

## ДОСЛІДЖЕННЯ З КОГНІТИВНОЇ ЛІНГВІСТИКИ

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### THE TERM COMBINATION AND THE METAPHOR IN THE OFFICIAL BUSINESS DOCUMENT: COGNITIVE ASPECT

У науковому дослідженні робиться спроба виявити та проаналізувати військові терміносполуки і військові метафори в офіційно-діловому документі *методами* корпусної та когнітивної лінгвістики, а також виявити їхнє спільне вживання в єдиному офіційно-діловому документі НАТО. *Метою* цієї статті є створення методології статистичного та автоматизованого виділення терміносполуки з паралельного корпусу офіційно-ділових текстів і пропозиція методів когнітивної лінгвістики, таких як теорія концептуальної метафори (далі ТКМ) і теорія концептуального блендингу (далі ТКБ) для аналізу військової метафори в паралельному корпусі офіційно-ділових текстів. Завершальна мета дослідження полягає в аналізі військової термінології НАТО та розумінні військової концептуальної метафори в офіційно-ділових документах, щоб продемонструвати глибинні пізнання текстів військово-політичного дискурсу.

Вагомим результатом дослідження є те, що співіснування військової термінології НАТО та військової метафори в одному контексті може демонструвати розширення дискурсивних практик. Методологія аналізу дозволяє визначити стилістичну приналежність військової термінології, яка є ключовою одиницею розгляду спеціалізованого перекладу з яскраво вираженою військово-комунікативною функцією, та військової метафори, яка до певної міри є сталою у сприйнятті військової реальності.

Порівнюючи військову метафору з термінологією НАТО, ми припускаємо, що метафоричні моделі відображають загальні концептуальні зв'язки з військовою термінологією в рамках теорії мистецтва ведення війни. Одночасно, є підстави вважати, що метафорична модель, так само як і багатокомпонентні термінологічні комбінації, має досить складну багаторівневу структуру й розширене концептуальне значення. Це дозволяє використовувати військовий словник, який є одним з основних джерел військової метафоричної експансії в тих випадках, коли метафора не вписується в панівну модель військової ідентичності. Як засвідчило проведене дослідження, до цього часу проблема виокремлення та лексико-семантичного аналізу військової терміносполуки й військової метафори не була широко вивчена в корпусній та когнітивній лінгвістиці.

*Ключові слова:* терміносполука, корпус паралельних текстів, метафора, офіційно-ділова термінологія, НАТО, Теорія концептуального блендингу.

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**Introduction.** The peculiarity of the representation of official terminology of NATO is characterized by its distinctive features, in particular, its usage in literal and figurative meaning which belongs to the military term system and is its inseparable element and is realized in oral speech or professional texts. Numerous researchers [Farley, 2010; Flusberg, Matlock, Tibodeau, 2018] point to a number of regularities that involve the usage of social and political, scientific and

technical, and educational factors which determine the semantic peculiarities of terminological groups of the military vocabulary of NATO, ways of its reproduction and origin. Scientists pay special attention to the factors which influence the development of the military term system and distinguish this array of terms from the commonly used vocabulary in the official document [Jurafsky, Martin, 2008] and encourage the scientific interest in their study not only in the official documents but also in the parallel corpus of texts. In particular, Dmitriy Dobrovolskyi marks that in the official texts of NATO the theoretical basis is realized through the most productive term combinations which fit in the official style in comparison with the one-word lexemes [Dobrovolskyi, Kretov, Sharov, 2005, p. 263–295]. In the scientist's view, the contrast between the word and the term combination is based on the fact that the term combination is outside the language system and is not subject to any semantic laws and provides for possible a more detailed and accurate definition of the object of opinion. It should be noted that in the official speech metaphors, hyperboles, the elements of the substandard language and jargon are not usually used. However, in the current study, we will try not only to identify the military term combinations in the official documents of NATO and parallel corpus of texts but also to identify the military metaphors and compare them with the military term combinations.

More recently, the metaphor was basically seen as a trope (figure of speech) belonging exclusively to the realm of poetry [Gyuró, 2017, p. 47]. The change of the paradigm was initiated by the fundamental work of Lakoff and Johnson (1980), which is based on idealized cognitive models. The cognitive model should be construed as a database structure with cognitive operations applied to it [Jarecki, 2020]. Over time, the metaphorical thinking has extended to the cognition, in which the concept is formed together with other concepts [Gyuró, 2017, p. 47]. Against this background, modern cognitive linguistics emerged, which studies ways of obtaining, processing, storing and using the verbalized knowledge [Lemonnier, 2014] about NATO's term combinations and metaphors obtained through the language.

