Kurdamir] – *çırpı - brushwood.* E.g.: *qaraltı - siluet, hənirti - howl, ağartı - bleach, bağırt ı-screamed.*

The indicated suffixes played a great role in the enrichment of Azerbaijani literary language due to internal possibilities.

Let us note that it is clear from the modern view of the vocabulary composition of the dialects and accents of Nakhchivan that the morphological method is more productive than the lexical and syntactic method in the process of word creation. Most of these linguistic facts are formed by adding various suffixes to word roots.

The process with the morphological way of word creation has such meaning and shape characteristics that it is necessary to study them in both general and special aspects of the suffix system of Azerbaijani language, that is, in relation to different parts of speech. "When analyzing any sound, phonetic and phonological aspects should be considered as a whole" [5, p. 800].

The common features of the suffixes involved in the process of morphological word creation are their lexical-grammatical signs, productivity, derivational ways, meaning creation, and its special aspects can be determined in relation to separate categories of speech. In the linguistic facts that we find in Nakhchivan dialects and accents, different parts of speech are also formed like the same part of speech is formed from one part of speech.

Professor M.H.Giyasbeyli said about these processes that take place in Azerbaijani language, *"Suffixes that form the same category as well as different categories acquire a lexical-grammatical feature. This shows that the lexicon and grammar are closely related, and the lexicon plays an important role in the grammatical structure of the language. Therefore, in our language, suffixes have lexical, lexical-grammatical, and grammatical properties as they serve both fields - lexis and grammar"* [4]. The main feature of lexical suffixes in the majority of morphologically formed words in the dialect and accents of Nakhchivan is to create new meaningful words that express a certain concept.

In fact, lexical-grammatical suffixes also make new meaningful words that express a certain concept. However, unlike lexical suffixes, words formed through this type of suffixes do not undergo any grammatical changes in their structure when they come into contact with other words.

Characteristics of name-creating suffixes in Nakhchivan dialects and accents

Azerbaijani dialects and accents differ from the literary language phonetically, syntactically, and lexically, as well as morphologically. Professor Buludkhan Khalilov writes about the morphology of dialect and dialect facts, and the importance of its study for traditional linguistics: *"Morphology has a wide connection with the department of dialectology. It is impossible to study grammar in depth without knowing the many morphological regularities in our dialects. It can be said that there are many linguistic facts that confirm the connection of most of the topics taught in morphology with dialectology"* [13, p. 26]. When we analyze the living folk spoken language in the Nakhchivan dialects, we come across interesting linguistic facts related to name-forming suffixes and forming nouns. M. Huseynzade gives the definition of modified nouns as follows: *"Modified nouns are nouns formed by external signs, that is, by changing the shape of simple words. Such nouns are called the nouns formed with morphological way. By adding a word-correcting suffix to simple words, a correcting noun is formed from various parts of speech"* [6, p. 26]. Morphologically, the role of name-forming suffixes in word formation is important. In the morphological structure of the dialects and accents of Nakhchivan, there are many different aspects, as well as in other dialects of the Azerbaijani language; this concerns also aspects that are identical with the modern literary language. It is possible to observe these different, characteristic features more clearly in the process of word formation by morphological means. In Nakhchivan dialects and accents, a particular suffix is more active or, on the contrary, weaker than in the literary language. Rather, a certain suffix can end on more words or parts of speech

and form more new words in dialects than in literary language. This linguistic fact is also evident in the dialects and accents of Nakhchivan. For example, a certain suffix that is productive in the literary language has the ability to create more words in the dialects of Nakhchivan and creates many new words that are not used in the literary language, or creates a completely new meaning in the word. This can be considered a lexical-morphological way of word creation. The process of word formation by lexical-morphological method is the main tool that closely connects the word creation of Azerbaijani language with grammatical structure and morphology. Here, new words are formed by adding word-creating suffixes to existing words. This method is the richest and most productive type of word creation. *"In the lexical-morphological type of word creation, suffixes can be grouped by parts of speech: noun modifiers, adjective modifiers, verb modifiers, adverb modifiers"* [10, p. 76]. In general, word-correcting suffixes can be divided into two groups according to their relationship with parts of speech: 1) suffixes belonging to only one part of speech; 2) suffixes common to several parts of speech that include more nouns and adjectives. This is historically explained by the generality of both categories. Such commonness is less in verb forming suffixes. Most of the suffixes that form verbs belong only to the verb itself.

Thus, in the dialects and accents of Nakhchivan, there are a number of characteristic word-correcting suffixes that form correcting nouns, which actively participated in the creation of new words by joining nouns and verbs. Such suffixes can also be found in Nakhchivan dialects and accents. These are valuable in terms of preserving the ancient features of Azerbaijani language. In the dialects and accents of Nakhchivan, word-creating suffixes are divided into two groups: 1. Name-fcreating suffixes; 2. Verb creating suffixes. In the dialects and accents of Nakhchivan, the suffixes that form names are divided into two parts according to their origin: a) suffixes belonging to the Azerbaijani language; b) suffixes of Arabic and Persian origin.

In the dialects and accents we are discussing, new words formed by means of name creating suffixes occupy an important place. Name-creating suffixes are combined with different parts of speech to form new words. However, not all of these suffixes are equally involved in the word creation process. While some of them can be added to words and even now create new words, some of them no longer have the ability to create words, and the number of words formed with these suffixes is also small. Considering these characteristics, they are divided into two groups: productive and non-productive. In the dialects and accents of Nakhchivan, not all of the suffixes that make up names are mentioned, but only some of them, and we give the suffixes that serve to create words without dividing them into groups:

-anax, -ənəx', -nax, -nəx'. This suffix joins nouns, adjectives, and verbs to form words that express the name of the sign and the result of the action: for example, *sızanax-acne, bicənəx'- scabies, döyənəx'-hard place, etc.*

-acax, -əcəx', -ənəx'. This suffix is attached to verbs to form substantive and attributive nouns: for example, *çırpacax, tutacax, keçinəcəx' [chirpajakh, tutajax-handle, chechinajax`] etc.*

-cax, -çax, -çıx. This suffix is added to verbs and sometimes to nouns to form nouns and adjectives: for example, *qolçax, irgəncax [qolchax, irganjakh] etc.*

-lı, -li, -lu, -lü [-nı, -dı, -rı]. This suffix is a productive suffix. A lot of new words have been created through it: for example, *əlli-ayaqlı-quick, boylu-pregnant, durumnu-, damarrı-veined etc.*

-ıx, -ix', -ux, -üx'. This suffix is added to verb roots to form nouns and adjectives: for example, *batıx, ütüx', təntix', düşüx' [batikh, utux`, tantix`, dushux`] etc.*

-çı, -çi, -çu,-çü. Salim Jafarov writes about the *-çı*[4] suffix we are talking about: *"This suffix mainly makes names that are*

combined in six meaning groups" [7, p. 156]. The suffix we are talking about is one of the productive suffixes in the modern Azerbaijani literary language, as well as in the dialects of Azerbaijani language. In the dialects of Nakhchivan, this suffix creates words denoting the concept of profession, art, and occupation: for example*, quzuçu, sünnətçi, töycü, karxarçı, kəlçi, belçi, ayaqçı, südçü, suçu, əppəyçi, tapılçı, xərmənçi [quzuchu, sunnatchi-circumciser, toyju, karkhanachi, kalchi, belchi, ayagchi, sudchu-milk maker, suchu-waterman, appaychi-bread maker, tapilchi, kharmanchi],* etc.

-ça, -çə. By means of this suffix, nouns with diminutive content are formed: for example, *döşəkçə- a mattress, sandıxca-a little chest, ləyənçə-a little basin, qazanca-a pot, dühcə-duhja, qulança-gulancha etc.* In Nakhchivan dialects and accents, we observe that the words ending with the suffix *-ça, -çə* also have other meanings. In this context, let us note that in the modern Azerbaijani literary language, as well as in Turkish languages, this suffix does not only mean diminutive - for example, the word *yetimçə-orphan* means caressing, pity.

-ma, -mə, [-ba, -bə, -və]. This suffix is added to verbs to form nouns and adjectives. For example, *basdırma, artırma, burma, çalma* [a small scarf tied under the big scarf], *hörmə, dişdəmə, salma* [çay], *yappa [horma, dishdama, salma [tea], yappa].*

-əm suffix is one of the unproductive suffixes. This suffix is involved in the formation of words such as bəndəm-bandam, küzəm-kuzam.

-lax, -ləx' and the phonetic variants of this suffix -dax, -nax, -dax', -dex' from nouns such as otdax, xitdəx' // ximitdəx', çıtdax, çatdax, xışdəx', dişdəx' [otdax, xitdax' // khimitdax', chitdax, chatdax, khishdax', dishdax'], and from verbs to express adjectives and abstract concepts forming nouns: for example, dannax, cızdax, öddəx' [dannax, jizdakh, oddakh'], etc.

-qu, -ğu suffixes are mainly attached to verbs to form nouns. For example, *çalqu-chalgu [broom], qurqu-gurgu* [lie, cunningly constructed game], etc.

-lıx, -lix', -nux, -dıx, -dux. This suffix attracts attention with its productivity. Joining most parts of speech, it forms nouns that express different meanings: for example, *başdıx-bashdikh [an amount of money given from the boy's house to the girl's house on the eve of the wedding], -döşdüx' doshdukh' [apron], cığallıx, xuruşdux-cigallikh, khurushdukh [naughtiness],* etc*.*

-gən, -kən the suffix is attached to both effective and ineffective verbs, forming adjectives expressing the concept of sign, quality, character: for example, *deyingən-talkative, söyüşkən-sweary, sürüşkən-slippery,* etc.

-ov, -öv. "This suffix is one of the non-productive suffixes in our language that is disappearing by joining the word it joins" [9, p. 159]. Let us pay attention to the lexical units formed by the suffixes -ov, -öv in Nakhchivan dialects and accents: for example, *selov, kəsov, ərov, kədov, kirov, bicov, gicov, əcov, hacov, tırtov, pərtov [selov, kasov, arov, kadov, bijov, gijov, ajov, hajov, titov, partov],* etc.

In general, the materials of Azerbaijni dialects and accents play as important a role as written monuments in the study of the process of word creation in the Azerbaijani language by morphological means, and in the discovery of ancient word-creating suffixes. Thus, when each dialect or accents is examined, along with characteristic suffixes, ancient forms are also identified. Sometimes the suffix that shows itself in one or two examples is observed in other dialects and accents, Turkic languages, as well as in other words in written monuments. Thus, it is possible to obtain extensive information about the origin and distribution of the suffix.

Summarizing all these features of name creating suffixes, we can come to the following conclusion:

- In the dialects and accents of Nakhchivan, a suffix can be added to a word that does not end in the literary language;

- The painter creates a completely new meaning that does not exist in the literary language by joining the same word;

- Some suffixes used in the dialects and accents of Nakhchivan can be attached to more parts of speech than those in the literary language. It is clear from the actual linguistic materials that the differentiation between suffixes in the dialects and accents of Nakhchivan is weak compared to the literary language. This means that the historically existing feature remains in the dialect.

The verbs created with morphological way in the dialects and accents of Nakhchivan

One of the parts of speech that has interesting, rich, and characteristic features in the Nakhchivan dialects and accents of the Azerbaijani language is the verb. *"According to its general grammatical meaning, the verb denoting work, situation, action is considered the core and component of morphology as a part of speech. In Turkology, the archaicization of verbs, types of lexical meaning, structure, classified and non-classified forms, as well as categories such as type, negation, effectiveness and ineffectiveness have been systematically studied"* [18, p. 273]. In the Nakhchivan dialects and accents of the Azerbaijani language, the verbs that attract attention with some different characteristics are included in the analysis at the level of research. Within this division, it is possible to distinguish two subgroups: a) verbs that are present in Nakhchivan dialects and accents and continue to function within the framework of the same semantic load in the modern Azerbaijani language; b) verbs wgich are present in Nakhchivan dialects and accents, but in the modern Azerbaijani language have a more or less different semantic load.

The verbs created by morphological way are widespread in Nakhchivan dialects and accents. This is related to the lower development of the lexical and syntactic process of word modification in dialects and accents compared to the morphological process. Except for some verbs in Nakhchivan dialects and accents, it is possible to easily divide most verbs into their roots and suffixes. Because the root of this type of correcting verbs preserves its independence as a lexical unit even today in the modern Azerbaijani language. *"In Azerbaijani linguistics, morphing verbs are sometimes studied only under the heading "morphing verbs formed from nouns", and sometimes both "morphing verbs formed from nouns" and "morphing verbs formed from verbs". But since the suffixes that form verbs from verbs are morphological indicators of the types of grammatical meaning of the verb, it is considered more appropriate to study them within the type category of the verb"* [18, p. 276]. The verbs used in the Nakhchivan dialects and accents of the Azerbaijani language have different structures. Some verbs consist of only one root, they are used as real verbs without taking any formative suffixes. Another group of verbs, according to their structure, consists of a root [or main] word-correcting suffix. The root or basis of these types of verbs are mostly other parts of speech, names. There are also verbs that consist of two or sometimes more words. Thus, the verbs in the dialects and accents of Nakhchivan can be divided into three parts, as in the literary language: 1) simple; 2) derivative; 3) complex. Based on this division, we often come across verbs in Nakhchivan dialects that provide interesting facts for the explanation of the root-base and suffix problem. Since the object of our research is the verbs formed by morphological means, we include the modification verbs in the analysis.

Morphologically formed verbs observed in Nakhchivan dialects and accents can be grouped as follows: a) suffixes that form verbs from nouns; b) suffixes that form verbs from verbs; c) suffixes that form verbs from phonetic words. These types of verb-forming suffixes form verbs with new meanings from different parts of speech. Let us take a look at the morphological features of the suffixes that play an important role in the verb formation process:

a) Suffixes which form the verbs from nouns:

The suffix -la, -lə is almost the most productive among the suffixes that created the verbs from nouns. This suffix joins nouns, adjectives, numeral, adverbs and imitations to form verbs with different meanings close to the semantics they express. In the literary language of Azerbaijan, in our dialects, as well as in most Turkic languages, the suffix -la [8, p. 44; 13, p. 256; 16, p. 195] is considered one of the productive suffixes. This suffix forms a new word by joining words ending in a vowel and consonants. In Nakhchivan dialects and accents, we meet the verbs formed by this suffix *burmala, dolakla, tehla, qirmala, gomarla, chirmala // chirmala, mijila, kardila, chatila, yella, guyla, chamla, axala, eshele, chalihla, shotala, sigalla, tumarla, fitilla, gachila, dumsukle,* etc. Moreover, in Nakhchivan dialects and accents, depending on the last consonant of the word, variants of the suffix -la, -lə are observed -da, -də, -na, -nə, -ra, -rə; for example: *buretde, arittda, batda, jida, serinne, agirra,* etc. are observed. Of course we can observe this type of phonetic variants of the suffix -la, -lə in some dialects and accents of the Azerbaijani language.

-lan, -lən. This suffix creates verbs from nouns and adjectives. The suffix which we are talking about is fixed both in Azerbaijani literary language and in Azerbaijani dialects and accents. *"In Nakhchivan group of dialects and accents, the verbs kirtmikhlanmak [to be pinched] and poshelamak [to get scalded]are formed by joining that suffix to the words kirtmikh and poshe, which are interesting from a lexical point of view"* [2, p. 113]. Rasul Rustamov writes about this suffix, which is also used in most Turkish languages: *-lan, -lən is one of the productive suffixes in the dialects and dialects of the Azerbaijani language. This suffix consists of two separate suffixes -la -lə and -n* [15, p. 82]. Hadi Mirzazade notes that this suffix is another variant of the suffix *-la, -lə* [14, p. 209]. Of course, we cannot agree with this idea. Linguistic facts show that a variant of any suffix means a different form as a result of another intervention. Let us pay attention to the example: the phonetic variants of suffixes *-la, -la* in Nakhchivan dialects, such as phonetic variants *-da, -da, -ra, -re,* verbs with the same root formed by suffixes -la, -la and their phonetic variants do not differ from each other in meaning. For example, *tulazla // tulazda, tulamazda [to fling out],* etc.

Regarding the definition of the boundaries of these suffixes, S. Jafarov writes: *"Either the suffixes -la, -la, which form verbs from nouns, or the suffixes -lan, -lən, -lam, -lem, laş, -ləş have been stabilized as suffixes with independent form and semantic properties"* [9, p. 64]. With the help of the addition of this suffix, formative verbs are formed from nouns expressing a more general meaning, especially from adjectives. The verbs formed by means of this suffix mainly mean that the object, sign, or quality has changed according to the situation. Let us give an example of the verbs formed by adding the suffix *-lan, -lan, -dan* to the noun in the Nakhchivan dialects and accents: *gijallan, gileylan, diraklan, jibirikhlan, lobazdan, arvatdan, qodazdan, avaralan, samalan, kishilan, yaylan [yayılmaq], qalakhlan, lillan, qalbilan, yaylıqlan, buxaralan, buratdalan, buralan, dillan, hellan, giralan* etc., forms of verbs like those in relation to similes to animals - *quchuhlan, khoruzlan, qodukhlan, miğirran,* etc.

In Nakhchivan dialects and accents, we also meet the expressions formed with the suffix *-lan, -lən* that have phonetic variants *-dan, -dən, -ran, -rən and -nan, -nən.* For example, *godazdan, digirran,* etc.

-laş, -ləş. -rəş, -ş These suffixes create verbs from nouns, adjectives, numbers, and adverbs. This suffix consists of the suffixes *-la, -lə* and *ş.* Certain scientific thoughts have been formed about this suffix, which is considered productive in Nakhchivan dialects and accents. In some of the works related to Turkic languages, it is mentioned that this suffix is not a suffix that serves independent word creation, but is a sign of the opposite type. In Azerbaijani linguistics, M.Huseynzade, S.Jafarov, Z.Taghizade, Z. Budagova, and others considered the suffix *-laş, -ləş* as an independent word-correcting suffix, while S.Jafarov and Z.Budagova grouped the verbs formed with this suffix according to meaning, Z.Taghizade and S.Jafarov explained the differences between the independent suffixes *-laş,*

-*ləş* and the suffixes -ş [-la+ş, -lə+ş] which are added to express the mutual type of verbs with suffixes -la, -lə.

