

## ASSOCIATIVE FIELD OF THE NATO CONCEPT IN THE LANGUAGE AND THOUGHT OF UKRAINIAN STUDENT YOUTH

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**Abstract.** The article presents the results of comprehensive study of empirical material obtained through the controlled associative experiment method involving students from three Ukrainian higher education institutions. The associative reactions provided by the respondents to the stimulus word "NATO" were analyzed in their quantitative and semantic aspects. Based on this analysis, the conceptual characteristics of the NATO concept in the minds of young Ukrainians were determined, and the structural model of the associative field of the investigated concept was reconstructed. The verification of the results of the component analysis was carried out using a directed psycholinguistic experiment based on Charles Osgood's semantic differential method.

**Keywords:** concept; NATO; associative experiment; associative field; conceptual feature; Ukrainian youth.

### 1 Introduction

The conceptualization of NATO in the mentality of Ukrainians is a complex and contradictory process. The ideological legacy of the Soviet era has resulted in the older and middle generations of Ukrainians in the first decades of the 21st century fully or partially rejecting the idea of Ukraine's Euro-Atlantic integration, as evidenced by numerous sociological surveys. Myths and stereotypes of Soviet propaganda fostered a negative attitude towards the Alliance during the Cold War. Atavisms rooted in the memory of those from the Soviet Union included assertions such as "NATO is an aggressive bloc" and "NATO is an instrument of the USA foreign policy". The collective work of Ukrainian historians, edited by Professor D. Dzvinchuk, presents the results of a study conducted back in 2006 in various regions of the country. 77.2% of Crimea residents considered NATO an aggressive bloc, while 54.7% of residents in the Mykolaiv region and 54.5% in the Odesa region held the same view. In contrast to the southern regions of Ukraine, citizens in western regions held diametrically opposite positions: in the Ternopil region, only 8.7% of respondents considered NATO aggressive; in the Ivano-Frankivsk region – 16.2%, and in the Lviv region – 14.7% [7].

The youth born in independent Ukraine did not demonstrate active Euro-Atlantic aspirations despite being significantly interested in their country's movement towards the European Union. One explanation for this may be, on the one hand, the absence of an obvious military threat from neighboring states and, on the other hand, the principle of multi-vectors upon which the geopolitical strategy of most Ukrainian presidents was based.

Radical changes in attitudes towards NATO in the public consciousness of Ukrainians began to occur after the annexation of Crimea by Russia and the occupation of parts of Donetsk and Luhansk regions in 2014. The unprovoked and unjustified full-scale war waged by Russia against Ukraine since 2022 became the trigger for Ukrainians to reconsider the source of the threat to the existence of their sovereign state and to seek reliable support from the international community in the fight against the aggressor. Sociological research in recent years has shown the erasure of regional differences in the resolute recognition of the necessity for Ukraine's accession to the Euro-Atlantic alliance. According to the results of a survey conducted from February 22 to March 1, 2023, by the sociological service of the Oleksandr Razumkov Ukrainian Center for Economic and Political Studies as part of the MATRA Program, among 2020 respondents in the Vinnytsia, Volyn, Dnipropetrovsk, Zhytomyr, Zakarpattia, Zaporizhzhia, Ivano-Frankivsk, Kyiv, Kropyvnytskyi, Lviv, Mykolaiv, Odesa, Poltava, Rivne, Sumy, Ternopil, Kharkiv,

Kherson, Khmelnytskyi, Cherkasy, Chernihiv, and Chernivtsi regions, as well as in the city of Kyiv (in the Zaporizhzhia, Mykolaiv, Kharkiv, and Kherson regions - only in the territories controlled by the government of Ukraine and not affected by combat operations), 79% expressed a positive attitude towards NATO, and 78% approved Ukraine's integration into the alliance. [9]. According to a study conducted from May 26 to June 5, 2023, by the Kyiv International Institute of Sociology (KIIS), 79% of respondents in eastern regions of the country to 93% in western regions want to see Ukraine as a member of the Euro-Atlantic alliance [1].