Despite numerous researches published in the field of military term combinations and metaphors [Scott, Brydon, 1997; Shapiro, 2018; Farley, 2010; Kugler, 2007; Zhang, Bowman, 2018; Weinrod, Barry, 2010], the analysis of their joint use in NATO's official business document (hereinafter referred to as OBD) still remains a major challenge for scientists.

The study suggests that the coexistence of NATO's term combination and a military metaphor in one context may demonstrate the expansion of discursive practices. To some extent, the methodology of analysis allows us to outline the stylistic affiliation of the military terminology, which is a key unit of analysis of a specialized translation with a strongly pronounced military-communicative function, and a military metaphor, which steadily becomes a universal tool of comprehension of military realities. The primary objective of the study is to analyze NATO's term combination and to understand the military conceptual metaphor in OBD in order to demonstrate a deep knowledge of texts of the military-political discourse. To date, this issue has not been extensively studied in cognitive linguistics.

### **Theoretical Background**

The conceptual metaphor theory introduced by Lakoff and Johnson (1980) was studied by numerous foreign and domestic scholars [Fauconnier, 1997; Gyuró, 2017]. According to Slobod and Fuks, NATO as an international organization is a target domain that we try to understand by using conceptual metaphors [Slobod, Fuks, 2012, p. 144]. The universal character of the metaphor mechanisms explains the interdisciplinarity of searches in the military field, which in its turn complement the theoretical and practical basis of the knowledge about the military metaphor [Farley, 2010, p. 4]. The constructive role of military metaphors is emphasized in the article by US researcher Stephen Flusberg "War metaphors in public discourse" (2018) – a classic work that substantiates the need to use CMT in the understanding of a military organization in general and in the public discourse in particular. In the researcher's opinion, adaptation of a military text to CMT requires: 1) search for the target and source domain; 2) analysis of a certain form of conceptualization; 3) correlation through the metaphor; 4) observation of the conceptualization of space [Flusberg, 2018, p. 13]. The concept of Tourangeau and Sternberg (1982) states that the components in metaphors should have a large distance between domains and a short distance within the domain [Tourangeau, Sternberg, 1982, p. 203–244]. Attempts by scholars to unify and describe the formulation of Tourangeau and Sternberg (1982) on the specific distance between

domains and within the domain demonstrated the relevance of this concept for multi-vector studies and confirmed the lack of comprehensive studies of NATO's military metaphor. This theoretical basis gives rise to the conceptual blending theory as a continuation and extension of the conceptual metaphor theory. The theory is based on the mental space as an element of cognitive organization. CMT and CBT are based on the assumption that a metaphor as a cognitive mechanism, "designed to process information about abstract objects that are not perceived perceptually" lies behind the metaphor as a fact of language and speech [Jarecki, 2020].

The contrast between the military metaphor and the military term combination is based on the fact that the military metaphor is characterized from the point of view of cognitive linguistics and the military term combination is characterized from the point of view of corpus linguistics. In their research, S. Seljan and A. Gašpar underline that the military term combination belongs to the words with a special function and is studied taking into consideration the corpus and linguistic theoretical knowledge which involve statistical and automated ways of separation of term combination from collocation [Seljan, Gašpar, 2012, p. 149–156]. The launch of studies of military term combination and its separation from the text corpus was initiated by the researches of J.I. Farley (terminology of NATO's military operations), P. Martinez (terminology of search and rescue operations), R.C. Kothari (terminology in the sphere of military positions and combat zones), B. I. Shunevych (terminology of NATO's naval forces), K.G. Schulze (NATO's terminology in the sphere of air and missile defense), L. Achille (military terminology of Internet network), W. Weinrod (military-technical terminology). Scholars outlined the meaning and features of analytical terms (fixed terminological phrases), which, in contrast to the common vocabulary are pluralized on the basis of the verbal business space, law and order, international law in official business documents. In our research, the separation of terminological phrases from the text corpus originates from the ideas of the corpus constructivism of NATO's official business terminology. It is based on the meaningful, accessible and reliable conceptual content. Each term is correlated with the professional sphere of use and affects the formation of the public perception about the international organization in particular.

Comparing the military metaphor with the NATO's term combination, we assume that metaphorical models reflect common conceptual connections with the term combination within the theory of the art of war; the metaphorical model as well as multicomponent term combinations have a rather complex multilevel structure. Finally, the military vocabulary is one of the main sources of metaphorical expansion.

## Methods

The analysis of the NATO's term combination and the military metaphorical model from the point of view of their implicature envisages the use of the method of observation and continuous sampling. Separation of the term combination from the text corpus and official business documents was carried out by using statistical and automated *methods*. The analysis of the military metaphor in the text corpus involved the use of methods of cognitive linguistics (CMT and CBT).

*The purpose* of the present analysis is to demonstrate the NATO's term combination and the military conceptual metaphor in a single official business document. Thus, we offer a formula that distinguishes term combinations from the commonly used phrases and determines the coefficient of their information value, as well as a cognitive model that substantiates the characteristics of both CMT and CBT.