In Nakhchivan dialects and accents, let us pay attention to the verbs formed from different parts of speech with the help of the suffix -*laş, -ləş: hojatlash, bogazlash, sallash, bitlash, itlash, shitlash, italash, sirmalash, yavalash, uzakhlash, allash, betarlash* [*höcətləş, boğazlaş, sallaş, bitləş, itləş, şitləş, itələş, sırmalaş, yavalaş, uzaxlaş, əlləş, betərləş*] -"to be worst", *irilash,* etc. These types of verbs are states - quality, sign, characteristic etc. In Nakhchivan dialects and accents, we can meet with the different phonetic variants of suffix -*laş, -ləş* as -*daş, -dəş, -raş, -rəş, -naş, -nəş, -zaş, -zəş*: for example, *agizdash, maslahatdash,havirrash, itdash, zavzash, partovlash* [*ağızdaş, məsləhətdaş, həvirrəş, itdəş, zəvzəş, pərtovlaş*] etc.

In the dialects and accents of Nakhchivan, in addition to the productive suffixes that we analyzed above, there are also many verbs formed with non-productive suffixes. We should note that in the dialects and accenst of Nakhchivan, the number of non-productive suffixes that creats verbs from nouns is more than the number of productive suffixes. Unproductiveness is not determined by the fact that these suffixes only create fewer words. On the contrary, verbs formed by adding some unproductive suffixes are more in their number. For example, the verbs formed with the suffixes -ı, -i, -u, -ü, which are considered unproductive, are more numerous than the verbs formed with the suffixes -lash, -lash, which are characterized by their productivity in Nakhchivan dialects and accents, as well as in other dialects and accents of the Azerbaijani language. Z.Tagizadeh considers the suffix -$ı^4$ more productive suffix in comparison with the suffix -*la, -lə* [17, p. 111]. Z.Budagova also puts this suffix among the productive suffixes [1, p. 107], S.Jafarov considers the suffix -$ı^4$ more productive suffix than the suffix -*ıx, -ik, -ux, -ük* [9, p. 112], so this fact can be considered true.

The unproductiveness of any suffix is determined by the formation of new verbs with its addition. The main issue is that the process of creating a new word cannot continue with that suffix. This suffix cannot be called the most productive.

The suffixes -*ı, -i, -u, -ü* create verbs from nouns, adjectives, adverbs, and verbs. There are few verbs formed with this suffix in Azerbijani language. For example, *kiri, barki, sangi, tangi, turshu, zari, aji, alazi, bekari, lali [to beg], olazi [to be late, to slow], tapi [a little dry], shini [to reveal] [kiri, bərki, səngi, təngi, turşu, zarı, acı, alazı, bekarı, lalı [yalvarmaq], ölazi [ləngimək, gecikmək], təpi [azca qurumaq], şini [üzə salmaq]*, etc. Verbs formed by adding the suffix $ı^4$ to nouns express the concept of quality, sign, feature, depending on the meaning of the root.

-*a, -a.* suffix forms verbs from nouns and adjectives. In the Turkological literature, there are different opinions about the suffix -a, -ə, which is one of the unproductive suffixes used to form verbs from nouns in the dialects and accents of Nakhchivan. Most Turkologists consider this suffix independent and unproductive. In Azerbaijani linguistics, this suffix is also included among unproductive suffixes. However, Z.Taghizade called the suffix -a, -ə, *"the most productive verb modifier"* [17, p. 111], while S.Jafarov called it "relatively unproductive" [9, p. 109]. To our mind, compared to other suffixes, -a and -ə are unproductive suffixes. This suffix is considered one of the oldest word-correcting suffixes, because some of the roots in the verbs formed by adding the suffix -a, -ə have lost their independence and their meaning is unknown. Often it is not possible to separate these verbs into root and suffix. In the dialects and accents of Nakhchivan, verbs are formed almost exclusively from monosyllabic initial roots with the addition of the suffix -a, -ə. We do not come across verbs formed from two or more syllables by means of this suffix. In the dialects and accents of Nakhchivan, verbs are mainly formed from nouns with the help of this suffix. For example: *chita, bula, dila, tila, disha, chila* [*çitə, bülə, dilə, tilə, dişə, çilə*] etc.

The suffixes - *ar, -ər* are added to adjectives and nouns to form verbs. Unlike some verb modifying suffixes, "... this suffix exists in all Turkic languages" [3, p. 129]. Indeed, the Yakut language is more productive, partly for the Tuvin language. In the dialects of Nakhchivan, it is possible to detect several linguistic facts formed by means of this suffix. For example:*kozar, agar, goyar, bozar, qomar [közər, ağar, göyər, bozar, qomar]*, etc.

The suffixes -sı, -si, -su, -sü form verbs from nouns and adjectives. For example, *to mould, to regret, to taste [kifsimək, heyfsinmək, tamahsımaq]*, etc. This suffix, which is used in most Turkic languages, is considered unproductive and archaic by grammar authors of various Turkic languages. Some Turkologists consider the suffixes -sa, -sə and -$sın^4$ as a more developed form of the suffix -sı. Hadi Mirzazade, speaking about the suffix -sa, -sə, writes: *"We find this suffix in a group of words in the modern colloquial language and dialects, after a small sound change, in the form -$sı^4$"* [14, p.112]. Therefore, H.Mirzazade does not see any difference in content between these two suffixes. Thus, they are a single suffix, the only difference is that the open *a, ə* sounds in the suffix -sa, -sə are replaced by the closed *ı, i, u, ü* sounds. Dialectologist M.Shiraliyev, in his monograph "*Nakhchivan group dialects and accents of the Azerbaijani language*", when talking about verbs, focuses not on the suffixes that form corrective verbs, but on some characteristic suffixes used mainly in Nakhchivan dialects, one of which is the suffix -si. *"This suffix is attached to the word kif and forms the verb kifsimek. It is possible to see the bold version of the suffix -si in the word kifsimek in the word qaxsımaq, which is derived from the word qax"* [2, p. 113]. K.Ramazanov considers the suffix -si *"...mainly from some characteristic suffixes used in Nakhchivan group dialects and accents"* [2, p. 113].

The suffixes -al, -əl, -l create passive verbs from adjectives and numbers that reflect a certain state and situation. This suffix appears mainly in Oghuz languages. It is not observed in Kipchak and other languages. Azerbaijani linguists S.Jafarov, Z.Taghizadeh, Z.Budaghova, M.Shiraliyev, and others include this suffix among unproductive suffixes. In Nakhchivan dialects, the addition of suffixes -al, -əl, -l has the characteristic of forming verbs from adjectives and sometimes from nouns: for example,*boshal- be loose, dara be narrowl, genal-be wide, dikal-be steep, duzal- be straighten , turshal- be sour, sagal- be heal, qaral- be darken, qisal- be shorten, dinjal-be rest, chokhalbe widen, azal-be less [boşal, daral, genəl, dikəl, düzəl, turşal, sağal, qaral, qısal, dincəl, çoxal, azal]* etc.

The suffixes -ıq, -ik, -uq, -ük, -ıx create verbs from nouns, adjectives, numbers, and adverbs. For example, *darikh-miss, karikh-be confused, pisik-be loathe, birik-be gather [darıx, karıx, pisik, birik]* etc.

The suffixes -sın, -sin, -sun, -sün create verbs from nouns and adjectives. For example, *diksin-to scare, heyifsin-to regret, yaysin-to spread [diksin, heyifsin, yaysın]* etc.

The suffixes -sa, -sə create verb from nouns and adjectives. For example *susa, qəribsə.* Of course, sometimes the suffix –sa creates verb by joining to the end of the verbs - for example, *qapsa, axsa.* Let us pay attention to different thoughts about this suffix in the Azerbaijani linguistic literature: *"It is a phonetic variant of the suffix -sı, -si, -su, -sü used in the Azerbaijani language. The forms of -$sın^4$ are the historical development form of suffix –sı"* [11, p.114]. H. Mirzazadeh writes about the suffix -sa, -sə: *"This suffix is found in a group of words in the modern colloquial language and dialects in the form of -$sı^4$ after a small sound change"* [14, p. 212]. Therefore, the suffix -sa is spread as a variant of the suffix -$sı^4$ in Nakhchivan dialects and accents.

-*sov.* This suffix is adjacent to the word *sələ* [smooth in Azerbaijani literary language] and forms the verb *salasovlamakh - to mow the ground [sələsovlamax].* For example: *"Buğdanın şərti odu kun, yeri gərək sələsovlayasan ["The condition of wheat is to burn the fire, you need to mow the ground"]"* [2, p. 113].

The suffixes -lat, -lət create verb from nouns and adverbs. For example, kirlat-to dirty, darinlat-to deep, yogunlat-to thin [kirlət, dərinlət, yoğunlat]. The suffixes -rə, -ri, -rən create verb from noun and adjective - for example, iyran, chiyran [iyrən, çiyrən].

The suffixes which creats verbs from verbs should be especially mentioned. "As verbs are created from other parts of speech, verbs are also formed from simple, inflectional verbs. Such verbs are considered modifications because their form and meaning are changed by means of various suffixes" [6, p. 124]. In the dialects of Nakhchivan, there are a number of word-correcting suffixes, which only form verbs from verbs. These suffixes have certain differences from the suffixes that form verbs from nouns. If the above-mentioned suffixes make a new part of speech, a word expressing a new meaning, apart from one part of speech, these suffixes do not create a new part of speech, they create the meaning of repetition and intensity in the verb, sometimes they give the verb an additional meaning. Suffixes forming verbs from nouns are mostly simple in composition, while suffixes forming verbs from verbs are both simple and complex. Suffixes that form verbs from verbs are mainly attached to monosyllabic roots. It is impossible to separate a certain part of verbs formed from verbs into roots and suffixes, and to separate the meanings of roots. This shows that the roots and some suffixes in the verbs have become archaic, as well as the antiquity and unproductiveness of the suffixes. Let us pay attention to these suffixes:

The suffixes -ı, -i, -u, -ü create verbs from nouns, adjectives, and adverbs, as well as create new verbs from verbs. Verbs formed with this suffix are few in Nakhchivan dialects. The addition of this suffix creates repetition and other nuances in the verb, attaches to more monosyllabic verb stems. For example, suru, qazi, qarsi, tapi, kiri, shini [sürü, qazı, qarsı, təpi, kiri, şini] etc.

-mala, -mala both in dialects and accents of the Azerbaijani language [8, p. 131], and also among the archaic unproductive suffixes in Turkic languages should be mentioned. This suffix is complex in composition: -ma + la, -mə+lə. It is a very rare suffix in Turkish languages. This suffix is not mentioned in any work dedicated to the historical morphology of the Azerbaijani language. Let us take a look at the verbs formed with the suffix -mala, -mələ in Nakhchivan dialects and accents: for example, bogmala, burmala, sarmala, jizmala, basmala, qarmala, eshmala, bukmala, yolmala, durtmala, chirmala, [boğmala, bürmələ, sarmala, sərmələ, cızmala, basmala, qarmala, eşmələ, bükmələ, yolmala, dürtmələ, çırmala].

The suffixes -qa, -qala, -ğa, -ğala, -xa, -xala, -gələ, -kələ, -cala are the unproductive suffixes which create verbs from nouns. For example: chulga [çulğa]-to cover, chulgala [çulğala],yirgala [yırğala], jigala [cığala], ovkhala [ovxala], chalkhala [çalxala], yakha [yaxa] // yaykhala [yayxala], yikha [yıxa] //yikhala [yıxala], dongala [döngələ], avkala [əvkələ], sikhjala [sıxcala], etc. Among them, the suffix -qala is used more widely in majority turkic languagesr [3, p. 185]. S.Jafarov presents the suffix -qa, -ğa only as a suffix that creates the verb from verb [9, p. 138]. These suffixes can sometimes form verbs from nouns in Nakhchivan dialects and accents: dashqa [daşqa], qashqala [qaşqala].

-ğan is an unproductive suffix and met by chance. And it is mentioned that the suffix is "related to the verbs -qır, -qız, -qıs which exist in turkic languages" [11, p. 116].

-ala, -ələ; This suffix joins to the verb and forms the concept of frequency and repetition in its meaning. For example: portala, qovala, jozala qomarla, komala, itala, sapala, eshala, silkala [pörtələ, qovala, cözələ, qomarala, komala, itələ, səpələ, eşələ, silkələ] etc. There are some words that formed by this suffix but cannot be seperated to root and suffix - for example, üşələ. S.Jafarov [9, p. 118] and Z. Budagova [1, p. 109] mentioned this suffix, which also exists in some Turkish languages.

-ıx, -ik, -ux, -ük: in Nakhchivan dialects and accents, the suffix is one of the less common suffixes in the creation of verbs. This suffix appears in most Turkic languages, regardless of whether it makes more or less words [3, p. 130]. Despite the fact that most linguists named this suffix unproductive, S. Jafarov named it a suffix that "gradually loses its productivity" [9, p.106]. To our mind, this suffix has lost its productivity many years ago, new words are not formed by means of this suffix, and the verbs expressing quality, sign, and condition that were formed earlier are also a minority. For example, sinikh, ajikh, solukh, durukh, dolukh, donukh, yapikh, jibirikh, bezik [sınıx, acıx, solux, durux, dolux, donux, yapıx, cıbırıx, bezik] etc.

-ış, -iş, -uş, -üş, -ışın, -aş, -əş. Rasul Rustamov named this suffix "one of the main suffixes that create a verb from the verb" [15, p. 132]. Z. Budagova also considers the mentioned suffix to be productive for the modern Azerbaijani literary language and shows that this suffix creates verbs with different lexical meanings by joining them to verbs [1, p. 145]. Therefore, "such type of suffixes do not have a word-creation feature", these suffixes "do not create a word with a new lexical meaning" [1, p. 109]. For this and other reasons, Z.Budagova considers it correct to call species suffixes formative suffixes [1, p. 107]. Indeed, most of the such type of suffixes not only do not create a word with a new lexical meaning, but also cannot create repetition, intensity, and other shades of meaning in the verb. Mainly these suffixes create a new kind of meaning in the verb. This suffix creates repetition and intensity in the content of the word to which it is added. Let us pay attention to examples in Nakhchivan dialects and accents: for example, yigish-to gather [yığış] / yigishin [yığışın], qapish-try to take [qapış] / qapishin [qapışın], qarish-to mix [qarış] /qarishin [qarışın], qirish-to wrinkle [qırış], qamash- to be dazzled [qamaş], yavish [yavış], darash-to fall on [daraş], etc.

-ışgə, -işgə, -uşgə, -üşgə. This is a complex suffix formed by the combination of -ış, -iş, -uş, -üş common type suffix and the ancient directional case suffix -gə. With the help of this suffix, verbs formed from different parts of speech in Nakhchivan dialects and accents indicate that the state of a certain object is gradually changing; olushga [ölüşgə], sinishga [sınışgə].

-an, -ən. In Nakhchivan dialects and accents, verbs created with this suffix also occur. They join more monosyllabic nouns and adjectives to create the verbs: for example, shitan, ushan, qimjan [şitən, üşən, qımcan]. In the works on the modern Azerbaijani language and its dialects, the suffix -an -ən is considered unproductive, several examples of the derivative verb formed with the help of this suffix are shown [8, p.122].

-la, -lə // -da, -də: for examle, salla, qovla, ayla-to stop, sortugla-to suck, tigla –to gather, aritda-to clear [salla, qovla, əylə, sortuğla, tığla, arıtda], etc.

-əclə: for examle, doyajla-to beat [döyəclə].

-na, -nə: for examle, qisna, asna-to yawn [qısna, əsnə].

-ız: for examle, qalkhiz-to lift [qalxız].

-quz: for examle, durquz-to wake, to stand [durquz].

The next category consists of suffixes that create the verbs from imitations. These types of verb-creating suffixes form the verbs with new meanings from different parts of speech.

-la, -lə düdülə. This word is observed in other dialects and accents of Azerbaijani language in the phonetic variant of didula [15, p. 78]: jujula, kishila, tutula, eshala, bijila, pufla, ufla, mala [cücülə, kişələ, tütülə, eşələ, bijilə, püflə, üflə, mələ] etc.

-da, -də. The suffix –da is the phonetic variant of -lə . Kishda [Kişdə] means "to chase away". It is formed from the imitatation of kiş // kış. Dialectologist Rasul Rustamov notes that this word is used in other Azerbaijani dialects and accents in the form of koşla [to expel, remove] [15, p. 126].

-qır, -xır, -qur, -xur, -kir, -ür these suffixes mainly create the verb from imitations. For example haykhir, havkhir, finkhir,

asgir, hichgir, ufur, fisgir [hayxır, havxır, fınxır, asqır, hıçqır, üfür, fısqır], etc.

The suffix *-an, -ən* creates verb from imitations as it is in nouns and adjectives. For example: *shitan, davran [şitən, daran]*.

The suffixes-*aş, -əş, -ş* create verb from nouns and imitations. For example: *satash, chatash, darash, yanash, malash, tutash, chaqqish [sataş, çataş, daraş, yanaş, mələş, tutaş, çaqqış]*, etc.

-ılda this suffix mainly creats verb from sound imitations. For example: *zarilda, pichilda, hirilda, gurulda, mizilda, girilda, shaggilda [zarılda, pıçılda, hırılda, gurulda, mızılda, qırılda, şaqqılda]*, etc.

-ran, -rən. For example: *firran-to turn, digirran [fırran, dığırran]*.