### 2 Literature Review

The study of the attitude of Ukrainian civil society, including its younger generation, towards the Euro-Atlantic military-political alliance remains a subject of active research interest for domestic Ukrainian sociologists, political scientists, and historians. Analysis of the stereotypical perceptions of Ukrainians about NATO, which were entrenched during the Cold War years, is the focus of research by O. Makliuk [3]. Ya. Tymkiv not only attempted to understand the reasons for Ukrainians' negative attitude towards the Euro-Atlantic bloc at the beginning of the twenty-first century but also formulated effective recommendations for creating an attractive image of this international military-political organization in the collective consciousness of compatriots of different generations based on informing the general public about its positive role in preserving peace [9]. O. Novakova and M. Ostapenko traced the dynamics of geopolitical and civilizational self-identification among Ukrainians, their attitudes towards Western institutions and values, and the influence of these processes on the perception by Ukrainian citizens of the place and role of their state in the Euro-Atlantic community [6]. A. Moroz investigated the worldview orientations of youth in the context of Ukraine's integration into the Euro-Atlantic alliance as of 2009 [5]. Researcher O. Zhukovskiy addressed the issue of the awareness of Ukrainian students regarding the possibilities and prospects of partnership between Ukraine and NATO [13].

N. Yevtushenko analyzed the verbal representation of the NATO concept in the context of linguo-cognitive studies using materials from Ukrainian and English-language mass media [11].

### 3 Materials and Methods

The proposed article aims to analyze the associative field of the NATO concept in the language and thought of Ukrainian students to study their attitudes towards the Euro-Atlantic alliance.

The methodological foundation of the research is based on the study of the relationship between language and thought, initiated in the works of G. Steintal, G. Paul, C. Osgood, J. Miller, W. Humboldt, Ch. Bally, O. Potebnya, as well as the idea of the perspective of psycholinguistic studies of word meanings and their functioning in the collective linguistic-mental space, developed by modern Ukrainian and other linguists such as O. Zahorodnia and T. Nedashkivska in "The associative field of a word as a multilingual structure (based on the mass free associative experiment with Ukrainian social and political lexis" (2019), I. Akhmad and V. Chmel' "Association as linguistic phenomenon" (2016), "Constructing an associative concept space for literature-based discovery" (2004), C. Christiaan van der Eijk, Erik M. van Mulligen, Jan A. Kors, Barend Mons, Jan van den Berg, in "Text-forming function of associative fields" (2018) by V. Khomych, Ehud Jungvirt' "Associative field as a diagnostic tool in the assessment of the breadth of multi-aspect concepts: the concept of "development"" (2007), and "The magic words: Lexicon of the associative field" (2020) by Sandro Marcio Drumond Alves Marengo, and Rafael Marques Ferreira Barbosa Magalhães.

The study was implemented using a system of general scientific and specialized methods, including the interpretive-analytical method (during the processing of scientific sources related to the chosen problematics), controlled associative experiment (in the formation of the associative field of the "NATO" concept), statistical method (for structuring the analyzed associative reactions quantitatively), componential analysis (during the interpretation of the content of the studied concept), Charles Osgood's semantic differential method (for the verification of experimental results), induction method, and method of theoretical generalization (during the formulation of conclusions and research perspectives).

The study material consisted of associative reactions obtained from interviewees through the method of controlled associative experiment.

#### 4 Results and Discussion

The associative experiment is an important research method for studying the deep mental meanings that create the meaningful content of a concept, as "the results of the associative experiment represent the respondents' personal ideas... in particular, emotional reactions to the stimulus word, and are also informative in terms of the choice of means of verbalization of the associative field ..." [12].

Eighty-two bachelor's degree students aged 18 to 22, who are studying at Vinnytsia State Pedagogical University named after Mykhailo Kotsiubynsky, Donetsk National University named after Vasyl Stus, and Vinnytsia Humanitarian Pedagogical College, participated in the psycholinguistic experiment. The experiment consisted of three stages.

In the first stage of the controlled associative experiment, participants were asked to provide one noun and adjective that came to mind as associations with "NATO". The quantitative results of associative reactions are presented in Table 1.