## Results and Discussion. Continuous Sampling Method: Selection of NATO's Official Business Terminology

From the perspective of the continuous sampling, the official business terminology in the context of its functioning, namely in English official business documents, is interpreted as "a result of a meaningful choice of a research unit that is only fixed by the text" [Jurafsky, 2008].

The removal of the highly specialized terminology from NATO's official business documents is conditioned by the presence of language units with the semantic structure indicating military, political and humanitarian features that distinguish NATO from other organizations. In our research, the sampling of nominative units used to denote the military concept of NATO as an international organization evidenced a wide reproduction of the accurate and definite content that deprives its components of the semantic ambiguity. At the same time, the speech expression

is fixed in texts from positions of observation of the language that allows to identify the dynamics of language changes in general and on the general scale in particular [Yermolenko et al., 2013, p. 320]. The essence of the observation method is to inventory, systematize, classify and interpret various phenomena and factors [Ganesh, 2017]. The analytical method of observation in the context of our research envisages the collection of scientific information and identification of linguistic characteristics of NATO's official business terminology. This is a popular method of researching the official business terminology "that helps to study and record the current state from a single token to a phraseme both in the past and in real situations" [Mareček, 2018].

As is well known, the ongoing development of NATO's armed forces caused constant changes in the composition of its military vocabulary, i.e. the 'extinction' of certain words and the 'birth' of new ones having the same significant regulatory potential. We would like to mention that our linguistic sampling includes neologisms which constitute an integral part of the vocabulary of any terminological system, two-component and three-component phrases and special language constructions. Consequently, we decided to analyze not "emotionally colored elements of the military lexicon" [Devlin, Chang, 2019], but the highly specialized terminology that includes the development of new weapons, the reorganization of armed forces and change of the military tactics and is considered to be a key inverse sampling in the context of NATO's business documents. In particular, we separated a number of two-, three- and four-component phrases from OBD. The sampling included the following phrases used to denote: 1) nuclear-powered rocket weapons system: *nuclear cruise missile submarine; wire guarded missile; nuclear-powered ballistic missile submarine; rocket-assisted projectile*; 2) radio-electronic and other technical tools: *artillery radar complex; beam rider guidance; uninterruptible – power supply; laser range finder; ambush detection device; on-board electronic computer system*; 3) reorganization of ground forces and senior management units: *paramilitary mining rescue unit; logistics operations center; emergency unit*; 4) change of some fundamental provisions (doctrines) in tactics and operational art: *nuclear detonation detection; electronic countermeasures; protection of safety information*.

Texts of NATO's official business documents are saturated with a variety of phraseological units denoting a number of military positions and areas of hostilities and military operations. According to the selected phrases, **the military position** as such: *assault position, firing position, attack position, battle position, defensive position, alternate position*; **hostilities** *rear area, battalion forward defense area, battle area, security area, company forward defense area, forward edge of the battle area, reserve area, forward defense area*; **military operations** *fire mission, zone of action, clandestine operation, covert operation, operation plan, shock action*.

In summary, the semantic dominance of the highly specialized terminology in NATO's official business documents is confirmed by a large sampling based on features identified as a result of monitoring of their extralingual indicators. The research value of the sampling consists in the fact that the selected terminological phrases lead to an improvement of their understanding and the effective practical application of the research.

### Statistical and Automated Methods of Separation of a Term Combination Based on the Corpus of Parallel Texts

We derived a formula that distinguishes term combinations from commonly used phrases and determines the coefficient of their information value in UN Parallel Corpus. Words and phrases classification algorithms in a document helped us to achieve the desired result. Thus, the formula derived by us (the quadratic deviation of the frequency of use of term collocations) is as follows:

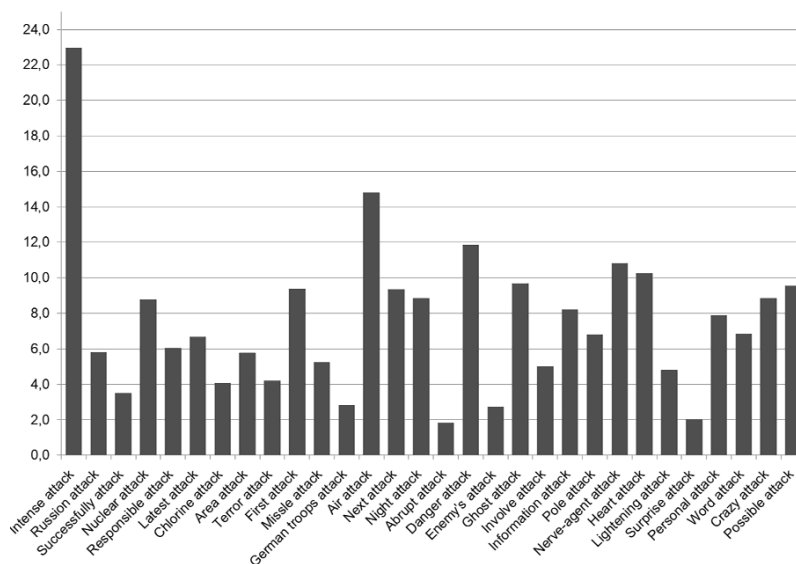
$$\sqrt{\frac{n_1 n_2}{N^2 \lg \left( \frac{n'_1 n'_2}{N'^2} \right)}}$$