-lan, -lən, -dən, -dan create the verb from sound imitations: for example, *tullan, qigildan, zirildan, hirildan, zarildan, ziqqildan, zoqqumlan, guppuldan [tullan, qığıldan, zırıldan, hırıldan, zarıldan, zıqqıldan, zoqqumlan, guppuldan]*.

In addition to the above-mentioned suffixes that form verbs, in Nakhchivan dialects and accents, there are suffixes that create such linguistic facts that it is difficult to find a few examples of them. Let us pay attention to the completely unproductive, incidentally encountered, mostly monosyllabic stems, formed morphologically, creating verbs from nouns and verbs: *-ırğa* is an unproductive suffix which creats the verb from adjective: for example, *yadırğa*. *-ız, -iz* is an unproductive suffix creating the verb from adjective. Other examples are: *bərkiz; -ca, -cala sıxcala [sikhchala-to press], -qla*; *oynaqla [to jump]; -an, -ən*: *dadan, khirtdan [xırtdan]; –xul*: *burkhul [burxul]*; *-ux* for example, *durukh, burukh [durux, burux]*; *-nux*, for example - *vurnukh, tinjikh [vurnux, tıncıx]*; *-man, -mən:* for example, *chirman, dirman [çırman, dırman]*, *-ıt⁴*, for example, *qanjit/qunjit [qancıt / quncıt], uyut [üyüt]; -t,-ət* - we meet some words which formed with this unproductive suffix. *Arit [Arıt]* ahould be also mentioned - the semantic load of such words is more evident within the sentence. *Apar bu pencəri tərtəmiz arıtda gətir [Take these greens clear them and bring back]. Gözət, səhərdəndi Həsəni gözəttəyirəm ki, gizlincə çıxıb getməsin [I've been watching Hasan since morning so that he doesn't leave]*. Some of part of such words of this type have lost their independent lexical meaning, have become archaic, and their meaning cannot be determined.

4 Conclusions

In conclusion, let us note that in the dialects and accents of Nakhchivan, two forms of syntactic word creation are more often observed: 1. The combination of two words with different meanings; 2. The combination of two words with different meanings in the form of a compound word. As in other dialects of the Azerbaijani language, in the dialects and accents of Nakhchivan word creation with syntactical way, as well as syntactic features, do not differ much from the literary language due to their phonetic and morphological patterns. Locality is rarely observed here. Nevertheless, the dialects and accents of Nakhchivan share some of the syntactic features found in other dialects. For example, it can be a violation of the word order in a sentence, the use of sentences in a concrete and concise model, sometimes omitting the message or message in simple sentences, the use of connectives and other auxiliary words in a communicative speech, a lot of syntactic repetitions, repetition of sentences, changing the sides of the word combinations of the definition, etc. It is one of the specific aspects of the dialect and accents of Nakhchivan.

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DEVELOPMENT AND MANAGEMENT OF THE TOURIST AND RECREATION COMPLEX AS A STRATEGIC DIRECTION OF THE TOURISM ECONOMY IN THE SYSTEM OF SUSTAINABLE DEVELOPMENT

[a]ANDRII IVANOV, [b]NATALIA REMZINA, [c]LESYA KOLINETS, [d]ARTEM KOLDOVSKIY, [e]VIKTORIA ODNOLKO

[a,b,e]*Odessa National Maritime University, 34, Mechnikova Str., 65029, Odesa, Ukraine*
[c]*Vilnius Gediminas Technical University, 11, Saulėtekio Str.,10223, Vilnius, Lithuania*
[d]*Zhytomyr Economic and Humanitarian Institute of the University "Ukraine", 18, Vilskyi Shliakh Str., 10020, Zhytomyr, Ukraine*
email: [a]*andriy5555@i.ua,* [b]*nremzina@ukr.net,* [c]*lesya.kolinets@vilniustech.lt,* [d]*akoldovskiy.pa@gmail.com,* [e]*odnolko.vika@ukr.net*

Abstract: The article examines the importance of developing and effectively managing the tourist and recreational complex as a strategic direction in the tourism economy, considering the principles of sustainable development. The factors influencing the successful implementation of this strategy were analyzed, in particular, infrastructure, tourism potential, socio-cultural context and environmental aspects. The management principles of the tourist and recreational complex were studied, and critical strategic approaches to ensuring sustainable development were determined. Based on the received data, recommendations are proposed to ensure the increase in competitiveness and profitability of the tourism sector based on preserving environmental sustainability and cultural heritage. The importance of careful planning, coordination, and functional cooperation of all interested parties to successfully develop the tourism and recreation complex in the context of sustainable development has been proven.

Keywords: strategic management; tourism; tourism economy; sustainable development; tourism development strategy.

1 Introduction

The development and management of the tourist and recreational complex is gaining more and more relevance in the tourism economy in light of modern challenges of sustainable development. In particular, today, tourism is recognized as one of the critical sectors of the global economy, which has significant potential in developing various countries and their regions. Thus, the growth of international travel, the development of technologies and changes in consumer preferences of tourists require new approaches to managing tourism resources not only at the level of individual enterprises but also at the level of the entire industry.

However, along with the growth of tourism volumes, problems related to the need to preserve natural and cultural resources, ensure sustainable development, and equalize the distribution of economic benefits are also growing. Accordingly, there is a need for functional improvement of tourism resource management strategies to maximize tourism benefits for the economic system with minimal negative impact on the environment and cultural heritage. That is why it is essential to consider tourism as a functional component of sustainable development, which requires the integration of economic, socio-cultural, and environmental aspects into the strategic planning and management of the tourist and recreational complex. On the other hand, the study of the mentioned issue has sufficient potential to clarify the key factors and tools that contribute to achieving a balance between economic benefit and ensuring the efficiency of the development of the tourism sector of the economy.

In addition, due to recent global challenges, such as climate change, military aggression by Russian non-humans, and the COVID-19 pandemic, tourism is becoming an even greater focus from the perspective of ensuring sustainable development. At the same time, the sustainability of the development of the tourism sector of the economy becomes a strategic goal for many countries, as it contributes to balanced economic growth, improves the quality of life of the local population, and preserves natural and cultural values. Accordingly, in dynamic changes in the socio-economic situation and technological progress, solving the problems of effectively managing the tourist and recreational complex is essential for business and the national economy.

Thus, we conclude that the study of the development and management of the tourist-recreational complex as a strategic direction in tourism economics is particularly relevant today in the context of the needs of the modern world, where effective tourism management plays a significant role in achieving global sustainable development goals. Solving problems related to the efficiency of the tourist and recreational complex will contribute to developing new functional strategies and innovative approaches to the development of tourism that meet the modern requirements of sustainable development and contribute to the general preservation of cultural and natural heritage for future generations.

2 Literature Review

The study of modern approaches to managing the tourism and recreation complex based on sustainable development is familiar to economic science. In particular, several works by various scientists comprehensively consider this issue based on the need to ensure the effectiveness of tourism management.

Thus, it is worth noting the research of such scientists and practitioners as I. Britchenko [1-10], Y. Danshina [11], M. Masl'an [21] and R. Sodoma [32-34], in which the concepts and strategies of sustainable tourism development are discussed, relevant theoretical approaches and practical aspects of their implementation are highlighted. At the same time, the authors focus on defining the fundamental principles of sustainable development in the context of the tourism economy and the methods of their implementation.

In addition, it is necessary to pay attention to the works of researchers such as M. Dziamulych [12-19], O. Ramos [22], M. Rudenko [24] and I. Tsymbaliuk [37], whose books consider strategies for managing tourist flows based on the principles of sustainable development. At the same time, the authors investigate the critical aspects of the formation and management of tourist flows using modern digital and information technologies and determine the necessity of applying innovative approaches in the tourism economy. Separately, the authors determine the need for an effective banking system to serve the tourism sector based on the widespread use of online banking and digital software applications.

Another important direction of research in this field is the works of N. Khomiuk [20], J. Reitšpís [23], T. Shmatkovska [25-31] and I. Tofan [35], in which the authors pay attention to the critical analysis of tourism resource management and its impact on the sustainability of tourism. In particular, the problems and prospects of management of tourist complexes given sustainable development goals are highlighted. At the same time, special attention is paid to the field of green tourism of the agricultural sector as a source of reserves for tourist flows in the future.

In general, existing research in tourism management covers a relatively wide range of problems. Moreover, new challenges emerging in the global economic system require an in-depth study of key aspects of the development and management of integrated tourist and recreational complexes in the context of forming the strategic direction of the tourism economy in the system of sustainable development.

3 Materials and Methods

Various scientific research methods were used to study and analyze the development and management of the tourist and

recreational complex as a strategic direction of the tourism economy in the system of sustainable development, which made it possible to conduct a comprehensive study of this topic.

In particular, the initial stage of the research was to apply the system analysis method, which allowed us to consider the tourist and recreational complex as a complex system that includes various components and helped to determine the functional relationships between them. This method also made it possible to decide on the key factors and processes affecting the development of the tourist complex and identify opportunities for improving its management.

The method of economic zoning was used to analyze the economic potential of tourism and its role in economic development. This method made it possible to conduct a comparative analysis of economic indicators and identify potential strategic directions for tourism development in different areas, considering their characteristics and resources.

The comparative method was applied to analyze tourist and recreational complexes' development and management experience in different countries. It allowed comparing different approaches and strategies and determining the most effective practices for their implementation in a practical context. Applying this method made it possible to identify critical trends for making informed strategic decisions in managing the tourist and recreational complex.

In general, using these methods made it possible to carry out a comprehensive analysis and development of strategies for developing and managing the tourist and recreational complex, considering the principles of sustainable development. Each method provided an opportunity to systematize and analyze information to achieve research goals.

4 Results and Discussion

One of the essential modern trends in developing the tourist market is strengthening the differentiation of tourism policy in the regional section and the decentralization of management and regulation of tourist activities. In this regard, it is necessary to consider the specifics of tourist demand and supply and the current and projected level of tourism development. The study of tourism as a system makes it possible to single out several problems, among which the key is forming and implementing state plans to develop regional tourism systems. At the same time, the functional mechanism of management of the tourist and recreational complex provides the primary function of the socio-economic development strategy, which is related to developing the country's or region's potential in the context of the attractiveness of tourist resources. This strategy should cover economic actions related to market processes and non-market actions carried out at various levels by state institutions, particularly local self-government bodies. At the same time, the formation of an effective model of management of the tourist and recreational complex will make it possible to create conditions for the investment attractiveness of tourist enterprises and allow the development of infrastructure, preserving the ecology and cultural heritage, which in the complex will contribute to increasing the well-being of the economic system as a whole.

The formed and formalized tourist complex of any state is an integral part of the global economic system and one of the growth points of the national economies of individual countries. In particular, according to the UN World Tourism Organization, the tourist complex currently generates every 11 jobs, and its contribution to the world GDP is 9%. Therefore, considering tourism's economic and social importance, the World Tourism Organization made forecast calculations of the development of tourist flows and income from tourism for the long term. In particular, the report "Tourism Towards 2030" predicts that the number of tourist arrivals worldwide will grow annually (Table 1).

Table 1: Determination of forecast values of international tourist arrivals

	Number of international tourist arrivals, million people				
	1980	1995	2010	2020	2030 (forecast)
World	277	528	940	1.360	1.809
Africa	7.2	18.9	50.3	85.0	134.0
America	62.3	109.0	149.7	199.0	248.0
Asia and the Pacific	22.8	82.0	204.0	355.0	535.0
Middle East	7.1	13.7	60.9	101.0	149.0
Europe	177.3	304.1	475.3	620.0	744.0
including:	20.4	35.8	57.7	72.0	82.0
Northern European region	68.3	112.2	153.7	192.0	222.0
Western European region	26.6	58.1	95.0	137.0	176.0
Central and Eastern European region	61.9	98.0	168.9	219.0	264.0

Source: [38]

Improving the quality of products and services within the framework of developing the tourist complex at the current stage has a significant economic, social, scientific and technical significance for specific organizations and the country's national economy. Tourists who are satisfied with the service in hotels, restaurants, service bureaus, and tourist complexes become active propagandists. They often visit these places, helping to increase the flow of tourists and creating a high reputation for their favourite tourist areas. Accordingly, the quality of service contributes to increasing the economic efficiency of tourism; therefore, improving the quality of products and services contributes to increasing the competitiveness of tourist organizations both on the domestic and international markets, which ultimately leads to the sustainable development of the country's economy and its functional integration into the global economic system.

Thus, the primary goal of improving the tourist and recreational complex is the formation of a competitive tourist and recreational industry as one of the country or region's leading areas of territorial specialization. Its functioning significantly contributes to socio-economic development due to the increase of the revenue part of the budget, growth of investments, preservation and rational use of cultural, historical and natural heritage. An essential role in this belongs to the system of management of the processes of providing services of the tourist and recreational complex, which regulates the functions and methods of this system, subject-object relations of the complex, and connections between service and information technologies. These technologies make it possible to effectively coordinate dynamic situations inherent in the field of recreational services because, within the framework of a single tourist and recreational complex, it is possible to build an effective scheme of redistribution of financial flows from highly profitable sectors (for example, the entertainment industry) to less profitable ones in the interests of sustainable economic development of the entire complex, using the principles planned to budget. Therefore, the importance of developing such a scheme is determined by the fact that the tourist and recreational complex provides the functional needs of the relevant services for tourists and the local population, thereby significantly improving the quality of life.

In this aspect, it should be noted that the World Economic Forum annually investigates the level of competitiveness of the tourist and recreational complex in cooperation with representatives of Booz&Company, Deloitte, the International Air Transport Association, the International Union for Conservation of Nature, the World Tourism Organization (UNWTO) and the World Travel and Tourism Council. The result is a functional, analytical report on countries' competitiveness and tourist attractiveness. To determine the

competitive status of countries in the field of providing tourist services, the Tourism Competitiveness Index is developed, which is calculated as the arithmetic mean of three sub-indices:

1. Legislative basis of tourism.
2. Conditions of business and infrastructure of the tourist complex
3. Human, cultural and natural resources of tourism.

At the same time, the leading countries, according to this index, include the most developed tourism states (Figure 1).
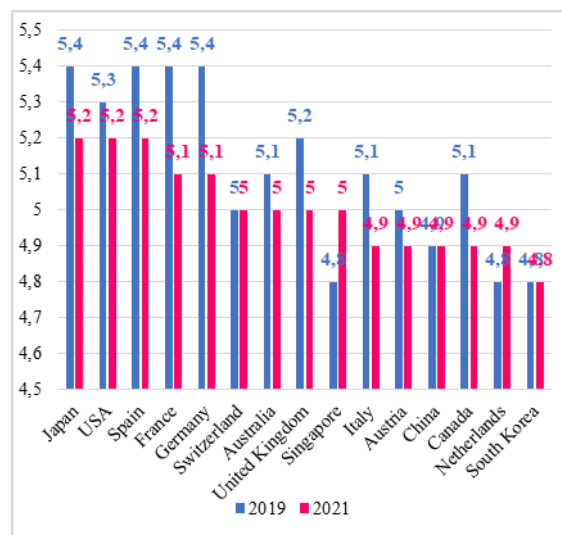

Figure 1. Top 15 Countries in Travel and Tourism
Competitiveness Report
Source: [36]

The tourism competitiveness index includes such components of the tourism complex as:

- air transport infrastructure quality;
- quality of education;
- quality of roads;
- quality of infrastructure of railways and ports;
- the quality of the national transport network;
- the quality of the natural environment.

In our opinion, the following should also be added to this list: the quality of medical care, the quality of hotel and excursion services, the quality of training of specialists in the field of tourism, the quality of food establishments and other entertainment establishments, etc.

In our opinion, management of the quality of the tourist product should also be carried out systematically; that is, at the national level, a system of strategic management of the quality of the services provided should function in the context of the functioning of the tourist complex. Such a system is a specific organizational and economic mechanism with a precise distribution of powers and compliance, regulatory and legal support, economic basis, procedures, processes and resources, which are necessary for managing the quality of the tourist product. The goal of strategic management of the quality of the tourist product, as well as the implementation of the organizational and economic mechanism of the management of the tourist and recreational complex, is to increase the profitability and competitiveness of this or that enterprise (and as a result, the national tourism sphere) by increasing not only the quality of products but also all related processes.

So, we conclude that increasing the efficiency of the tourism and recreation complex can be implemented by coordinating the development strategy with the elements of the organizational and economic mechanism and implementing the appropriate methods and techniques of the organizational and economic mechanism at

the micro, meso, and macro levels. Such a scheme for the development and implementation of the strategy for the tourist-recreational complex determines the dependence and interconnection between individual elements of the organizational and economic mechanism. Focusing on dynamic development and the results of effective cross-sectoral interaction of various tourist and recreation complex structures, it is expedient to search and research scientific directions for improving the development mechanism of functioning at each level. It is also noteworthy to explore ways to enhance and activate the economic potential of the tourist-recreational complex, the specific utilization of which depends directly on the available tourist-recreational resources and demand (both domestic and international), as well as the level of economic interaction between sectors of the national economy. Accordingly, the following provisions should be formed at the national level as a concept of strategic management of the quality of tourist services within the development of the tourist complex:

- general improvement of the quality of products and services as the main principle of the tourism sector;
- mastering of quality management methods by managers and specialists at all levels of tourism management;
- formation of legal, economic, social, organizational, and technical conditions that enable tourist organizations to successfully solve quality-related tasks;
- formation of a mechanism to protect consumers from substandard products.

Therefore, the management system of the operational processes of the tourism and recreation complex as a whole and its objects should consider the possibilities of coordination and functional integration of service processes of adjacent enterprises, the need and reserves for expanding the production capacity of tourism and recreation production, increasing labor productivity and improving its quality. All this should be ensured by the interconnection of the production, investment and innovation potentials of tourist enterprises included in the complex.