Table 1: The quantitative results of respondents' associative reactions

Quantitative manifestations of associative reactions of the first stage of the experiment		
Association	Number of responses	Per cent
Nouns		
<i>weapon</i>	14	17%
<i>force</i>	7	8.5%
<i>security</i>	6	7.3%
<i>help/assistance</i>	6	7.3%
<i>support</i>	6	7.3%
<i>USA</i>	5	6%
<i>inaction</i>	5	6%
<i>defense</i>	3	3.6%
<i>organization</i>	3	3.6%
<i>strength</i>	2	2.4%
<i>alliance</i>	2	2.4%
<i>hope</i>	2	2.4%
<i>power</i>	2	2.4%
<i>fist</i>	1	1.2%
<i>cooperation</i>	1	1.2%
Adjectives		
<i>powerful</i>	10	12%
<i>strong</i>	9	10.9%
<i>inactive</i>	8	9.7%
<i>military</i>	8	9.7%
<i>indecisiveness/indecisive</i>	7	8.5%
<i>strong</i>	4	4.8%
<i>inaccessible</i>	4	4.8%
<i>unattainable</i>	3	3.6%
<i>large</i>	3	3.6%
<i>authoritative</i>	3	3.6%
<i>influential</i>	3	3.6 %
<i>distant</i>	3	3.6%
<i>irresponsible</i>	2	2.4%

<i>weak</i>	2	2.4%
<i>apathetic</i>	1	1.2%
<i>high-tech</i>	1	1.2%
<i>indifferent</i>	1	1.2%
<i>steel-like</i>	1	1.2%
<i>impervious</i>	1	1.2%
<i>uncertain</i>	1	1.2%
<i>dubious</i>	1	1.2%
<i>effective</i>	1	1.2%
<i>fragile</i>	1	1.2%
<i>inflexible</i>	1	1.2%
<i>stagnant</i>	1	1.2%
<i>lazy</i>	1	1.2%

Component analysis of the associative reactions of the respondents allowed for interpreting the conceptual features of NATO that have formed in their consciousness under the influence of various extra linguistic factors. Naturally, a portion of the associative reactions reflects the objective content components of the conceptualized notion: *organization, alliance, military, the USA*. The combined share of these conceptual associations is 18 (21.9%). The conceptual feature of NATO as a partner of Ukraine in the fight against aggression is delineated: *assistance, support, defense, and cooperation*. These associations are found in the responses of 16 individuals (19.5%). Eight interviewees (9.7%) directly link their hopes for security with the Euro-Atlantic alliance: *hope, security*. Thirty-two participants in the experiment (39%) have an understanding of the indisputable power of the Bloc: *powerful, strong, influential, high-tech, effective, and steel-like*. Conversely, 22 respondents (26.8%) emphasize the weaknesses of the international collective defense organization, stemming from its *inaction and indecisiveness*. Three individuals (3.6%) are inclined to characterize the Bloc as *inflexible, stagnant, and lazy*. Two of the respondents (2.4%) have doubts about the reliability of NATO: *dubious and uncertain*. For 10 individuals (12%), the main conceptual feature of NATO is its unattainability for Ukraine: *unattainable, inaccessible, and distant*.

To determine the semantic content of the investigated concept, we consider an associative reaction to the stimulus word "NATO", such as the USA, to be important. Associating the Euro-Atlantic alliance only with one-member country is evidently due to the recognition of its organizational and existential role in this international military-political bloc.

The associative reaction expressed by the adjective "military", belonging to 8 participants (9.7%) of the experiment, cannot be overlooked. The focus of attention solely on the military aspect of the Alliance by young individuals, while ignoring its political component, is a consequence of insufficient awareness among students about NATO's role in global geopolitical processes.

In the second stage of the associative experiment, participants were tasked with naming one representative of the animal world associated with NATO. Table 2 shows the distribution of associative reactions recorded at this experiment stage.