where  $n_1$  – is the number of occurrences of the 1st word in all documents,  $n_2$  – is the number of occurrences of the 2nd word in all documents,  $N$  – is the number of occurrences of the phrase in all documents,  $n'_1$  – the number of occurrences of the 1st word in a document,  $n'_2$  – the number of occurrences of the 2nd word in a document,  $N'$  – the number of occurrences of the phrase in a document.

The formula determines the weight of terminological combinations in OBD – the “importance” of words in identification of NATO’s official business text. All commonly used phrases and terminological combinations that occur in official business documents of the processed UN Parallel Corpus collection are sorted by the degree of termhood. At the stage of weighing each component in the text corpus, we calculate and save the global weight that determines the importance of a component (term combination) for solving the problem of the content analysis (quantitative analysis) [Myung, 2003, p. 25]. The application of the quantitative analysis to analyze official terminology is also discussed by Ondřej Klbal and Michal Kubánek (2021), who propose that the term oriented sources include parallel text. In a similar vein, we compare term combinations and commonly used phrases in the parallel text corpus and we count the number of texts in which the NATO’s term combination or commonly used phrase containing a key search token occurs. The mechanism of the analysis envisages techniques that make it possible to calculate the number of occurrences of phrases in a given text for each phrase in the text corpus, as well as to form a vector model for the NATO’s term combination and commonly used phrase.

The mechanism of application of the formula to illustrate the quantitative presentation of the NATO’s term combination and the commonly used phrase is systematized below (Figure 1).

The presented calculations contain both NATO’s term combinations and commonly used phrases that receive the opposite quantitative assessment. This Figure 1 demonstrates how NATO’s term combinations are becoming more professional. The high reproducibility of the NATO’s term combination in the parallel text corpus evidences a pronounced concept, which determines the stability of its structure in official business documents. Term combinations are endowed with characteristics and informative functions that clarify the meaning of the described concepts in OBD. The prevalence of the NATO’s term combination in the parallel text corpus of the UN is explained by the semantic compatibility of the objects and features of the military sphere fixed in the language system. Commonly used phrases are acceptable in OBD given the ability to clearly distinguish between comparable entities contained not only in NATO’s official business documents, but also in the entire parallel corpus of UN texts.



**Figure 1. The result of interaction of the NATO’s term combination and the commonly used phrase in the UN Parallel Corpus**

In conclusion, the used statistical and automated methods of separation of a NATO term combination from the collocation do not hinder the presentation and perception of the corpus of UN parallel texts. The quantitative expression of results of the corpus analysis of the NATO’s



term combination and the commonly used phrase encourages to choose the optimal way to single out a referent of a certain military sphere, and in such event its nomination corresponds to the official business document assigned to this term combination.

### The Conceptual Blending Theory of the Military Metaphor

In this study, we attempt to illustrate the cognitive model of a metaphor through a military expression. The language data of the military expression and lexical token analyzed in the research are taken from the NATO's official business document titled "*FM 23-10 Sniper Training*" [Acosta, 1994]. As the statistical analysis of NATO's combat manual shows, 9 of all 820 terms (more than 1%) are military metaphors. Such choice of the research material, first, allows to cover the variety of terms in the official business discourse from a military point of view, and secondly – shows that military metaphorical models remain relevant for the analysis of the military context. Methods chosen for the analysis make it possible to describe the integrated space (blend) in OBD.