In general, for the balanced development of the tourist and recreational complex, it is necessary to implement several coordinated measures at the micro, meso, and macro levels. In particular, at the micro level, the primary task is to improve the quality of service to tourists and vacationers, form a network of small private hotels and other types of accommodation facilities, and gradually develop the service infrastructure. At the meso level, an important issue is the formation of perspective plans for the development of recreational zones and the regulation of the recreational load on tourist and recreational territories, the assignment of individual zones to the status of a nature reserve with their further use for recreational purposes, as well as the implementation of a tourist marketing complex. At the macro level, an important task is an intersectoral coordination and the formation of a positive image of the country or region on the international tourism market, the development of nationwide programs to stimulate tourism, the gradual improvement of legislation in the field of tourism, and the improvement of standards in the industry.

5 Conclusion

Thus, we conclude that ensuring the quality of services in the modern conditions of the development of recreational and tourist complexes is one of the most critical components of the efficiency and profitability of the subjects of the tourism industry. At the same time, the quality of individual components of the tourist complex determines its competitiveness. The system of strategic management of the quality of tourist services within the framework of the development of the tourist complex in modern conditions should become a permanent process of activity aimed at increasing the level of services provided in the field of tourism, improving the elements of the production of related services and implementing national quality systems. That is why all processes of designing, ensuring and maintaining the

quality of a tourist product should be integrated into a strategic quality management system.

Accordingly, increasing the rating positions of the tourist attractiveness of the tourist and recreational complex is one of the critical socio-economic tasks and a necessary condition for ensuring the development of tourism and the successful integration of this complex into the world tourist market. In this aspect, the study of tourist attractiveness as a multi-indicator is relevant, in which a set of indicators of tourist potential is accumulated, which creates the basis for its effective use and conditions the formation of demand for tourist products.

Thus, the main task of developing the tourism sector at present is the need to create long-term programs for the development of the industry and their financial support based on the construction of an adequate investment infrastructure. The modern investment policy should successfully combine the country's regional, state and international interests while ensuring progress in socio-economic life. All this will make it possible to form a strategic course for the development of the territory based on the formation of a single, balanced recreational complex capable of ensuring the sustainable development of tourism, focused on establishing and maintaining a balance between the preservation of natural and historical and cultural resources, economic interests and social needs and the development of tourism, as well as, creating favorable conditions for the formation of a quality tourist product.

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PRIORITIES FOR SUCCESS IN ACADEMIC COMMUNICATION

[a]NOVRUZALIYEVA SEVDA JAID

Azerbaijan Medical University, S.Vurgun Str., AZ1022, Baku, Azerbaijan
email: [a]sevda.novruzaliyeva@mail

Abstract: In the article, the priorities of the process of achieving success arising from academic communication are disclosed, explanatory and guiding quotes from English sources are given for each priority. No comments and opinion of any researcher are used, but the author only expresses her own conclusions. It is already a fact that there is no language in the world today that has as much published material and potential as English in terms of motivating and inspiring people, especially young people, and there is no country that has as much theoretical and practical knowledge in this direction as the United States. That is why this article mostly refers to sources from the United States.

Keywords: communication; success; priority; society; motivation.

1 Introduction

People engage in academic communication in the family, workplace, and society solve problems, present approaches, make objections, make suggestions, and in this way, they create the foundation for society to exist as a thinking, building, and huge force. "A person becomes a potentially vulnerable object of information manipulation... Due to the fact that in the 21st century, the information space and information pressure on humanity is in the stage of excessive change, the discussion taking place in the mass media has a great impact on the public consciousness. Most of the ideas and knowledge about the world are formed in a person under the influence of mass media such as television, radio, press, and the Internet." [6, p. 175]. This article, explores academic communication from six approaches. In considering "Success and courage", the concept of courage is presented as a driving force. In considering "Success and passion", the concept of passion is understood as an energy carrier. In "Success and dream" analysis, the concept of dream is explained as a planner. In "Success and error" investigation, the concept of error is brought to attention as a corrective by distinguishing bad from good. In "Success and learning" part, the concept of learning is explored as potentially cumulative. In "Success and obstacle" part, the concept of obstacle is explored as empowering. In the article, as one can see, the concept of success is studied as a stimulus, energy carrier, plan maker, reformer, potential collector, and power giver.

2 Method

This research is conducted using descriptive and comparative methods. Analysis and synthesis methods, as well as static and functional methods are also used. When studying the priorities of success in academic communication, the personal-functional - communicative approach - is in the foreground. Being like the spiritual ocean, academic communication has hundreds of fields of study, although the article touches on six of them. The investigated issues are brought to attention through the filter of speech activity and speech communication.

3 Results and Discussion

During the preparation of the article, we have used English quotes of world-known philosophers, including Aristotle, the world-known seafarer, Christopher Columbus, world-known writers, including Johann Goethe, world-known heads of state, including Winston Churchill, the world-known scientists, including Albert Einstein, and Benjamin Franklin two well-known inventors, world-famous businessmen, including John Rockefeller, world-famous singer Michael Jackson, American TV presenter Brian Williams, and American football coach Paul Bryant, quoting from relevant sources.

Success and courage

Without courage, a person cannot achieve anything. Every success and progress towards the future originates from the concept of courage. If a person has all the positive qualities, including intelligence, skill, honor, honesty, knowledge, experience, compassion, but he does not have the courage and fearlessness to start something, that person cannot achieve anything good in life, life will pass by him, and success rooted in innovations will not knock on door. A person without success is not respected, he will not become a person who is considered among his acquaintances and in the circle he lives in. It means that courage is at the head of success. Courage is considered such a spiritual catalyst that everything a person can have depends on it, otherwise, as we said, nothing good will happen. If not, the world-renowned Greek philosopher Aristotle would not have written 23 centuries ago, putting the concept of courage next to reason and honor [1]:

You will never do anything in this world without courage. It is the greatest quality of the mind next to honor.

We know that C. Columbus is a brave Spanish seafarer known all over the world. He crossed the width of the Atlantic Ocean 8330 kilometers in the 15th century at the head of a ship expedition, facing death at any moment, but the highest goal he set before him led to the discovery of a large continent, which is now called America. If the great success achieved by this sea traveler had not been preceded by great courage and immense enthusiasm, often referred to as 'passion,' a victory and a monumental discovery that astonished the world would not have materialized. That is, enthusiasm and courage just as there is a burning torch, a great enthusiasm is a great torch that ignites a great courage. To describe the scale of his great success, Columbus wrote the name of the coast and the ocean, exaggerating the concept of courage [12]:

You can never cross the ocean until you have the courage to lose sight of the shore.

In general, there are factors in courage, in the courage that leads to success exhibited by an ordinary person, which gives vitality, inspiration, stability, resistance, endurance to courage. There are many factors that create courage: intelligence, strength and charm are among these factors. That is, in order to understand the advantages of courage, which is the door to success, a person first needs intelligence (the ability to distinguish between bad and good), then strength (energy). Let the thoughts of the mind be moved, in the end magic is needed to arrange what intelligence and energy have revealed, and as long as this order remains existing thanks to magic, courage will create miracles and achieve success after success. Even the 18th century genius German philosopher I. Goethe, who proceeded from the concept of dreams when discussing the necessity of the concepts of intelligence, strength and charm to the concept of courage, emphasized [9]:

Whatever you think you can do or believe you can do, start it. Action has magic, grace and power in it.

An experienced success is not a permanent success, just as an experienced failure is not permanent. In this case, the important thing is not to lose heart, not to extinguish the burning desire, not to forget the goal, and to confidently move from one failure to another failure. Every failure in itself leaves a positive mark, gives experience, instills in a person tenacity, endurance, character, and irreversibility. Just as the gold that goes into the fire is purified, refined, freed from impurities when it burns, so a person who goes from failure to failure should know that an eagle can rise high when it flies against the wind, but not when it flies with the wind. That is, like the wind lifts the eagle, it is the courage that takes a person to the goal, makes him taste the taste of success, and being not afraid of failure, makes him more successful than other people. In discussing this idea, the expression by former British Prime Minister Churchill comes to mind [2]:

Success consists of going from failure to failure without losing enthusiasm.

A success remains a small success when there is no transition to the next success. In order to make the success permanent, to give it vitality, to make it an irreversible image, to achieve success after success, one has to work hard. In fact, a failure that one faces instills in him a conviction that this experience is not enough to achieve a further success. We live in the bosom of a nature created by the Creator, in this nature, which is God's masterpiece, changes are taking place every moment, there is not a second without progress. If we look at a flower and look at it again after leaving it, this flower is not the previous flower. If we go back there again, this river is not the previous river. These moments of nature seem to tell us that, oh man, the success you have won should not be the last, go forward, this life does not like those who fall back, but those who move towards success after success. Life loves these people abundantly. Churchill, who points out that a success is not the end, and a failure is not the end, emphasizes the courage that gives life to success and says [2]:

Success is not final; failure is not fatal: it is the courage to continue that counts.

The size of a person's success depends on the size of his courage. Thus, the success of a person with great courage becomes great, and the success of a person with little courage remains small. Only love, love for something, makes courage abnormal. Alexander the Great would not have overthrown the Iranian empire 23 centuries ago and sent troops to the north of India if it were not for the extreme courage born of excessive love. If there was no such courage, the troops of the French emperor Napoleon Bonaparte would not have reached Moscow. If it wasn't for this great courage, the Uzbek conqueror named Amir Teymur would not have conquered the lands of Iran. Without this bravery, Yuri Gagarin, the first cosmonaut of the planet, would not have circled the Earth once in a spaceship for one hundred and six minutes, facing death. He will be envied. If there was no courage, an iron will, and a high character, i.e., courage-will-character triad, the political giant Heydar Aliyev would not have assumed the leadership of Azerbaijan at the age of 70, facing death in order to save Azerbaijan, which was being erased from the world map.

Success and passion

Passion is a storehouse of energy and the first door to success. All the great scientists of the world, including Newton, Einstein, Edison, made great inventions only because of passion (loving what they do and doing it stubbornly). Passion is a human feature. It's such a sweet thing that strengthens the mind, that no matter where a person goes, where he is from, what hi does, even if he does nothing, this enthusiasm doesn't leave him in peace. It continuously motivates him to progress in his favorite work. This happens because when a person loves a cause with his heart and is soulfully attached to it, it is as if the entire universe lends its support. The world-renowned 18th century German philosopher G. Hegel very rightly says that [4]:

Nothing great in the world has ever been accomplished with passion.

The genius poet of Azerbaijan Nizami wrote the poem "Khosrov and Sirin", the great poet of Azerbaijan Fuzuli wrote the poem "Leyli and Majnun", the Italian poet Dante wrote the comedy "Ilahi", the genius Russian writer Leo Tolstoy wrote the novel "War and Peace", the brilliant Russian writer F. Dostoyevsky wrote "Crime and Punishment", the brilliant English playwright V. Shakespeare was writing the tragedy "Hamlet", the genius French writer V. Hugo was writing the novel "Les Miserables", the genius Italian artist Leonardo da Vinci was painting the "Mona Lisa" portrait, and the genius Italian sculptor Michelangelo was building the "David" monument. They were in a state of ecstasy, they were at the peak of their love and passion for the work they were doing.

A working person who lives with enthusiasm gains energy from his favorite work, receives inspiration, and achieves new successes. The life of such a person is an ideal life; there is no time or desire for gossip, malice, or envy. At the beginning of every success, stands diligent work, born from inspiration fueled by excessive enthusiasm. American Thomas Edison, one of the great inventors and businessmen of the world, called the concept of hard work, which is the mother of success, "sweat of the brow", highlighting the formula "inspiration+sweat=success", keeping the concept of inspiration in a powerless state against hard work, and widely promoting motivation. He wrote that [9]:

Success is one percent inspiration, ninety-nine percent perspiration.

A person cannot do a job without energy, energy is needed not only for physical work, but also for spiritual work. If one thinks without doing anything, he is expending energy, because it is not separate from the energy that initiates, stimulates, and directs thought. It becomes clear that namely desire and passion create spiritual energy, and it is extreme desire and passion that creates great energy. The former president of the United States, Donald Trump, who is a great businessman, says with great enthusiasm when talking about the synthesis of success [5]:

Without passion you don't have energy, without energy you have nothing.

Excessive enthusiasm is a gift from God, not everyone has it. Due to such enthusiasm, many people have achieved great success in the world of science, business, and art. A. Einstein is one of such people. This scientist, the world's greatest physicist, won the Nobel Prize thanks to his enthusiasm, created the theory of relativity, found the formula for splitting the atom, and made other great scientific innovations. This scientist explains that he is an over-enthusiast [3]:

I have no special talent; I am only passionately curious.

An individual who is looking for a bright future for himself, who wants to achieve great success, is obliged to constantly, without a break, be loaded with excessive enthusiasm. Every success achieved is a harbinger of a success that has not yet been achieved, even in the dream. A person who sets such a goal for himself should not get stuck in the circle of achieved success. One who is content with what this success has provided and does not think about the future will never see new success. Transient success is not a guide for a person with the potential to achieve a great future. The world's biggest billionaire, American oil tycoon John Rockefeller, addressed people who want to achieve great success and said that [11]:

Go as far as you can see, when you get there, you will be able to see farther.

What this great businessman and statesman wants to say is that no matter what work you do, do not stop moving forward in that work, because after one success, the horizons of the next success will begin to appear clearly. That is, nature never ceases to renew a person with tremendous inherent potential. Why should it stop?

Success and dream

A dream is one of the ways to success, and if it is big and long-term, the realized result will inevitably be big. Thus, the English mathematician I. Newton used differential and integral calculus, light dispersion, chromatic aberration, made his life a candle that illuminates this path.

The above-mentioned German physicist Einstein dreamed for years to create the theory of relativity, the quantum theory of light, the concept of the photon (light sensor), the laws of the photo effect, the law of photochemistry, Brown's theory of motion, the theoretical foundations of fluctuations (oscillations), Boze quantum statistics in ways that stand in physics. Einstein, who called himself "passionately curios" ("extremely enthusiastic"), preferring dreaming to knowledge, knowing that

the dream is infinite and knowledge is finite, stating that the dream stimulates progress and paves the way for evolution (gradual development) emphasizes that [3]:

Imagination is more important than knowledge. For knowledge is limited whereas imagination embraces the entire world, stimulating progress, giving birth to evolution.

Nothing in the world is faster than a dream, maybe it is faster than light that travels three hundred thousand km per second. Future times will show whether this assumption is true. Everything that is real is born from logic (the reality that confirms or denies the existence of an entity). Dreams do not subordinate to logic, as they make decisions beyond it. Logic, which is a branch of science, rests on fact (reality), it does not have the power to wake up from it, but imagination does not know distance and space, it penetrates all three of them in a tenth of a second. Big and small, every type of success is a dream. Einstein was absolutely right when he said that while logic takes you from A to Z, and imagination takes you everywhere [3]:

Logic will get you from A to Z, imagination will get you everywhere.

Everything on earth and in heaven serves people. There are many beauties on earth and in the sky. Without them, life would not exist. Thus, a poet would not write a poem, a composer would not compose, an artist would not paint – in other words, they would be human, but not creative humans. What a person sees, hears, and feels inspires him, providing a theme for innovation and success, seeking opportunities to make him happy. A person, especially a creative one, benefits from them when dreaming and working in search of innovation and success. That is, in order to get something from the inexhaustible visible and invisible treasure of nature, it is necessary to go through the duality of "imagination + effort". All the successful ones are the ones who get through it, and all the unsuccessful ones are the ones who don't get through it. The former president of India, Abdul Kalam, invites people to look at the sky, paying attention to the constant movement of things there (the movement along the circumference of the Earth), recommends that people learn from them, dream and wish, and work [7]:

Look at the sky. We are not alone. The whole universe is friendly to us and conspires only to give the best to those who dream and work.

Almost every moment of human life is closely related to dreams, either positively or negatively. In other words, a person is the sum of what he imagines and brings out. A person who does not dream for the sake of innovation drags oneself into a spiritual and material abyss, diminishes the intellectual potential of his brain, and step by step moves toward death. People do not begin to die when aging; they begin to die when they stop thinking, dreaming, and desiring. That is, the dream is the architect not only of success, but of every situation a person faces. The well-known American writer Brian Williams rightly says that [11]:

A person starts dying when he stops dreaming.

Anyone who thinks and comes to a conclusion can confirm the truth of the opinion expressed by this author in his personal life based on experiences. It is enough that a person does not look and pass by, but looks and learns.

Success and mistake

The fourth path to success is the share of mistakes. One life path is not an example for everyone. Every person has a life path; if they find the path they were born for, they move forward on it without fear. If a person does not make mistakes on his path, he will not progress. Therefore, one must dare to make a mistake (not make the same mistake more than once). There is no doubt that obstacles, defeats and despair will be encountered in the future. Brazilian writer Paulo Coelho emphasizes that these three do not come in our way to lead us astray. God presents them to

us as three means in order to bring us back to the way we should be [8]:

When you find your path, you must not be afraid. You need to have enough courage to make mistakes. Disappointment, defeat, and despair are the tools God uses to show us the way.

In other words, if a person is caught in a problem, he is the cause of the problem, and God provides three means mentioned to give him endurance, resistance, turning back to oneself, and salvation as a way out.

A mistake has its advantages, as we discussed, provided that a person who has made a mistake must do three things - forgive the mistake, learn from it, and not repeat it. It prevents wasting time and money by learning from own mistakes. By not repeating the mistake, one preserves his personal image and avoids the mentioned losses. American football coach Paul Bryant writes about three approaches to mistakes [8]:

When you make a mistake there are only three things you should ever do about it: admit it, learn from it and don't repeat it.

As evident, a person must be great to forgive mistake, he must be wise to learn from his mistake, and he must be strong to correct his mistake. In other words, mistakes can bring great benefits if a person is great, wise, and has strong willpower. Without these three qualities, mistakes won't bring any benefits.