Table 2: Distribution of associative reactions of respondents

Quantitative manifestations of associative reactions of the II stage of the experiment		
Association	Number of responses	Per cent
<i>elephant</i>	34	41.4%
<i>lion</i>	22	26.8%
<i>tiger</i>	11	13.4%
<i>bear</i>	7	8.5%
<i>eagle</i>	4	4.8%
<i>bull</i>	2	2.4%
<i>aurochs</i>	1	1.2%
<i>bison</i>	1	1.2%
<i>horse</i>	1	1.2%
<i>bee swarm</i>	1	1.2%

In the second stage of the experiment, its organizers aimed to determine which image of NATO predominates in the consciousness of young students – strong or weak. The majority of associative reactions turned out to be names of fauna representatives endowed with considerable strength and dominance in the animal kingdom. Forty-two participants in the controlled associative experiment (51.2%) favored animals that were powerful but slow: *elephant, bear, bull, bison, and aurochs*. Thirty-three interviewees (40%) associated the alliance with *lions and tigers*, animals characterized by a rapid predatory reaction, albeit short-lived. Hence, it can be concluded that while acknowledging the potential strength of NATO, young individuals recognize the vulnerability of this military-political organization associated with its slow response to present-day dangers and threats. It is worth noting that the phrase “*bee swarm*” in association with the noun “*fist*”, which correlates with an association recorded in the first stage of the experiment, deserves special attention within this group of associative reactions. Each of these associations objectifies the conceptual feature of the Euro-Atlantic alliance, namely unity. However, their isolated occurrences suggest that very few interviewees truly believe in this, and the associative characteristic “*fragile*” reinforces this notion.

The mathematical calculation of the results of the controlled associative experiment allows for constructing a structural model of the associative field of the NATO concept, represented by reactions expressed in nouns, adjectives, and names of representatives of the animal world. The model contains three zones: the core, the near-periphery, and the periphery. The criterion for assigning the verbal expression of an associative reaction to a specific zone is the frequency of its occurrence in the interviewees' responses.

#### Core Zone:

- Nouns: weapon, strength.
- Adjectives: powerful, strong.
- Names of representatives of the animal world: elephant, lion, tiger.

#### Near-Periphery Zone:

- Nouns: security, assistance, support, USA, inaction, organization/alliance.
- Adjectives: inactive, military, indecisive, unattainable, large, authoritative.
- Names of representatives of the animal world: bear, eagle.

#### Periphery:

- Nouns: hope, fist, cooperation.
- Adjectives: inaccessible, irresponsible, weak, indifferent, uncertain, fragile, inflexible.
- Names of representatives of the animal world: bison, aurochs, horses, bee swarm.

In the final third stage, we employ a directed psycholinguistic experiment using Charles Osgood's semantic differential method to verify the component analysis results. The respondents were asked to determine on separate sheets what connotation the abbreviation NATO has for them in a table with such an interpretation of gradation on the scale of opposite meanings (positive - negative connotation): +3 means “extremely positive”, +2 – “positive”, +1 – “not very positive”, -3 – “absolutely negative”, -2 – “negative”, -1 – “rather negative”, 0 – “cannot determine”. The aggregated quantitative manifestations of respondents' reactions are presented in Table 3.

Table 3: The results of the experiment using C. Osgood's semantic differential method

Stimulus word	Positive connotation			Undecided	Negative connotation		
	+3	+2	+1		0	-3	-2
NATO	32(39%)	33(40.3%)	14(17%)	1(1.2%)	-	-	2(2.4%)

There were different levels of positive connotation with the NATO acronym among 96.4% of the respondents, while 2.4%

associated it with a negative connotation, and 1.2% were unable to determine.

## 5 Conclusion

The comprehensive psycholinguistic study of the associative field of the NATO concept in the language and thought of Ukrainian university students has enabled the identification of conceptual characteristics of the Euro-Atlantic alliance that shape young people's attitudes towards it. The defining conceptual features include, on the one hand, the strength of the bloc and, on the other hand, indecision and inaction. Ukrainian youth realize that NATO is a force capable of assisting in the fight against aggression, but they are not confident in the reliability of the alliance. Twelve per cent of the experiment participants acknowledged the unattainability of Ukraine's membership in this international collective defense organization, while only two individuals associated the Bloc with hope. The combination of all these factors results in varying levels of assessment of NATO, ranging from extremely high to not very high.

The linguistic-mental sphere of the young generation in Ukrainian society is an extremely interesting object of study, particularly in the psycholinguistic dimension. The results of such investigations can be valuable for modelling educational and cultural projects of strategic importance. We consider research on concepts such as the EUROPEAN UNION, EUROPEAN VALUES, DEMOCRACY, and so forth as promising avenues of exploration.

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