The corpus of a military text includes such metaphors as 'slash and burn' (difficulties of creating a new life after war or other trauma), 'killing fields' (a scene of mass killing), 'thinning the ranks' (reduction in the number of soldiers as a result of hostilities), 'Green Jackets' (military uniform that helps the military to disguise), 'sortie allotment message' (the joint force commander allots excess sorties to meet requirements of subordinate commanders), 'Persistent agent' (a chemical agent that, when released, remains able to cause casualties for more than 24 hours to several days or weeks), 'measurement ton' (the unit of volumetric measurement of equipment associated with surface-delivered cargo equal to the total cubic feet divided by 40), 'D-day' (the unnamed day on which a particular operation commences or is to commence), 'boost phase' (the portion of the flight of a ballistic missile or space vehicle during which the booster and sustainer engines operate) etc. We chose one metaphor from the text corpus with a purpose to analyze it within CBT. 'Hold fire' in the military context means not to shoot (*Dictionary of Military and Associated Terms. US Department of Defense*) [Gortney, 2010]. The *Collins English Dictionary* [O'Neill, 2015] defines the original term above as, "to stop attacking, harassing, or criticizing someone or something". The cognitive model of the metaphor '*Hold fire*' describes the input space (InpS) on the left and the integrated space (IntS) on the right. In our research based on CBT, the integrated space contains abstract elements inherent in both spaces. Mixing (overlapping of the set system) is shown in a common space. The overlapping means that both sets contain a common element, and each of them contains one element not present in the other two analyzed sets. The adequate reflection of a metaphorical model by means of cognitive linguistics ensures the integrity of the research, illustrated with the help of Venn diagram. This diagram shows the mixing of input, output and common spaces within CBT [according to Gyuró, 2017].

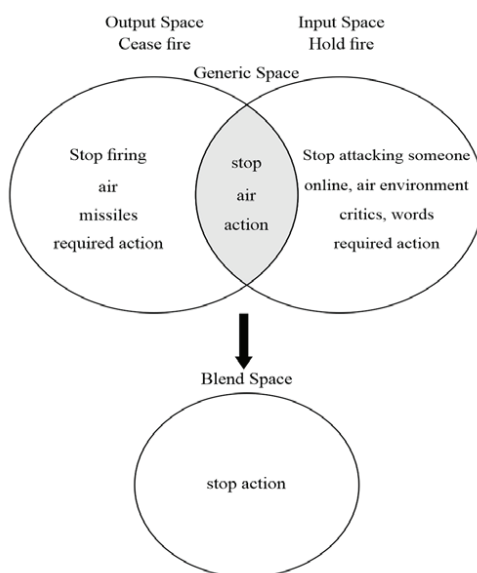


Figure 2. The cognitive model of a military metaphor

The example above shows the term 'ceasefire' in the output space above the left range and the term 'hold fire' in the input field above the right plane. The data processed during the use of CBT relate to the term *hold fire* – it is a classified set of our basic knowledge about this term and an obvious interpretation of the content that indicates *criticism*.

To date, the word *hold fire* has no complete terminological definition, which allows us to expand the boundaries of its interpretation and use in the system-structural paradigm. Therefore, it is justified to differentiate the concepts of *armed* and *verbal* attack, which can be traced in a number of works on the relevant topics [eg: Kubits, 2007; Flusberg, 2018]. To some extent, the understanding of *ceasefire* resonates with the concept of *hold fire*, so it is likely that multiple and more diverse interpretations of these terms will be formed. The association of *armed* and *verbal* attack causes the appearance of a number of functional properties and mixing of output and input spaces in particular. The properties of input and integrated spaces are listed in each of the domains, which are at the same time recognizable by these speech patterns. Lexicographic sources present the terms *ceasefire* and *hold fire* as ideographic synonyms [Walter, 2005]. Key points of the content of the word *ceasefire*: 1) a temporary suspension of fighting; 2) truce; 3) an order or signal to stop fighting. Some dictionaries [O'Neill, 2015] also record the archaic (noun) meaning of the term *hold fire*: delaying, waiting. The semantic connection between the archaic and modern pejorative meaning of this input and output space explains the military, colloquial, stylistically colored sphere of its use. Figure 2 illustrates how the set of all possible consequences of a stochastic experiment connects the elements of InpS and IntS in the form of analogies. The signal of a change in the set of elementary events is the formation of probabilistic space (Blend Space).

The input space is the main contact and starting point for each term. IntS shows 'stop attacking someone' as 'stop something happening'. The understanding of CBT is reflected in the term *hold fire* that is a metaphor. Accordingly, the InpP is retransmitted through the verbalization of the concept *stop firing* in a military context and focuses the attention on weapons and military equipment. Consequently, we see that there is no direct correlation between these two concepts. And although the criticism is not a military weapon, the logical and linear connection of the actualized same with the closest context still can be traced. The next stage envisages the identification of common features between two entities in terms of their scope of use. In InpS and IntS, we distinguish the identical functional and stylistic labeling that is expressed in the token *air* and *air environment*. The system of CBT methods used in our research revealed differences in the display of information about the tools of *military* and *verbal attack*. Thus, for instance, these are *missiles* in InpS, and *critics* and *words* in IntS. A special role in InpS and IntS belongs to *required action* and *no required action*. They are created by specialists and are designed for other specialists, and also have a common status indicating an *action* in each space. This means that CBT is a dynamic and contextually dependent phenomenon. The final phase of the research allowed to formulate a common space that includes similar lingual units and thus combines two contrasting spaces. This is an indication of the *termination of action* and *the place of its occurrence*. The final step proved the specifics of presentation of the space of mixing in the expression *stop action*. Against such a stylistically neutral background, the common features of the input and output spaces can be traced clearly.