Although learning from one's mistakes is better than not learning, it takes a person's time, makes him stressed, and damages the respect shown to him. However, learning from the mistakes made by others is the best lesson because it costs money, there is no waste of time and money. Donald Trump emphasizes [9]:

Always try to learn from other people's mistakes not your own - it is much cheaper that way.

A person who lives the life of positive dreams is a successful person. It is true that life will throw obstacles, doubts, mistakes, setbacks in front of them in order to strengthen them, test them, taste the flavor of success. In order to overcome these negatives on the way to the goal, a person needs hard work, perseverance and self-confidence, along with living the life of his dreams. There is no limit to stand in front of these last three. Whether it is in science, art, business, or sports, behind any success lie hard work, perseverance, and self-confidence, stemming from positive dreams and wishes. Thus, hard work moves a person forward, perseverance does not allow him to retreat, self-confidence gives him energy. Isaac Newton and Albert Einstein as the world-renowned scientists-standards, William Shakespeare as the dramatist-top, Leonardo Da Vinci as the artist-giant, Franklin Roosevelt as the president-founder, John Rockefeller and Henry Ford as the businessman-billionaires, Mozart as the composer-giant and Beethoven, Mahatma Gandhi and Nelson Mandela as fighters for independence, Pele and Muhammad Ali as high-class sportsmen, Michael Jackson and Jennifer Lopez as star singers, who brought great people to their goals and achieved the enviable name - worked hard based on good wishes and dreams, perseverance is the trinity of self-confidence. Zimbabwean statesman Roy Bennett advises to live the life of dreams and desires and emphasizes [4]:

When you start living the life of your dreams, there will always be obstacles, doubts, mistakes and setbacks along the way. But with hard work, perseverance and self-belief there is no limit to what you can achieve.

To hope in a world full of hate, to pray in a world full of anger, to wish (dream) in a world full of hopelessness, to advise to believe in a world full of doubt are important things. If a person believes in what he does, if he can help himself and others in the process, if he never stops dreaming, and if he wholeheartedly believes in his work, then sooner or later, he will achieve success, as Michael Jackson once said [10]:

In a world filled with hate we must still dare to hope. In a world filled with anger we must still dare to comfort. In a world filled with despair, we must still dare to dream. And in a world filled with distrust we must still dare to believe.

From grammar, we know that punctuation marks are graphic signs that create syntactic connections between words or phrases in writing (text). A point, a comma, a colon, a semicolon, a question mark, an exclamation mark, multiple question marks, multiple exclamation marks, and other punctuation marks complete the thought, pause, intonation, clarify, postpone thoughts. In a text without punctuation marks, the meaning is unclear, ideas do not conclude, it's unknown where a new idea begins, the positions of words or phrases are not visible. In other words, a mysterious text is created. Japanese businessman Haruki Murakami emphasizes that a life without mistakes is meaningless, just as a text without punctuation marks is meaningless writing because through mistakes, a person gains confidence for success by gaining experience [8]:

Errors are punctuation marks of life. Without those, as in the text, there is no meaning.

Success and learning

To be successful is not to earn money, but to manage money and invest it. In other words, managing money is harder than earning it. To earn the money that will bring financial success, a person must have a business mind. Unless this latter exists, the money collected, regardless of the number, will be exhausted by being diverted to unnecessary and superfluous needs. Benjamin Franklin, an 18th century American statesman and educationalist, emphasized the importance of investing in knowledge, stressing the importance of investing in knowledge in order to become a successful businessman [8]:

If a man empties his purse into his head, no one can take it away from him. An investment in knowledge always pays the best interest.

The one who benefits from learning is the one who thinks about what he has learned, looks for ways to implement it, examines the options, and in this way finds the way to success. Thinking is also useless if there is no learning in between. That is, thinking-learning or learning-thinking are among the concepts that cannot be separated from each other. If we have to divide them, we won't be able to achieve the set goal; in other words, we won't be able to succeed. The ancient Chinese philosopher Confucius explains that one who does not think and learn is in great danger (will face great losses) [8]:

He who learns but does not think is lost. He who thinks but does not learn is in great danger.

In the physical sense, an old person is a person who is very old and lives a life based on years. Spiritually old is the person who, even if young, doesn't learn anything that renews his life. In other words, people begin to die from the moment they stop learning, because a brain that does not think and learn gets exhausted, bringing a person closer to death and leading to various illnesses, including Alzheimer's disease. A person who engages in work that benefits others throughout his life may not achieve great success, but he can be considered happy, as he has sufficient income for himself and his family. A person who builds his life correctly, does not disturb the order of life for others, earns a living in a proper manner, does not suffer from stress, does not fall into despair, takes care of himself, and does not live in hell while on Earth, lives to the end of his age allotted by the great God. Henry Ford, a great businessman of the United States, made the following statement [10]:

Anyone who stops learning is old, whether at twenty or eighty. Anyone who keeps learning stays young. The greatest thing in life is to keep your mind young.

In one of the stories of the English playwright Shakespeare, 5 important problems of human life are touched upon, and 5 ways to solve each problem without harm are shown. First, allow to show what you have, that is, let the greater part of your work be concealed. Second, speak less than you know, that is, speak less, do not talk too much. Third, let learning be more than thinking, that is, thinking without learning is in vain. Fourth, ride more than walk, that is, ride a lot to see many places. Fifth, borrowing should be less than lending, that is, borrowing is more harmful than lending. Fifth, lending should be less than borrowing, that is, lending is more harmful than borrowing [12]:

Have more than you show. Speak less than you know. Learn more than you know. Ride more than you go. Lend less than thou owe.

There is no such thing as coincidence in the world. Everything is logically connected to something else. If there is nothing, there is no separate thing. The concept of success in academic communication does not deviate from this law of nature. There are many ways to achieve success, every great person known in the world approached it differently. One of these people is the king of Brazilian football named Pelé. His statement includes hard work, perseverance, learning, education, dedication, and above all, love. Learning takes the third place in this five. No matter how much there is work, perseverance, education, dedication, and love, a person striving for success cannot move forward if he does not learn about specific work [8]:

Success is no accident. It is hard work, perseverance, learning, studying, sacrifice and most of all, love of what you are doing or learning to do.

Success and obstacle

Obstacle (difficulty) is among the ways that lead a person to success. If there are no obstacles in one's life, no friends and enemies are found, no springboards for advancement are discovered, no life experience and work practice are gained, the character is not shaped, in other words, the person will not evolve into a chosen personality but will continue his life as an ordinary person. By conquering America, C. Columbus, a symbol of a man who cannot be feared in the world, recommends that a person should do two things in order to reach the set goal, the destination — to overcome obstacles and distractions [11]:

By prevailing over all obstacles and distractions, one may unfailingly arrive at his chosen goal or destination.

The quote suggests that a person who overcomes obstacles and avoids distractions does not make mistakes on the path he is taking. That is, the one who makes a mistake does not overcome obstacles, does not avoid distractions.

Every person has seen or heard the correctness of the life formula called "Dream + hard work + overcoming obstacles = success" many times in his life. It is impossible to find anyone who denies this fact. Let us cite one of millions of examples. Twenty percent of Azerbaijan's land was occupied by its infamous neighbor 30 years ago. Azerbaijani poets in their poems, writers in their works, artists in their paintings, sculptors in their monuments, composers in their compositions, singers in their performances, and the president in his unique foreign policy have not forgotten this tragedy. The whole nation united as a fist, that is, by wishing, putting in hard work, overcoming obstacles, it succeeded — it liberated the lands of Azerbaijan. This saying of the President of Azerbaijan, Ilham Aliyev, who calls people to patience, calls for patience, motivates self-confidence, and invites hard work for the sake of justice (victory to be won), is completely appropriate [5]:

During the occupation, many of us - former forcibly displaced and the people of Azerbaijan, including me - repeatedly thought that there was no justice in the world. Because if there was justice, we would not be in this situation. I was also of the same opinion. However, life has shown that there is justice, you just need to be tolerant, you need to be patient, you need to believe in

justice and you need to work to achieve justice, you need to make sacrifices.

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J INDUSTRY

PROBLEMS OF CONSTRUCTION AND OPERATION OF BUILDINGS AND STRUCTURES IN THE CONDITIONS OF RECONSTRUCTION AND RESTORATION USING UNIVERSAL MACHINES

[a]LEONID CHEBANOV, [b]LIUBOV LEPSKA, [c]TARAS CHEBANOV, [d]OLENA SHANDRA, [e]SERGEI OSIPOV, [f]ANASTASIA OSIPOVA, [g]KOSTIANTYN CHERNENKO

[a-f]*Kyiv National University of Construction and Architecture, Povitroflotskyi Ave, 03037, Kyiv, Ukraine*
email: [a]*lchebanov@ukr.net,* [b]*lyubalepskaya@ukr.net,*
[c]*chebanov.taras@gmail.com,* [d]*82j.38rx3@gmail.com,*
[e]*osypovso@knuba.edu.ua,* [f]*osypovaao@ knuba.edu.ua,*
[g]*Chernenkokv@knuba.edu.ua*

Abstract: The article considers modern landscape and development vectors in the field of reconstruction and restoration where universal machines are applied. As practical examples, two options are considered: the technology of superstructure of the attic floor - superstructure with enlarged metal block sections and superstructure of the attic floor from lightweight aerated concrete blocks. The possibilities of using BIM and robotics in reconstruction and restoration are analyzed.

Keywords: reconstruction; machines; BIM; robotics

1 Introduction

One of the features of the reconstruction should be the need to take into account the position of the facility in the urban environment, which significantly affects both the type of work performed and the general appearance of the territory on which the building is located. The reconstruction process includes not only changing the external appearance of the building, but also conducting additional studies of soils, hydrogeological and structural indicators of the object as a whole - this allows eliminating possible design errors during reconstruction [22].

Reconstruction begins with the development of a special task, which includes information regarding the goals, basic requirements, and operating conditions of the facility after completion of the reconstruction. Specialists examine the documentation of the object and then conduct a thorough inspection. The purpose of such an inspection is to identify emergency components of the building and carry out their modernization during the full construction period.

It should be noted that the reconstruction of buildings today acts as a main direction in the field of capital construction. Unlike the construction process, reconstruction has a number of features:

▪ The work performed during the reconstruction process is heterogeneous, dispersed, and small-scale;
▪ The work carried out during reconstruction differs from that carried out during the construction process (dismantling of structures, their strengthening, replacement of individual structural elements, etc.);
▪ There are cramped working conditions, and this significantly affects the overall scheme of organizing work on the reconstruction of building, especially industrial;
▪ It is necessary to implement an individual approach to restoring operation indicators and strengthening the load-bearing elements of buildings and structures.

The choice of building reconstruction method is significantly influenced by the level of cramped construction area, which determines the possibilities of organizing and technology of work using mechanization, advanced technologies, and building materials.

The development of new methods and technologies for the reconstruction of residential and other buildings, ensuring a significant extension of their life cycle, reducing and eliminating moral and physical wear and tear, increasing operational reliability and comfort, is acquiring great socio-economic importance and relevance.

In particular, one of the important tasks of residential buildings reconstruction is the elimination of moral and physical wear and tear of buildings. Very relevant in the reconstruction of the

housing stock is the development and adaptation of industrial methods and technologies that reduce the overall cycle of reconstruction work, as well as ensure the work is carried out without evicting residents, the use of new composite materials and structures which reduce the weight of the built-on floors and have increased durability. Here one should also mention development of methods and new technologies to increase the operational reliability of buildings, reduce heat losses and energy consumption, increase the comfort of apartments, improve the architectural appearance of buildings while reducing costs.

The main methods for improving the reconstruction system include the following [13]:

1. Increasing the accuracy of diagnostics and checking the condition of an existing building, which would reduce errors and diminish the labor costs of preparatory work. The invention of high-precision instruments, means of analysis and processing of results becomes necessary. The creation of such an "instrumental" system would allow for complete control and analysis of the reconstruction process, identification of dangerous areas and installation moments, which will facilitate the work of analysis experts, the reliability of decisions made will increase, and the safety margins, stability and rigidity of structural elements will be identified.
2. Improving the computerization of the design process, which ensures optimization and high efficiency of constructive, space-planning solutions. Modern calculation methods more accurately take into account the laws of deformation of materials under appropriate application of loads, the characteristics of the operation of all elements of the building, both individually and in aggregate.
3. Completely new design solutions based on the use of traditional materials (brick, metal, reinforced concrete, etc.). It is also relevant during reconstruction to use lightweight concrete (expanded clay concrete, cellular concrete) for the construction of walls and floors, to reduce the weight of the part being built on, as well as to reduce the cost of materials (by about 15%) and their installation (by 30%). The scope of application of corrugated sheets should also be increased. In large cities, it is promising to use beamless floors in a reinforced concrete frame, represented by a frame-braced system of columns and flat prefabricated floor slabs (above-column, inter-column, span). As a result of creating rigid cells, a frame-braced system is obtained. This solution would seem universal for civil and industrial construction.
4. The use of new materials (fiberglass, nanoconcrete, fiber cement, basalt-plastic reinforcement, ecowool, etc.). For example, glass-plastic (fiberglass with a synthetic binder) can be used in large commercial buildings and a number of office complexes. Its use is justified by its low weight and the ability to transmit sunlight. It can also be used as a coating for defective reinforced concrete slabs to transfer snow loads directly to beams and trusses. The number of polymer materials has grown significantly in recent years, but this is not the limit.
5. Innovative methods for restoring the performance qualities of structures: the use of prestressing in reinforced concrete structures, the use of expanding cements (self-stressing), shotcrete and much more. Particular attention should be paid to strengthening the base (gas silicization, electrothermal fastening, vibration compaction, etc.). Structures with cracks can be restored to their original appearance by applying polymers to epoxy binders, which will harden at low temperatures. Fiberglass reinforcement of cracks in combination with polymer solutions is a particularly effective set of restoration measures. The widespread use of this method is most acceptable in large-panel buildings [16]. Fiberglass reinforcement is indispensable in the reconstruction of buildings exposed to

aggressive environments, performing a protective function. Columns can be wrapped with fiberglass impregnated with a binder; several layers can increase the load-bearing capacity of a given structure by more than 2 times [17].

6. Application of new construction machines and mechanisms, expansion of the range of machines. Development of effective technologies and use of automation tools in limited, cramped conditions.

This last point is extremely important, especially with regard to the use of universal machines in reconstruction and restoration, since the effective use of such machines can optimize the process.

Moreover, at the present stage of the technological race and, as a consequence, in the conditions of increasing need for the reconstruction of old industrial buildings, the most pressing issue is the development of a scientifically based approach to the architectural reconstruction of industrial buildings. There are a number of 'textbook' reconstruction methods:

▪   Strengthening structures to restore lost load-bearing capacity or increase load-bearing capacity (in construction science and practice, methods for strengthening the structures of industrial buildings have been sufficiently developed and tested; as a rule, strengthening structures does not change the architecture of the internal space and the external appearance of the building);

▪   Partial replacement of structural elements to increase their load-bearing capacity or change the architectural and construction parameters of the building (depending on the requirements of engineering and technology, crane beams, columns are replaced, roof elevations are raised, additional spans are added, the number of floors is increased; partial replacement of structural elements and architectural changes construction parameters of a building can lead to changes in its internal space and external appearance);

▪   Reconstruction with complete or partial replacement of building structures and even the shape of the building - sliding new ones of higher productivity onto old foundations at metallurgical plants, installing new chemical equipment on old foundations and shelves, adding additional floors at light industry enterprises.

In the practice of developed countries, old industrial buildings are often renovated, in other words, they lose their original function. In particular, in the UK this approach is most developed and, moreover, it is strongly supported both at the level of local government and at the state level. The main task of the architect-renovator of an old industrial facility is to develop a design solution that is attractive for investment and at the same time not implying losing the aesthetic and functional potential of the building or complex of buildings, with one "concern" - functionally they will change towards public or residential purposes, depending on individual characteristics of specific object. Since the second half of the last century, or more precisely, since the 1970s, in Europe and the United States, under the influence of postmodern ideology, a rather rapidly spreading idea arose about a global environmental catastrophe, which is inevitably approaching as a result of industrial activity that has a detrimental effect on the lives of creatures and processes occurring on the planet. Most authors suggest that industrial buildings should no longer be used for their original purpose; however, there are a number of practical approaches related to the reconstruction and modernization of industrial facilities.

In addition, one should not forget that the choice of space-planning, design solutions, technology and organization of work, materials, including composite and nano, during the reconstruction of buildings and structures must be justified not only from an economic, but also from an environmental point of view, based on carefully developed regulatory documents. In today's world, the consumption of energy and resources is becoming increasingly serious, and energy and environmental issues are receiving attention. Statistics show that energy consumption in the construction industry is 50%, and this has a

huge impact on resource consumption and environmental pollution [1]. Reconstruction of old buildings allows saving resources, which corresponds to the concept of sustainable development.

2 Materials and Methods

The research is based on the proven paradigm implying that the level of reconstruction work can be increased only by using industrial methods of work, new materials and designs with a high level of manufacturability, as well as implementing modern principles of organizational and technological reliability of construction with a high degree of mechanization of construction processes. Methods and technologies for carrying out work to increase and restore the load-bearing and operational capacity of structural elements of buildings by strengthening them and replacing them have been studied.

The research methodology included system analysis and synthesis, theoretical study of the technological parameters of the attic floor superstructure and the corresponding requirements for universal machines on the construction site. Recent achievements and prospects of BIM application and on-site robotization in the restoration and reconstruction projects were analyzed based on the method of content-analysis.

3 Results and Discussion

With the development of new housing construction in large cities, there are fewer and fewer free areas for development. The inevitable factors for expanding the boundaries of cities are: development of suburban lands, engineering development of remote territories, large costs for the creation of infrastructure facilities, which leads to the high cost of housing under construction and high operating costs for its maintenance.

Meanwhile, studies show that it is more rational to use densely built-up and developed areas within the city limits. Moreover, it is important to consider the reconstruction of the housing stock and the construction of new housing as a single process that ensures an increase in space, extending the life cycle of buildings, and increasing of their comfort and energy efficiency [21].