As the research showed, the mechanism of use of CBT for the analysis of the cognitive model of a metaphor with the author's conceptualization demonstrates condensed intra-domain properties. By singling out four spaces, we traced their mutual designing that indicates a shorter distance between the domains than originally expected.

### Metaphor and Term Combination in NATO's Official Business Documents

In the next step of the research, let's consider the use of the term combination and the military metaphor in different fragments of the NATO's official business text titled "NATO's land forces: Losing ground" [Lasconjarias, 2014]. The following fragments of the text are an example of the flow of the military terminology characterized by the constant dynamics that acquires "specialization of the nominative meaning" [Slobod, Fuks, 2012, p. 78]:

(1) *And while allied and partner forces have helped create a space in which a fledging army in Afghanistan could get its feet on the ground, it is the training mission that will ultimately provide the Afghans with the capacity to secure their own nation. All of this requires boots on the ground* [Lasconjarias, 2014].

The quoted fragment of the OBD text contains lexical tokens with the semantics used to denote the new army in Afghanistan, which was formed to give Afghans the possibility to protect their own nation. The process of establishing a new army was based on the political decisions of allies and partners that envisaged the Alliance's training mission in the Islamic Republic of Afghanistan. The main task of the mission is to provide support in formation of self-sufficient and capable Afghan National Security Forces, Afghan National Army and Afghan National Police. Such a mission correlates with the meanings associated with term combinations (partner forces, fledging army, training mission), which implies the conclusion of establishing new relations and strengthening of existing ones, expanding training and mentoring tasks, building the capacity and enhancing the quality of the Afghan National Security Forces. The context implies the involvement of troops from different countries of the world in the training mission (including the International Security Assistance Force in Afghanistan). In this sense, the military metaphor (boots on the ground) discloses a highly specialized content in OBD. Accordingly, *The Cambridge English Dictionary* (2021) defines the meaning of the metaphor 'boots on the ground' as 'soldiers, police, etc. who are physically present somewhere in a military or police operation' [Walter, 2005].

The next fragment demonstrates the financial limitations faced by NATO's land forces, which are impacting their ability to respond to new and emerging threats. The metaphor of "operating on a shoestring budget" emphasizes the limited resources available to the military, while the metaphor of "a sitting duck" suggests that the military is vulnerable and exposed to attack due to this lack of resources. The military term combination "emerging threat" reinforces the idea that the military needs to have a secure position in order to effectively defend against potential threats. Overall, this fragment highlights the critical importance of adequate funding and resources in maintaining a strong and effective military presence:

(2) *NATO's land forces are operating on a **shoestring budget**, which makes it difficult for them to maintain a **strong foothold** in the face of new and **emerging threats**. Without the necessary resources, the **military** is like a **sitting duck**, waiting to be picked off by the enemy* [Lasconjarias, 2014].

Metaphorical analysis suggests that:

1. "shoestring budget" is a metaphorical expression that means to operate on a small or limited budget.
2. "strong foothold" is a military metaphor that refers to a secure position that is difficult for the enemy to attack.
3. "sitting duck" is a metaphorical expression that describes a vulnerable or defenseless target that is easy to attack.

Semantic analysis confirms that: the second fragment uses military term combination and term (emerging threat, military) and metaphors to describe the financial limitations faced by NATO's land forces. The *shoestring budget* metaphor implies that the military is operating with limited financial resources, which can limit their ability to respond to threats effectively. The *strong foothold* metaphor highlights the importance of maintaining a secure position, while the *sitting duck* metaphor emphasizes the vulnerability of NATO's land forces when they are not properly resourced.

The following fragment demonstrates the need for NATO's land forces to adapt to the evolving nature of warfare. The metaphor of "a cavalry regiment trying to outrun a tank battalion" emphasizes the futility of relying on outdated tactics and technologies, and suggests that NATO's land forces must upgrade their capabilities in order to keep up with more advanced adversaries. The use of military term combinations such as "new technologies" and "advanced training" highlights the specific areas where investment is needed in order to maintain military readiness. Generally, this fragment underscores the critical importance of modernizing and adapting military capabilities in order to effectively respond to potential threats:

(3) *NATO's land forces must adapt to the changing nature of warfare, and this requires a significant investment in **new technologies** and **advanced training**. Without this investment, the military risks being **left in the dust** by more advanced adversaries, like a **cavalry regiment** trying to **outrun a tank battalion*** [Lasconjarias, 2014].



Metaphorical analysis indicates that:

1. "left in the dust" is a metaphorical expression that means to be left behind or left at a disadvantage.
2. "outrun" is a military metaphor that means to move faster or stay ahead of the enemy.

Semantic analysis shows that: the third fragment of OBD uses military term combinations such as "cavalry regiment" (a military term combination that refers to a unit of soldiers on horseback, typically used in the past) and "tank battalion" (a military term combination that refers to a unit of soldiers operating tanks, which are advanced weapons used in modern warfare) and at the same time metaphors to describe the need for NATO's land forces to adapt to new and emerging threats. The *left in the dust* metaphor implies that failure to invest in new technologies and training can put NATO's land forces at a disadvantage against more advanced adversaries. Another metaphor *outrun* means to move faster or stay ahead of the enemy. Thus, these metaphors and military term combinations serve to illustrate the importance of investing in new technologies and training to remain effective in modern warfare.

In comparison, the military term combinations in these fragments are used to provide specific information about the military, such as *the shoestring budget* and *the cavalry regiment*. On the other hand, the military metaphors are used to convey complex ideas and comparisons, such as the *sitting duck* and *tank battalion*. Both the military term combinations and metaphors contribute to the overall effectiveness of the language used to describe NATO's land forces and their challenges.

The study postulates that despite of the complex nature of the military terminology, the analysis of a fragment of the official business document "NATO's land forces: Losing ground" offers a new look at combination of the special terminology with a metaphor in one context, what does not fit into a clearly defined set of methods of analysis of an official business text. In the research, the analyzed fragment of the text is aimed at reflecting the diversity of the highly specialized terminology (military term combination and military metaphor) in the official business discourse, which allows to form a chain of semantic dependence between the concepts recorded in OBD.

To summarize, the algorithm of application of the content analysis contained the following procedures:

1) definition of the text corpus subject to the research analysis based on the following criteria: belonging to one of the selected functional styles (official business style), thematic proximity (terminological and metaphorical relevant problematics); 2) formation of a sampling of military-marked text fragments, the scope of which is sufficient to disclose the meaning of the concept of the military identity; 3) identification of lexical signals of a term combination and a metaphor, the semantics of which gives a military identification meaning to the content of the fragment; 4) interpretation of the meaning of a term combination and a metaphor within such categories as combat systems, operational art, ground forces.

## Conclusion

The study was focused on the identification and analysis of the term combination and metaphor in the official document by the methods of corpus and cognitive linguistics to confirm their common usage in the unified official document of NATO. We tried to justify the hypothesis according to which these subjects have common features in the lexical form and the military lexical meaning.

The first of the two linguistic analyses was aimed at giving the global perspective on the most frequent term combinations and comparing them with the most commonly used word combinations in the parallel corpus of the official texts to identify the coefficient of their informational value. Statistical and automated methods of the linguistic analysis confirmed the high reproducibility of the term combination NATO in the parallel corpus of the official texts. Taking into consideration the results, the field-specific military term combinations serve as a joining link that will provide the unity of the content plan and its expression [Solano, 2013, p. 167–180] as had been stated before. On the other hand, the second analysis was created to illustrate the cognitive model of the metaphor through the military expression. As the conducted study found, the mechanism of the usage of the TCB for the analysis of the cognitive model metaphor showed short intradomain properties. This identification helped to determine four spaces where we traced their mutual projection which showed the shorter distance between the domains than had been expected at the beginning of the study.

At the final phase of the study we focused on the identification of the field-specific term combination and military metaphor in the official document under the title "NATO's Land Forces: Losing Ground". Though the term combination and metaphor are different categories, their common usage in the official document shows the similarity which can create a common category, the military metaphor in the official terminology of NATO.

As far as specific results are concerned, the following conclusions can be drawn referring to the official business document dealing with training mission in Afghanistan:

1) The similarity between the term combination and metaphor is found in the chain of semantic dependence between the terms in the fragment of the official document. The meaning of the language units (the term combination, the metaphor) colors the fragment content with the military and identification sense.

2) The difference between the military term combination and the military metaphor lies in the usage of them in text. On the one hand, military term combinations used in the text convey meaning related to military operations rely on technical language to convey specific information, while on the other hand, military metaphors use imagery and comparisons to convey abstract concepts in a more relatable way.

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## **THE TERM COMBINATION AND THE METAPHOR IN THE OFFICIAL BUSINESS DOCUMENT: COGNITIVE ASPECT**

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**Key words:** *term combination; parallel text corpus; metaphor; official business terminology; NATO; Conceptual Blending Theory.*

In this paper, the military term combinations and military metaphors in the official documents are identified and analyzed by the *methods* of corpus and cognitive linguistics. The comparative approach was pursued to show their common usage in the unified official document of NATO. The purpose of the study is to recommend the methodology for statistical and automated identification of term combinations in the parallel corpus of the official texts and to recommend the methods of cognitive linguistics such as the Conceptual Metaphor Theory (hereinafter – CMT) and the Conceptual Blending Theory (hereinafter – CBT) for the analysis of the military metaphor in the parallel corpus of official texts. The ultimate *aim of*

*the study* is to analyze NATO's military terminology and understand the military conceptual metaphor in official business documents to demonstrate a deep understanding of military-political discourse.