The main structural and technological techniques for the reconstruction of residential buildings of old standard series are: the addition of attic floors, the addition of small architectural volumes, rigging with the expansion of buildings and the addition of several floors. The decision to reconstruct the facility is evidently made based on the technical and economic requirements for the building subject to reconstruction, based on compliance with the principle of self-sufficiency during the billing period, realistically available sources of covering costs, and high-quality conditions for financing the work [22].

Based on the existing facts, a process such as the reconstruction of a building and carrying out major repairs is an appropriate and rational method in the development of a residential urban environment. The most effective and comprehensive method of achieving the set goals is to reconstruct the building with the addition of an attic floor, since, as a rule, it does not require additional investment in creating or expanding the infrastructure of the area, performing construction and installation work on laying utility networks, transport support and cultural and social amenities service. This makes it possible to use the existing reserves of the load-bearing capacities of the main building structures and load-bearing elements of buildings, including bases and foundations.

Reconstruction of large-block mass buildings is a strategic direction in solving urban planning problems of dilapidated housing stock, which will improve the living comfort of buildings residents and their energy efficiency, improve the architectural and aesthetic appearance, extend the life cycle of buildings, and also increase the area for people to live. Reconstruction can be carried out by adding attic floors, which will increase the total living area of the house with different

layouts and configurations of rooms/premises. The reconstruction method using a combined load-bearing frame of the attic floor from rolled steel structures and light thin-walled structures, according to technical and economic calculations, is the most effective and expedient, as it allows, due to the standard construction of these objects, as well as the existing reserve of load-bearing capacity of structures and building elements, including bases and foundations, implement this technology for the reconstruction of buildings, while significantly reducing capital investments, the labor intensity of the work performed, and construction time.

A technical and economic comparison has established that the most rational option is the technology of using a combined load-bearing frame of the attic floor made of rolled steel structures and lightweight thin-walled structures [11]. The rationality of the choice is justified, in particular, by the reduction in costs for the use of powerful lifting machines and mechanisms, which makes it possible to carry out work on the superstructure without creating inconvenience for the residents of the house and allows reducing the use of the local area for the purpose of the construction site (it is possible to use small-sized stationary cranes or winches on the roof of the building). This technology does not require the resettlement of residents and raises the increase in area.

One of the modern trends in the renovation of city neighborhoods is the complete demolition of existing buildings with the further construction of a completely new, modern residential area. But the problems of the practical implementation of the demolition of residential buildings concern quite a few aspects: social and domestic, technical and technological, economically justified, environmental requirements and disposal of dismantled structures, etc. In these conditions, a way out of this situation may be constructive and technological techniques for the reconstruction of secondary residential buildings, such as: superstructure, extension of small architectural volumes, construction with the expansion of buildings and the addition of one or more attic floors. Technical and economic requirements for the reconstructed building are based on compliance with the principle of self-sufficiency in the required billing period, real sources of covering costs, and favorable financing conditions for the work. Technological solutions for reconstruction are quite diverse. They are based, first of all, on existing conditions: type of buildings, level of reconstruction work, use of appropriate technical equipment, and other factors [11].

The most important criterion when choosing options for constructive and technological solutions is the duration of the work and the conditions for intensifying the main construction processes. In this aspect, the construction of attic floors from volumetric blocks of partial or complete factory readiness, as well as technologies in which modern lightweight materials are used, deserve attention [17].

Analysis of the experience of various countries allows noticing a trend in the use of technologies and methods for the reconstruction of standard residential buildings in countries such as France, Finland, Germany, Poland, Sweden, etc. [10]. From the experience of existing technologies introduced in these countries, one can see various options for the reconstruction of buildings of these types. A number of cities in Germany and Finland are using the experience of de-densification of buildings. Thus, individual houses are dismantled, freeing up the area for landscaping and planting of greenery (Figure 1, 2). The experience of dismantling several blocks of sections of the house is also used, allowing the apartments to be converted into two levels. Due to the release of territories and changes in the architectural appearance of the building, the configuration of the building is added and developed, with according modernization by adding balconies and loggias (Figure 2) [10].

Figure 1. Germany. Reconstructed large-block residential buildings [10]

Figure 2. Finland. Residential area of reconstructed large-panel buildings [10]

The technology for adding an attic floor during reconstruction is clearly illustrated using the example of Figure 3. The proposed technology provides for the location of construction and installation zone III in the local area, to which half-spans of metal block sections of the attic floor II are brought. These blocks are mounted on a stationary platform using temporary fixing load-handling mechanisms 4 and scaffolding auxiliary means 3. The fixation of the halves of the block sections 2 is most often performed using a bolted connection. The block section of the attic floor is assembled over the entire width without intermediate supports, and is carried out in assembling taking into account the selected span spacing of the enlarged assembly [2]. At the roof level, work is being carried out to dismantle the floor slabs located above the flight of stairs. Then a flight of stairs for the future floor to be built on is built. Ventilation pipes are built on, communications are provided above the floor. A monolithic reinforced concrete strapping belt is installed along the building's contour with the installation of embedded metal parts, on which the mounted metal block sections are subsequently supported. Elements of block sections are mounted from the ground in separate parts or assembly units 6. At the level of the floor being built on, they are aligned in the design position. The supporting structure of the spans is welded to embedded parts installed in a monolithic reinforced concrete belt. Further, during the installation of the block of sections, work is carried out on installing an insulated roof and interior finishing work on the arrangement of living spaces. In addition, when using this installation method, a reduction in reconstruction time is achieved due to the enlarged assembly and installation of fully prefabricated openings of factory-ready block sections, the installation of assembly units is simplified, the negative impact of installation and dismantling work on the residents of the building is minimized, one longitudinal side of the building facade is used.
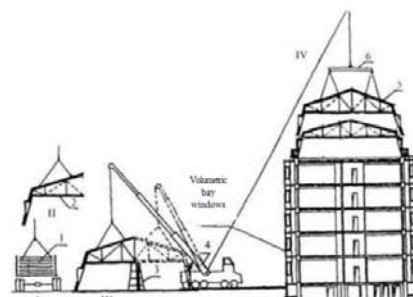

Figure 3. Schematic diagram of the technology for superstructure of an attic floor with enlarged metal block sections without widening the body (first option): I – unloading of half-spans of block sections; 1 – truck with spans; II –

unloading of metal spans with delivery to the assembly zone in enlarged block sections; 2 – half the span of the block section; III – zone of enlarged assembly of metal block sections; 3 – additional means of scaffolding; 4 – pneumatic wheel jib crane; IV – installation of a fully prefabricated enlarged metal block section of the built-on floor; 5 – enlarged block section; 6 – traverse

Reconstruction of buildings and structures may well act as part of the overall reconstruction of the entire complex of buildings. It also implies some change in the external architectural style. Such an operation must first of all be comprehensive; many factors must be taken into account when carrying out the appropriate measures. Thus, buildings can be of industrial and residential type, as well as administrative and commercial. Depending on this, the work carried out differs significantly from each other.

However, as it was mentioned above, in general, the reconstruction of buildings today acts as a main direction in the field of capital construction. In contrast to the construction process, reconstruction has a number of features: the work performed during the reconstruction process is heterogeneous, dispersed and small-scale; the work carried out during reconstruction differs from that carried out during the construction process (dismantling of structures, strengthening them, replacing individual structural elements, etc.); there are cramped working conditions, which significantly affects the overall organization of work on the reconstruction of an industrial building; it is necessary to implement an individual approach to restoring operational indicators and strengthening the load-bearing elements of buildings and structures.

This technology has a number of technical, economic, design and planning positive characteristics, which affects the profitability of its use in the reconstruction of narrow-frame buildings of standard construction with an attic floor superstructure. Construction and installation work is carried out in the most cramped conditions at all stages: the stages of preparatory work, organizing the construction site for the enlarged assembly of block sections, the main cycle of installing volumetric block sections in the design position, dismantling roofing structural elements, as well as when performing a complex of internal and external work on the installation of end walls, execution of work on the installation of sanitary and ventilation units. In the case of multiple repetition of this option, its further development could be the method of conveyor-block installation (Figure 4).
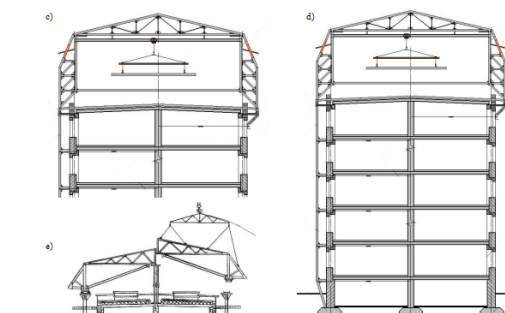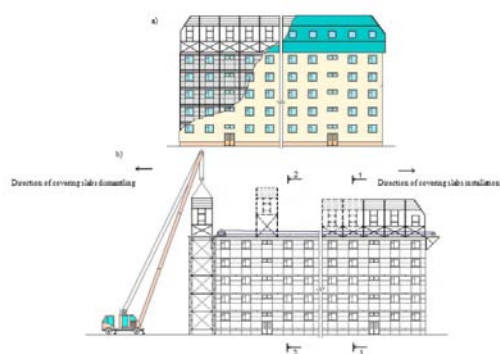

Figure 4. Organizational and technological schemes for carrying out reconstruction work with a superstructure using the conveyor-block method: a – house after modernization; b – work execution (general technological scheme); c – carrying out dismantling work under the protection of a spatial block with lifting and transport equipment; d – mounted spatial block of the attic floor; d – assembly of a spatial attic block from two symmetrical parts

Another option for the possible reconstruction of a standard residential building is the addition of an attic floor from lightweight aerated concrete blocks. This technology for constructing an attic floor differs significantly from previous options for on-building a floor and is based on the use of lightweight structural materials that meet all modern requirements for thermal performance, reliability of use, and durability of materials. The decision to apply the method of superstructure from modern lightweight small building materials with a monolithic reinforced concrete reinforcing belt resting on the load-bearing walls of an existing building is also a progressive and technologically sound technology. This technology also involves the dismantling of floor slabs located above the flight of stairs, with the installation of flights of stairs with access to the attic floor. A monolithic reinforced concrete strapping belt is installed along the contour of the load-bearing walls. A guide metal profile is fixed to this belt. Lifting of building material is carried out by truck cranes from the side of a truck in pallets.

In the first of these considered options, a jib wheel-mounted crane is used, and in the second case, a modular spider crane and a stationary roof crane are used. In both cases, the operation of the building during construction work is safe. Both options are characterized by a reduction in the cost of using powerful lifting machines and mechanisms, which makes it possible to carry out work on the superstructure without creating inconvenience for building users and reduces the use of the local area for the purpose of the construction site (it is possible to use small-sized stationary cranes or winches on the roof of the building).

Both in new construction and in restoration and reconstruction, the most important task in preparing construction production is the selection of an effective system of construction machines [8,19]. In any case, it is obvious that the equipment must meet both technical characteristics and operational qualities to perform tasks of any complexity and under any external conditions, as well as economic indicators. High efficiency of complex mechanization can be achieved with a rational combination of these components[7].

The demand for construction machinery is calculated in the following order: identifying the quantity of work to be done; determining the structure of mechanization methods; The operational hourly productivity of machines is determined; the necessary number of machines to do the specified quantities of work is computed [16]. Calculating the number (need) of construction machines N using the formula:

$$N = \frac{Q}{b_{ech} * T_t} \qquad (1)$$

where Q - amount of a specific sort of work in kind; b_{ech} - the machine's operational productivity when executing the specified sort of task; T_t - duration of work of the machine on the given type of work, mach.-h.

The following formula determines the machine's work time for the specified type of work. (2):

$$T_t = \frac{(T_{dv} - d_{nB})}{\frac{1}{t_{sm*}k_{sm} + DT_p}} \qquad (2)$$

where T_{dv} - specified period of machine operation as indicated by the timetable, days; t_{sm} - average duration of shifts, h, k_{sm} - average shift factor of the machine; d_{nB} - average time to transfer the machine, in days; DT_p - duration of machine staying in maintenance and repair (TM and R), days/mach - hour.

The following formula determines the machine's specified duration as per the timetable.:

$$Tdv = (T_d - D_v)*\left(1 - \frac{D_1}{T_d}\right) \qquad (3)$$

where T_d-planned schedule of construction of the site (calendar), days; D_v - number of days off; D_1 - number of days characterized with unfavorable weather conditions.

When estimating the demand for universal machines of one size that execute two or more types of work, the calculation is carried out according to the formula:

$$N_0 = \sum_{i=1} N_i = \sum \frac{Q_i}{b_{echi}}*T_{vi} \qquad (4)$$

where N_i — the need for machines on the i-th type of work; Q_i - the amount of work i-th type in kind; T_{vi} - duration of operation of the machine at the i-th type of work; b_{echi} - hourly operational performance of the machine when conducting i-th type of work.

Using formulae (1) and (4), one may compute the requirement for leading machines. The demand for non-leading machines functioning in the technological complex is determined based on the performance of the leading machine. [16].

Figure 5 demonstrates the flow of the performance evaluation of the intelligent lubrication system for construction machinery.
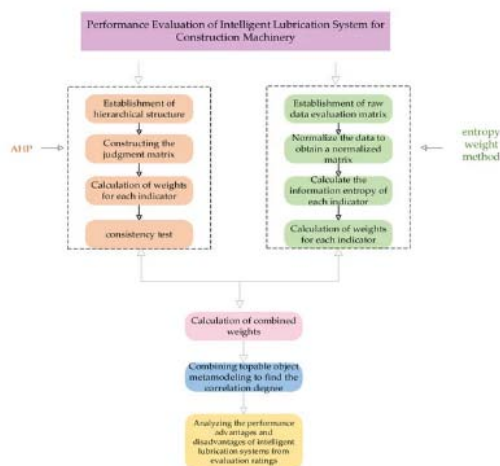

Figure 5. Performance evaluation of the intelligent lubrication system for construction machinery [15]

*AHP - analytic hierarchy process, AHP)–entropy weight method

The determining factors in the choice of mechanization means are the methods of work: construction of a built-in frame from prefabricated or prefabricated monolithic structures, extension or superstructure of a building from piece, enlarged flat, or volumetric elements, etc. [24]. The selection of lifting mechanisms is carried out based on the geometric dimensions of the building in plan and height, as a result of which the

parameters of the installation cranes are determined: the height of the hook, the reach of the boom, the length of the crane runway. Depending on the mass of the load being moved and the required reach of the boom, its carrying capacity is determined.

The choice of crane type and lifting capacity is determined by the technology of work and, first of all, by the maximum mass of mounted elements. When performing reconstruction work using monolithic reinforced concrete, the determining factors are the mass of formwork panels and tubs with concrete mixture, when building floors from volumetric blocks - their weight and dimensions, when constructing floors - the geometric dimensions and weight of reinforced concrete panels, etc. [17; 18].

The choice of an economically feasible option for integrated mechanization is carried out in two stages. At the first stage, machine systems are identified that, in terms of technical characteristics and performance qualities, can perform work in the conditions of a given facility. At the second stage, from the identified machine systems, an economically feasible option for integrated mechanization is selected and its effectiveness is assessed. It is recommended to choose this option not for individual types of work and reconstructed objects, but for their entire complex, including all types of mechanized work at all objects for the planned period. This approach is determined by the specifics of construction and installation work in the context of building reconstruction, when the most effective system is one that includes universal machines capable of performing several mechanized processes. Depending on the characteristics of the machines, the system may be for certain units or areas of the facility that are most suitable for the conditions of conducting work.

Appropriate ones for reconstruction conditions are such options for integrated mechanization that are based on small-sized, universal and mobile machines [13]. These machine systems operate in cramped conditions at optimal modes, have a multi-purpose intention, and can be quickly relocated to any site of the object being reconstructed. These qualities, along with low cost, increased reliability and efficiency, characterize these kits as the most effective for reconstruction.

Regarding the design of reconstruction or restoration, BIM has proven itself well in the reconstruction projects. When designing a BIM-based renovation of an old building, each process is managed by the appropriate designers. They make proposals for architectural designers based on their professional knowledge.

BIM can convert the current serial connection into a parallel connection during the design process. All participants can make decisions together, which reduces design changes and saves money and time. During the reconstruction design process, all employees involved in the reconstruction design had to record relevant design standards in the BIM platform, understand their responsibilities, ensure construction quality and processing depth, and check their own permits.

As the red line in the graph on Figure 6 shows, by dynamically connecting design, analysis, and documentation in a BIM workflow, the majority of the effort in a design project is shifted back into the detailed design phase, where the ability to impact project performance is high and the cost of making design changes is low. This allows engineers to spend more time considering what-if situations to improve the design and less time creating construction paperwork.
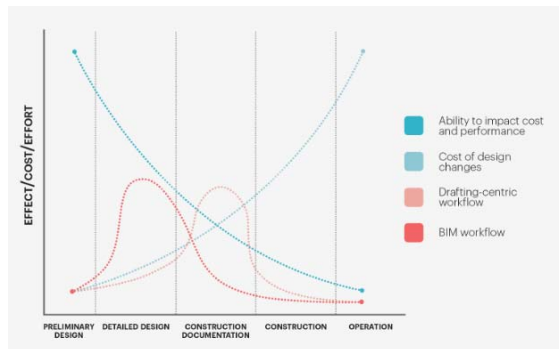
Figure 6. Advantages of BIM for projects [5]

When designing the renovation of old buildings, several characteristics can be identified, such as low safety, low durability, and low comfort levels. But in the process of reconstruction, spatial reconstruction of old buildings is advisable [24].

BIM can involve all staff in design and encourage them to actively engage in renovation, which promotes the development of a consciousness of democratization of design and socialization of the building. User requirements can be taken into account during design, which can enhance the sense of identity when achieving the design.