The removal of the highly specialized terminology from NATO's official business documents is conditioned by the presence of language units with the semantic structure indicating military, political and humanitarian features that distinguish NATO from other organizations. In our research, the sampling of nominative units used to denote the military concept of NATO as an international organization evidenced a wide reproduction of the accurate and definite content that deprives its components of the semantic ambiguity. At the same time, the speech expression is fixed in texts from positions of observation of the language that allows us to identify the dynamics of language changes in general and on the general scale in particular.

The analytical *method* of observation in the context of our research envisages the collection of scientific information and identification of linguistic characteristics of NATO's official business terminology.

In particular, we separated a number of two-, three- and four-component phrases from OBD. The sampling included the following phrases used to denote: 1) nuclear-powered rocket weapons system: *nuclear cruise missile submarine; wire guarded missile; nuclear-powered ballistic missile submarine; rocket-assisted projectile*; 2) radio-electronic and other technical tools: *artillery radar complex; beam rider guidance; uninterruptible – power supply; laser range finder; ambush detection device; on-board electronic computer system*; 3) reorganization of ground forces and senior management units: *paramilitary mining rescue unit; logistics operations center; emergency unit*; 4) change of some fundamental provisions (doctrines) in tactics and operational art: *nuclear detonation detection; electronic countermeasures; protection of safety information*.

Thus, the semantic dominance of the highly specialized terminology in NATO's official business documents is confirmed by a large sampling based on features identified as a result of monitoring of their extralingual indicators. The research value of the sampling consists in the fact that the selected terminological phrases lead to an improvement of their understanding and the effective practical application of the research.

We also used the statistical and automated *methods* of a NATO term combination separation from the collocation to not hinder the presentation and perception of the corpus of UN parallel texts. The quantitative expression of results of the corpus analysis of the NATO's term combination and the commonly used phrase encourages to choose the optimal way to single out a referent of a certain military sphere, and in such event its nomination corresponds to the official business document assigned to this term combination.

As the research showed, the mechanism of use of CBT for the analysis of the cognitive model of a metaphor with the author's conceptualization demonstrates condensed intra-domain properties. By singling out four spaces, we traced their mutual designing that indicates a shorter distance between the domains than originally expected.

In comparison, the military term combinations in these fragments are used to provide specific information about the military, such as *the shoestring budget* and *the cavalry regiment*. On the other hand, the military metaphors are used to convey complex ideas and comparisons, such as the *sitting duck* and *tank battalion*. Both the military term combinations and metaphors contribute to the overall effectiveness of the language used to describe NATO's land forces and their challenges.

**Conclusion.** The study was focused on the identification and analysis of the term combination and metaphor in the official document by the methods of corpus and cognitive linguistics to confirm their common usage in the unified official document of NATO. We tried to justify the hypothesis according to which these subjects have common features in the lexical form and the military lexical meaning.

The first of the two linguistic analyses was aimed at giving the global perspective on the most frequent term combinations and comparing them with the most commonly used word combinations in the parallel corpus of the official texts to identify the coefficient of their informational value. Statistical and automated methods of the linguistic analysis confirmed the high reproducibility of the NATO's term combination in the parallel corpus of the official texts. Taking into consideration the results, the field-specific military term combinations serve as a joining link that will provide the unity of the content plan and its expression [Solano, 2013, p. 167–180] as had been stated before. On the other hand, the second analysis was created to illustrate the cognitive model of the metaphor through the military expression. As the conducted study found, the mechanism of the usage of the TCB for the analysis of the cognitive model metaphor showed short intradomain properties. This identification helped to determine four spaces where we traced their mutual projection which showed the shorter distance between the domains than had been expected at the beginning of the study.

At the final phase of the study we focused on the identification of the field-specific term combination and military metaphor in the official document under the title "NATO's Land Forces: Losing Ground". Though the term combination and metaphor are different categories, their common usage in the official document shows the similarity which can create a common category, the military metaphor in the official terminology of NATO.

As far as specific results are concerned, the following conclusions can be drawn referring to the official business document dealing with training mission in Afghanistan (2019):

1) The similarity between the term combination and metaphor is found in the chain of semantic dependence between the terms in the fragment of the official document. The meaning of the language units (the term combination, the metaphor) colors the fragment content with the military and identification sense.

2) The difference between the military term combination and the military metaphor lies in the usage of them in text. On the one hand, military term combinations used in the text convey meaning related to military operations rely on technical language to convey specific information, while on the other hand, military metaphors use imagery and comparisons to convey abstract concepts in a more relatable way.

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