In addition, BIM brings together different groups of specialists involved in the renovation of old buildings for construction. A design decision support platform that brings together different professions significantly improves the efficiency and quality of renovation plans for old buildings [23].

After applying BIM-based performance modeling analysis, reconstruction and input of original information are not required, which can shorten the analysis cycle. The introduction of BIM into performance modeling analysis software can facilitate the simulation of the internal and external structure of old buildings, directly carry out the performance analysis and assessment of the internal and external environment in the renovation project of old buildings, and adjust the layout according to the simulation conditions. BIM allows adjusting and analyzing the design at any design stage and timely reflecting the situation when evaluating the simulation.

Creating a BIM model allows speeding up the development and design process, optimizing the timing of work, and also carrying out all types of control directly on the construction site. Moreover, the model lives with the building throughout its entire life cycle, including the stages of operation and demolition. The advantage of the information model is its integrated approach: it combines the architectural, structural, technological, and cost estimates of the project with the issues of providing engineering equipment, transport infrastructure, logistics, and other sections necessary for a specific project [24].

It is critical to stress the availability of BIM approaches for work facilities and the proper location of tower cranes on building sites with repeated activities. In this scenario, the transition from a passive to an active BIM methodology is evident [9]. The proper location of tower cranes with the goal of lowering the cranes' overall operating time cycles is an important scientific issue. The significance of the work arises from the well-known facts that tower cranes are big power users on building sites, and that electricity prices are steadily rising in most nations. Over the last few decades, numerous optimization models have been developed and tested to handle such challenges, and in the last decade, BIM has arisen as a viable combination with optimization approaches. Theoretically, this combination might generate a synergy between those techniques. On the one hand, BIM may dynamically obtain validated (i.e., optimal) information, while on the other hand, the outcomes of the optimization can be simulated with other project information, allowing enjoying all of the benefits of reconstruction over new construction.

Marzouk and Abubakr published a study presenting a BIM-based optimization model for tower crane selection, number, and arrangement [12]. The authors employed the analytical hierarchy process (AHP) to pick the kind of tower crane, and a genetic algorithm (GA) to determine the ideal crane number and configuration. The model was applied to a case study situation and produced satisfactory results.

Leading companies associated with robotics are already producing a variety of construction devices that are successfully used in the construction and reconstruction of large objects. Such devices have shown their high efficiency at all stages - from design to finishing. In particular, a popular device is the Geko PV lift. This is a self-propelled device in the form of a crank-elbow mechanism with special vacuum-type grippers of increased power. With their help, the equipment captures and holds large objects weighing up to 175 kg. The load can be rotated and fixed in the horizontal and vertical plane. Robotic cranes are also universal machines. They are designed for the assembly of building structures in high-rise buildings and are part of the automated RCA system, which combines the following subsystems: preparation and assembly of material, assembly of beams and trusses, construction system of the entire facility, control and management. Among the best devices, the MCC 804 on caterpillar tracks stands out. The equipment is equipped with a telescopic 4-section boom, capable of lifting a load weighing up to 8 tons to a height of almost 14 m [4].

The use of construction robots has a number of undeniable advantages for the reconstruction and restoration of buildings [3]:

1. Accuracy of installation, elimination of errors during design and construction. The possibility of spatial modeling is created.
2. Construction time is significantly reduced. Strict implementation of the agreed schedule is ensured, regardless of weather conditions.
3. Optimal consumption of materials. The amount of waste is significantly reduced.
4. Ensuring reconstruction in hard-to-reach places and in extreme conditions.
5. Creation of complex, unusual forms that cannot be built manually.

During the construction process, difficulties often arise due to inaccurate calculations when designing a construction project, imperfect communication with contractors, the notorious human factor, etc. Robotization helps to avoid all these problems and speed up the design process, bringing it to a new qualitative level, with the use of the above-mentioned BIM technology.

As it is known, this approach to the construction, equipment, maintenance and repair of a building (to the management of the life cycle of an object) involves the collection and comprehensive processing during the design process of all architectural, design, technological, economic, and other information about the building with all its interrelations and dependencies, when the building and everything related to it are considered as a single object. That is, a three-dimensional model of the building is being developed, linked to an information database, in which additional attributes can be assigned to each element of the model. The peculiarity of this approach is that the construction project is designed virtually as a single whole. And a change in any one of its parameters entails an automatic change in the remaining parameters and objects associated with it, up to drawings, visualizations, specifications, and a calendar schedule.

However, as practice shows, a precise BIM model will not be built accurately [6]. The reason for this is the reliance on manual operations, including when operating universal machines. No matter how professional the workers are, mistakes will occur. These are technical errors - regardless of the simplicity of the design, for example, if the column was planted a few centimeters from the intended position, the coordinates of the beams and other structural elements should be reconsidered and moved.

The problem is the lack of integration between BIM and contractors. Prefabricated structural elements may not be installed correctly if older construction methods were used. Therefore, technology must be effectively deployed to accurately transfer technical data of models using robots.

The use of BIM technology in AEC (Architecture, Engineering, and Construction) firms is quickly expanding. According to a recent report, 49% of surveyed builders said they use BIM in their firms for visualizations. Figure 7 indicates the same [20].
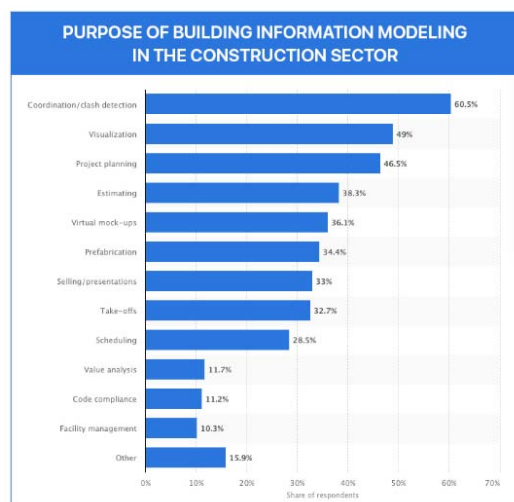

Figure 7. Purpose of BIM in construction [20].

Thus, these statistical data support the statement on high importance of robot technology and BIM combination in the projects of reconstruction and restoration.

Swinerton Builder is the first firm to use Tekla Structures/LM80 software and integrate it with portable software. Trimble LM80 software can accurately transfer data from Tekla Structure Layout Manager to Trimble Robotic Stations, establishing the coordinates of structural elements on the site. Thanks to this connection, specialists receive accurate and coordinated information on the ground. Through its virtual design and construction initiative, Swinerton has become a national leader in the application of building information modeling (BIM) and 3D modeling, estimating, simulation and planning techniques.

Of interest are human-controlled robots designed to lift and install large glass panels, sandwich panels, metal sheets and other building elements - especially those that are of considerable value and size. Such devices are used where it is inconvenient to use traditional cranes or lifts.

A new technique for automatically erecting steel structures in high-rise buildings is called the RCA (Robotics and Cranes Automated Construction System) system. The RCA system can be divided into four main systems:

- Monitoring and management system
- Material assembly system
- Beam assembly system
- Facility Construction System (CF).

The MCC 804 mini crawler robotic crane has the powerful lifting capacity of a crane and can reach the height of a mini spider crane. This 8 ton capacity crawler crane can be lifted to a maximum working height of 13.7 meters using a four-section telescopic boom that can be precisely adjusted with a joystick [3].

Thus, the problems and opportunities for the construction and operation of buildings and structures in the context of reconstruction and restoration using universal machines should be considered in conjunction with the development of BIM and robotics [14].

In the construction industry, the reconstruction of buildings and structures still does not lose its relevance, despite the general growth of buildings from year to year throughout the world. Along with the growth of construction, prices for land (and there is a shortage of land), materials are also rising and, in general, the oversaturation of the market with new buildings and structures sets certain limits for the construction of new ones and activates projects related to the reconstruction or restoration of objects. In addition, the legacy of the construction of the last century, where buildings were often erected without taking into account energy efficiency and high requirements for housing comfort, plus the problem of efficient use of space - all this determines the demand for reconstruction in construction industry no less than the construction itself.

The main problem is that reconstruction itself is a complex process, which is important to organize wisely, carry out accurate preparatory design work and conduct accurate calculations taking into account the characteristics of a particular building, correlate, check and carry out all design documentation, as well as take into account nearby infrastructure and structures in order reconstruction had no effect on them. If it is about the reconstruction of industrial operating facilities, then it is important not to stop production (at least for a long time and in all units), but to find a solution for working in cramped conditions and prepare impeccable design work. Reconstruction of residential buildings or commercial real estate also has its own nuances, which are not always easy to implement without the use of advanced technologies in materials, as well as without effective digital technologies, in particular when determining the need for the use of universal machines and optimizing this use.

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Primary Paper Section: J

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DEVELOPMENT OF THE TECHNOLOGY OF CRANE-LESS LIFTING OF LONG-SPAN REINFORCED CONCRETE AND METAL COATINGS

[a]HENNADII TONKACHEIEV, [b]OLEKSANDR IGNATENKO, [c]VOLODYMYR RASHKIVSKYI, [d]IRYNA DUBOVYK, [e]ANNA TRYHUB, [f]YURI SOBKO

[a-e]*Kyiv National University of Construction and Architecture (KNUCA), 31, Povitroflotsky Ave., 03680, Kyiv, Ukraine*
[f]*Yury Fedkovich Chernivtsi National University, 2, Kotsyubinsky Str., 58002, Chernivtsi, Ukraine*

email: [a]tonkacheievgm@knuba.edu.ua , [b]irpen6l@gmail.com , [c]rashkivskyi_vp@knuba.edu.ua, [d]dubovyk_ir@knuba.edu.ua, [e]tryhub.ao-2022@knuba.edu.ua, [f]yu_sobko@chnu.edu.ua

Abstract: Based on the analysis of well-known organizational-technological and structural-technical examples of crane-less lifting of long-span reinforced concrete and metal coatings of industrial and civil buildings, the goal was to develop a technological solution that would increase efficiency and shorten the duration of work on the construction of roofing structures. Taking into account the advantages and disadvantages of examples of the use of technologies of forced lifting of coatings by push-out methods, mechanized technological equipment for raising columns was developed, which consists of lifting modules and lifting fasteners. The lifting of the covering is carried out by leaning on the heads of the mounting columns, which are raised in the space between the paired design columns. In the process of increasing the load from the sections of the mounting columns, the support frames of the lifting modules and the lifting clamps take turns. According to the developed technological solution, in the initial phase, paired design columns are installed in the foundations by the method of free lifting with the help of cranes, and the construction and technological block of the covering is formed on low scaffolding. The support bars of the cover block are inserted into the space between the paired columns. Lifting modules and lifting fasteners are installed on the foundations, adjacent to the design columns. After completion of work on consolidation of the coating into a structural and technological unit, crane-less lifting of the coating to the design height is performed. For this, hydraulic lift cylinders raise the support frames and, fixed on them, the support bolts of the coating. Then the load from the coating is transferred to the lifting fasteners. At the next stage, the sections of the mounting columns are extended in the space between the columns. After lifting the covering to the design height with support on the mounting columns, the support bars of the covering are fixed on the heads of the design columns. Sections of mounting columns are dismantled. When using the developed technology, the lifting of the covering to a height of 34 m takes 1.8-2.0 shifts. At the same time, the dimensions of the construction site do not exceed the overall dimensions of the raised surface.

Keywords: crane-less lifting; long-span coating; reinforced concrete vault; mechanized technological equipment; lifting module.

1 Introduction

During the construction of industrial objects, the most difficult is the assembly of long-span roof structures weighing more than 1000 tons. When using traditional crane methods of free lifting of structures [1], it is necessary to use complex scaffolding and assembly platforms at a height of 14-34 m. At the same time, the time intervals for delivery of roofing elements to the project site are very long. Installation work on the formation of long-span roofs only with the help of cranes is very laborious and is defined as economically unprofitable. An attractive option from the point of view of organization, technology, duration, and cost of work on the construction of long-span roofs is the option that combines crane and crane-less assembly methods. During the starting organizational and technological stage of mounting works, cranes are used to assemble foundations, projection columns and assemble roof blocks on low scaffolding [6]. At the next stage of building works, the structural and technological block of the roof is moved to the design height using crane-less technologies [3]. Common ones to several options for the forced movement of long-span coating to the project marks are the methods of column growing using hydraulic lifting units [4]. Improving the well-known technologies for crane-less lifting of roofs using hydraulic hoists is an urgent and relevant problem.

2 Literature review

The development of scientific and theoretical solutions for constructing industrial facilities with long-span structural and technological blocks of roofs was carried out by well-known scientists. In particular, among Ukrainian scientists, the greatest contribution to the development of technological solutions for the construction of roofs of industrial facilities using a traditional crane and crane-less technologies was made by V. Chernenko, P.

Fedorenko, L. Kolesnik, V. Kurbatov, S. Landa, B. Mosakov, V. Nazarenko, V. Nikolaev, G. Nizhnikovsky, O. Osipov, V. Rashkivskyi, P. Rezhnichenko, A. Shkromada, A. Shnajder, T. Shtol, V. Shvidenko, G. Tonkacheiev, V. Topchii [1; 3; 4; 6; 9-14; 16; 18]. Among scientists of other countries, a great contribution to the development of scientific and theoretical solutions for crane and crane-free technologies for the construction of coatings of industrial and civilian objects was made by H. Engel, K. Fligier, E. Kühn E., G. Orlik, L. Rowinski, H. Rühle, K. Weissbach, J. Ziólko [5; 7; 17; 20].

3 Materials and methods

Studies of organizational-technological and structural-technical features of the construction of long-span reinforced concrete and metal coatings were carried out on the example of built civil and industrial facilities in France, Great Britain, and Ukraine. The technological processes used in the construction of coatings in the listed countries had common features. In particular, in each case, at the first stage of installation work, the covering structure was made on low scaffolding with the help of cranes using the free-lift method. The next stage of raising the coating to the design height was carried out by the method of forced vertical movement with the use of raising columns. Organizational-technological and structural-technical solutions for increasing the columns for each option under consideration were different. The analysis of the advantages and disadvantages of known examples of crane-less erection of long-span structural and technological blocks was used to develop mechanized technological equipment that would allow increasing the efficiency of installation processes for lifting coatings to a height of 34 m and more, while reducing the construction and installation work duration.

For the first time, the option of erecting a long-span reinforced concrete cover with the sequential use of crane and crane-less installation methods were implemented during the lifting of the hangar cover of the Marignane airport in Marseille, France in 1951 [7]. An important point in the organization of the technological process was the execution of all installation work on the formation of a monolithic reinforced concrete coating within the area of the construction site, which did not exceed the dimensions of the structural and technological block of the rising coating. The technological sequence of the processes of lifting the hangar cover is shown in Figure 1.
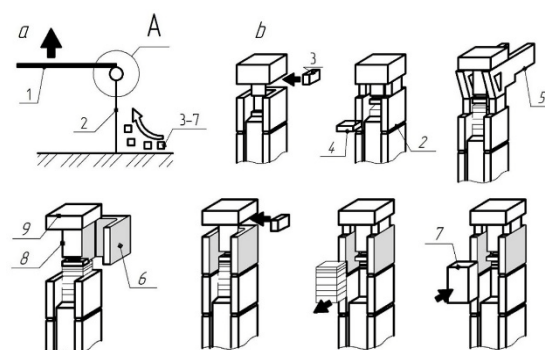

Figure 1. Lifting of the coating by the method of upper column growing: a - general scheme of column growing, b - sequence of the column growing process, "A" - column growing zone, 1 - coating, 2 - column grown, 3 - side support segment, 4 - support segment for the hoist, 5 - support beam, 6 - outer column segment, 7- inner column segment, 8 - hydraulic hoist, 9 - coating support block

The construction solution provided for the implementation of installation operations in two stages. At the first stage, on low scaffolding (height up to 1.5 m) by the method of free lifting

with the use of a crane, the racks and crossbars of the formwork were assembled, the formwork decking was laid, the reinforcing framework of the covering was formed and the concreting of the long-span vault was completed. At the second stage, after the strength of the reinforced concrete coating was obtained by the method of pushing out with the support of the coating support bars on the growing columns, the monolithic coating was vertically moved from the level of the foundations to the design height of 14 m. The hydraulic jacks involved in the raising process were located between the rising pavement and the heads of the raising columns. The actual growing method is classified as the "column top growing method" [1]. The installation process of the outer *6* and inner *7* segments of the growing column *2* consisted of the following sequential operations:

- Hydraulic lifter *1* moves cover *1* to a height of 200 mm (working stroke of hydraulic lifter cylinder);
- An auxiliary side segment *3* (segment height 19 cm) is inserted into the space between the support block of the covering *9* and the upper face of the extended column *2*;
- The rod of the hydraulic lift is raised by 200 mm, the load from the support block of the coating *9* is transferred to the upper face of the raised column *2*;
- In the space between the raised rod of the hydraulic lift *8* and the upper face of the inner segment of the column *7*, an auxiliary segment is placed under the lift *4*;
- With the support block of the cover *9* resting on the auxiliary segment under the lift *4*, the cover *1* is raised to a height of 200 mm;
- The operation to install auxiliary side segments *3* and auxiliary segments under the lift *4* is repeated 3 times;
- Instead of four tiers of auxiliary side segments *3*, an auxiliary beam *5* is installed;
- With the support block of the covering *9* resting on the auxiliary side beam *5*, the fifth tier of the auxiliary segment is installed under the lift *4*;
- The hydraulic lift rod *8* rests on the installed fifth tier of the auxiliary segment under the lift *4* and the support block of the covering *9* is raised by 200 mm;
- The auxiliary beams *5* are dismantled and the outer segment of the column *6* with a height of 950 mm is installed;
- With the support block of the covering *9* resting on the assembled outer segment of the column *6*, five tiers of the auxiliary segment under the lift *4* are dismantled and the inner segment of the column *7* with a height of 950 mm is installed;
- The assembled external segments of columns *6* are fastened with the help of four threaded pins Ø 25 mm;
- The reinforcing frame is fixed and the formwork shield is installed between the assembled outer segments of the column *6* and the inner segments of the column *7*, the formed cavity is filled with concrete.

The reinforced concrete coating of the hangar had dimensions of 58.5 x 101.5 m in plan, the pitch of the columns was 9.8 m, the weight of the coating was 4,200 tons. 14 hydraulic jacks with a carrying capacity of 310 tons were used in the process of raising 14 prefabricated columns. The growing columns consisted of 420 main and 126 auxiliary elements. The bodies of hydraulic jacks were fixed on special support blocks on the lower surface of the raised monolithic covering. Growing of the columns lasted 23 days. 23 installers were involved. The advantages of the method of the upper extension of the columns include a dense fixing unit of the lower sections of the extension columns in the foundations, a constant load on the hydraulic lifts, which does not depend on the total number of mounted sections of the extension columns. Disadvantages of the implemented method of the upper extension of the columns include increasing in proportion to the distance from the ground time costs for element-by-element delivery of 546 main and auxiliary elements of the columns to the extension area, high labor intensity, a large number of dangerous high-altitude installation operations at a height of 14 m, the need to constantly build up scaffolding in areas of installation work, a small stroke of lifting jacks.

A classic example of raising a long-span covering by the method of lower column raising is the erection of a monolithic hangar covering in the city of Abington (Great Britain) in 1957 by the firms Ove Arup and Partners and John Laing and Son Ltd. [7]. The coating consisted of three monolithic reinforced concrete segments (plan dimensions of each segment 33.53 x 59.59 m, total weight of the coating 1400 tons). The construction of the monolithic reinforced concrete vault was lifted by leaning on the heads of the growing reinforced concrete design columns (see Figure 2).
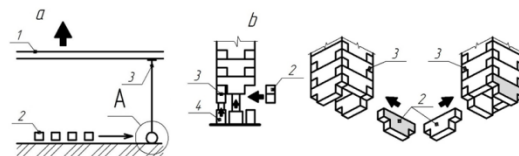

Figure 2. Lifting of the coating by the method of lower column growing: a - general scheme of column growing, b - sequence of the column growing process, "A" - column growing zone, 1 - coating, 2 – column segment before growing, 3 – growing column, 4 - hydraulic hoist.

The columns were made of T-shaped segments. The weight of the T-shaped segment was 500 kg, the total number of assembled segments was 1000 pieces. Before installation of each segment, a cement-sand solution (ratio 1:3), a layer thickness of 5/8" (16.5 mm) and metal plate spacers were laid on its upper face. Four jacks were used to raise each column. The carrying capacity of each jack is 200 tons. In the process of growing, a cavity was formed between the inner side faces of the mounted T-shaped segments. Reinforcing rods (14 rods for each column) were laid in the cavity during the growth of the column segments. After the installation of the last T-shaped segment of the column, the cavity was filled with concrete. At the moment when the concrete acquired the calculated strength, the reinforcing rods were tensioned. The direct lifting of each monolithic segment of the covering took five days, 30 workers were involved in the installation operations. Taking into account the time required for the concrete, enclosed in the cavities of the segmental reinforced columns, to acquire the calculated strength and the processes of tensioning the reinforcing bars, the total time for bringing the coatings to the design height was 35 days. Disadvantages of the real technology include the hinged scheme of supporting the column on the foundation during the extension process, significant labor intensity and low productivity of the installation process, a large number of installation operations in preparation for the extension of each T-shaped segment of the columns, the need for constant control of the synchronous operation of 16 hydraulic jacks involved in lifting and maintaining column segments during their extension, small working stroke of the jack rods [2].

Further development of the technology of lifting the coverings by the method of the lower extension of the columns can be observed on the example of the erection of the covering of the hangar measuring 144 x 275 m at the aircraft factory in Kyiv, Ukraine [12]. The covering with an area of 39,600 m^2 and a weight of 1,100 tons was raised to a height of 24 m in 12 shifts. Columns were raised using PG-300 hydraulic lifts [3]. As columns that were growing, sections of lifts were used, which were supplied into the growing zone between the bodies of the hydraulic lifts and the support frames. The crossbars of the covering rested on the heads of the lifting columns of the lifts. Solid design columns of the building were attached to the lower surface of the supporting beams of the covering during the period of consolidation of the long-span covering block on low scaffolding (height 2.0m). As the masts of the elevators grew, the design columns changed their position from inclined to vertical. At the final stage of raising the shafts of the elevators, the design columns were fixed in the foundation cups. At the next stage of installation work, the load from the support crossbars of the covering was transferred to the heads of the design columns. After that, the shafts of the elevators were

dismantled. Taking into account the fact that in the process of lifting the covering by the method of raising, the design columns were not involved, it is possible to classify the rising trunks of the elevators as "raising installation columns". The lifting of the covering by the method of raising the mounting columns is shown in Figure 3.
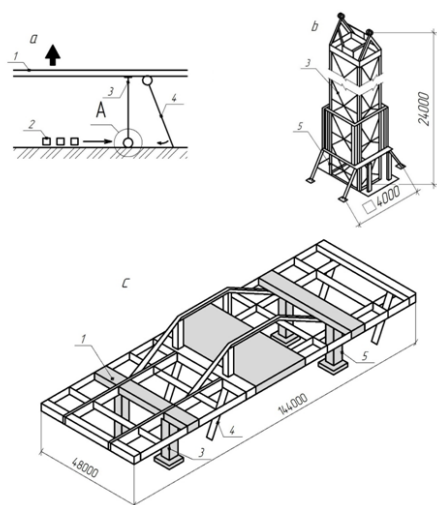

Figure 3. Lifting of the covering by the method of raising the mounting columns: a – general scheme of raising the columns, b – hydraulic lifting module PG – 300, c – long-span covering in the process of lifting, A – zone of raising the columns, 1 – covering, 2 – segments of the mounting column, 3 – prefabricated raised assembly column, 4 – integrated design column, 5 – hydraulic jacks

For the final landing of the covering blocks at the design height, "raising-lowering" cycles were repeatedly performed within the height limits of 200-300 mm with constant adjustment of the docking places of individual covering blocks. The disadvantages of the considered technology include the difficulty of placing the covering blocks on the column heads and the significant labor intensity of the installation processes at a height of 24 m, which are connected with the joining of the raised covering blocks. Taking into account the fact that the lower extension of the mounting columns defines the scheme of supporting the extension columns on the foundations as "hinged", expensive and metal-intensive measures were implemented to ensure the vertical movement of the sections of the installation columns during the extension process. For this, the sections of the mounting columns were designed with dimensions of 2.8 x 2.8 m in plan, and the supporting vertical conductor of each hydraulic lifting unit with a height of 10 m had a lower frame contour with dimensions of 16 x 16 m [3]. Also, when implementing this technology, it was mandatory to use overall safety equipment and a complex system of jacks that controlled the verticality of the lifting of the covering.

Based on the analysis of the organizational-technological and structural-technical features of the considered options for erecting long-span reinforced concrete vaults and metal structural-technological blocks of coatings, it is possible to form a general list of disadvantages and advantages of known technologies for lifting coatings using methods of raising design or assembly columns. The general disadvantages of the considered technologies are the small dimensions of the growing sections of the columns and a large number of installation operations related to the process of lifting the covering with support on the growing columns. Also, the disadvantages include the need to install bulky safety equipment with the use of hydraulic jacks that controlled the verticality of the column growth and the lifting of long-span coatings. The advantages include the tight anchoring of design columns in the foundations and the concentration of all processes for growing columns at low design marks. Under the condition of the minimum time required for the delivery of the column sections to the extension

zone located on the foundations, the overall duration of the work on the erection of the coverings is significantly reduced. Areas of improvement are increasing the structural dimensions of the sections of mounting columns, increasing the working stroke of the rods of hydraulic lifts, and using design columns to ensure the verticality of the rising cover at the design height. The technology of crane-less lifting of the covering must take into account the requirements of today - the performance of construction and installation works in the conditions of dense industrial and civil buildings.

4 Results

Taking into account the disadvantages and advantages of the analyzed organizational-technological and structural-technical options for crane-less lifting of coatings, a new technology for erecting long-span coatings by the method of column raising was developed [8]. The general scheme of raising the mounting columns, the lifting module and the long-span covering that rises with support on the heads of the mounting columns are shown in Figure 4.
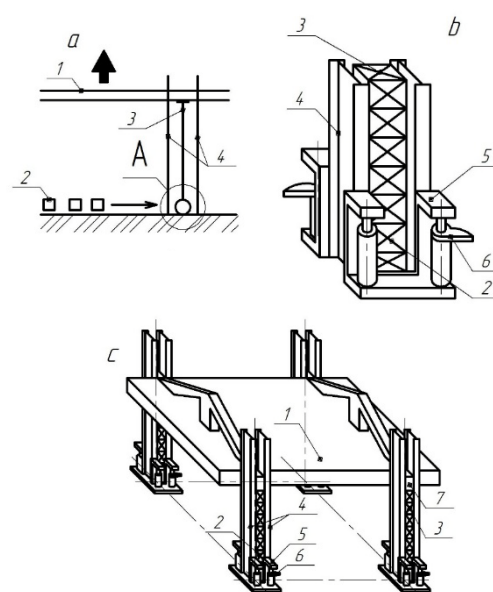

Figure 4. Lifting of the covering by the method of raising the mounting columns using vertical guides: a – the general scheme of raising the columns, b – step lifting module, c – the covering in the process of lifting, "A" – the area of raising the columns, 1 – covering, 2 – segments of the assembly columns, 3 – prefab elevated mounting column, 4 – vertical guide (one-piece design column), 5 – support frame of hydraulic lift, 6 – lifting lock, 7 – support crossbar of the covering.

According to the developed technological solution, the lifting of the covering to the designed height is performed by retracting the support beams of the structural and technological roofing block onto the heads of the lifting mounting columns. Sections of mounting columns are raised by lifting modules located on the foundations adjacent to the design columns. The extension of the mounting columns is performed in the space between the inner surfaces of the paired design columns. The mechanized technological equipment of lifting modules consists of hydraulic lifts, support frames, and lifting locks. The working stroke of hydraulic lift cylinders is 2.5 m, the carrying capacity of each hydraulic jack is 300 tons. The support frames of the lifting modules are attached to the rods of the hydraulic lifts. Lifting locks (fasteners) are fixed on the side surfaces of the design columns at a height that allows perceiving the load from the structures that are lifted by the support frame of the lifting module. The supporting beams of the coating are placed between the paired design columns in the process of enlarging the structural and technological block of the coating on low scaffolding. Under the condition of moving the support crossbars of the covering between the paired project columns, the internal

drives of the project columns serve as guides for the roofing structure in the process of its vertical movement to the project height. The sequence of lifting the covering with support on the mounting columns, which are raised in the space between the design columns, is shown in Figure 5.
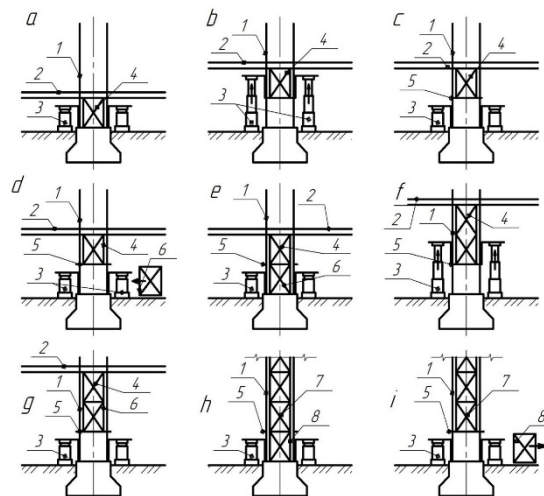

Figure 5. Lifting of the covering by the method of raising with support on mounting columns using project columns: 1 – project column; 2 – cover design; 3 – hydraulic lift; 4 – the head of the mounting column, 5 – lifting fasteners; 6 – the second section of the assembly column, 7 - the penultimate section of the assembly column; 8 – the lower /last/ section of the assembly column.

Leaning on the ends of the shafts of the lifts *3* and on the scaffolding, the bearing structure of the covering *2* is formed, roofing work and installation of technological roofing equipment is performed (Figure 5, a). After the completion of 100% of the installation work on the formation of a structural and technological block of covering on low scaffolding, the rods of the hydraulic lifts *3* push the heads of the mounting columns *4* to a height that is 100 mm higher than the height of the heads *4* (Figure 5, b). Into the space between the paired design columns *1* at the height mark of the lower face of the raised head of the mounting column *4*, the lifting locks *5* are pushed out, after which the rods of the hydraulic lifters *3* are lowered and the load from the heads of the mounting columns *4* and the structural and technological covering unit *2* is transferred to the lifting locks *5* (Figure 5, c). Released from the load, the rods of the hydraulic lifters *3* are returned to their initial position. After the rods of the hydraulic lifters *3* are completely lowered, the second section of the mounting column *6* is supplied into the space between the paired design columns *1* (Figure 5, d). The rods of the hydraulic lifters *3* push out the second section of the assembly column *6*. The process of lifting the second section of the mounting column *6* continues until the moment when the upper face of the lifting section reaches the height mark of the temporary fixing of the section *6* with the lifting fasteners *5* (Figure 5, e). When the rods of the hydraulic lifters *3* are further advanced, the load from the head of the mounting column *4* and the cover block *2* is transferred to the upper face of the second section of the growing mounting column *6*. This allows returning the lifting locks *5* to the initial position and performing the lifting of the second section of mounting column *6* with the rods of the hydraulic lifts *3* to a height similar to the height of the head of the mounting column *4* (Figure 5, f). By analogy with the head of the mounting column *4*, operations are performed to temporarily fix the raised second section of the mounting column *6* using the lifting lock *5* (Figure 5, g). Released from the load, the rods of the hydraulic lifters *3* are returned to their initial position. The cycle of supplying the sections of the mounting columns into the growing area is repeated until the final lifting of the coating *2* to the design height. After fastening the cover *2* on the heads of the design columns *1*, the sections of the growing mounting columns are dismantled. Sections are dismantled in the reverse sequence of the growing process. In the initial phase of disassembly, the rods of the hydraulic lifters *3* lower the last raised section of the

mounting column *8* to the height mark at which the lifting lock takes the load from the penultimate section of the mounting column *7* and the upper sections of the mounting column (Figure 5, h). Then the rods of the hydraulic lifters *3* lower the lower section of the mounting column *8* onto the foundations. The dismantled lower section of the mounting column *8* is removed from the assembly area (Figure 5, i). According to calculations, under the condition of manufacturing sections of mounting columns, which are growing, with a height of 2 m, the lifting of the structural and technological covering unit weighing 1,200 tons to a height of 34 m with the help of the developed lifting modules can be performed in 1.8-2.0 shifts. At the same time, the number of operations required to increase assembly sections is significantly reduced. The volume of climbing works when using the developed mechanized technical equipment is reduced to operations for fixing the raised coating on the heads of the design columns. There is also no need to install safety equipment with additional hydraulic lifts, controlling the verticality of the rising surface. The function of covering control during the lifting process is performed by paired design columns. The support bars of the coating rise in the inter-columnar space of the design columns, resting on the heads of the growing mounting columns.

5 Discussion

The developed mechanized technical equipment allows the use of lifting modules when erecting long-span structural and technological roofing blocks in the conditions of dense industrial buildings. At the same time, the dimensions of the construction site, which are necessary for consolidation of the covering blocks on low scaffolding and the subsequent lifting of the covering to the design height, do not exceed the dimensions of the rising covering.

The proposed technology of raising mounting columns with the help of lifting modules makes it possible to replace damaged reinforced concrete long-span vaults. With the adaptation of mechanized technical lifting equipment, which includes lifting modules and lifting fasteners to the structural profile of the supporting columns, new reinforced concrete vaults are made on low scaffolding and then raised to the level of the heads of the supporting design columns with support on the mounting extension columns.

In the case of further steaming of the lifting modules, the mechanized technical equipment of which is located at the level of the foundations adjacent to the project columns, the lifting height of the structural and technological blocks of the covering can be greater than 34 m. The main emphasis in further scientific developments is made on increasing the load-bearing characteristics of project columns.

The developed technology of crane-less lifting, provided that the lifting structures are retracted onto the lifting mounting columns, can be applied to lift large and heavy technological equipment in heavy machinery workshops, where it is technically impossible to use traditional crane technologies.

The mechanized technical equipment of the lifting modules, when further developed, can be used to move large and heavy blocks of technological equipment and engineering communications in the vertical plane, provided that a supporting frame is developed for the future support of the technological blocks rising on mounting extension columns.

6 Conclusion

1. Based on the analysis of known solutions for crane-less lifting of long-span coating using the column growing method, a new method of crane-less lifting was developed. According to the new method, the structural and technological unit of the coating is assembled during the assembly of foundations, design columns and intercolumn connections. The roof structure is assembled on low scaffolding. Assembly of foundations, columns and assembling of roofing units is made using crane methods. Further lifting of the structural and technological roofing

unit to the design height is achieved by supporting the mounting columns. The mounting columns are raised by hydraulic jacks located on the foundations. The mounting columns are grown between twin projection columns. The projection columns ensure the verticality of the roof lifting and the growing of the mounting columns. After fixing the roof at the design height, the mounting columns are dismantled.

2. The number of processes using assemblers during the lifting of the roof has been reduced to work on fixing the roof structure in the final step of fixing the coating to the design height. All the processes of growing up the mounting columns are automated.

3. Promising directions for the use of the new method of column growing have been identified, namely the lifting of large-sized and heavy technological equipment in the spaces of production halls, when the use of cranes is technically impossible, and the lifting of structural and technological roof blocks of 100% readiness to heights exceeding 34 m using reinforced structures of the supporting column frame.

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