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Metaphoric Transfer in Term Formation: Exploring Anthropomorphic and Non-Anthropomorphic Models in Military Symbolic Language

The authors examined the nature of metaphoric transfer in military terminology, explicitly focusing on anthropomorphic and non-anthropomorphic models. The aim of the research is to classify and identify metaphoric models produced by metaphoric transfer while investigating the basis used to enable this process and its influence on the final meaning of the new metaphoric terms inside the military domain. The study aims to classify and identify metaphoric models resulting from metaphoric transfer, while also examining the basis that enables this process and its influence on the final meaning of new metaphorical terms within the military domain. Proper interpretation and understanding of military metaphorical language are crucial for improving the cognitive perception of new military terms emerging through metaphorical transfer among a wide audience, including both military experts and wider audience. The analysis showed that anthropomorphic models are more common than non-anthropomorphic ones, due to the greater importance and frequency of human-related objects in everyday life. The results obtained from the study can provide a foundation for undertaking further research about the functioning of metaphoric transfer and the division between anthropomorphic and non-anthropomorphic models in other specialized terminological fields.

Keywords: metaphoric transfer, military terminology, anthropomorphic models, non-anthropomorphic models, military metaphors.

Introduction

In military discourse, language serves as a powerful medium for shaping identities and perceptions. It also acts as a potent tool for influencing public opinion and spreading propaganda, instilling feelings of patriotism, national pride, and a commitment to military service. The metaphoric transfer is an essential component of this process, helping facilitate communication through symbolic language and enriching concepts with metaphorical meaning, which, in turn, expands the military terminological vocabulary. In this paper, it has been attempted to examine the nature of metaphoric transfer in military terminology with greater attention to two separate models — anthropomorphic and non-anthropomorphic.

Using symbolic language in the military throughout thousands of years has tremendously helped collective identities, operational planning, and combatant mobilization. From ancient civilizations naming their warships after gods and heroes to modern military forces employing operational codenames derived from natural phenomena, symbolic representation in combat has evolved along with military tactics and technologies [1–4]. Together with making communication more accessible, these symbolic constructions impart military operations with deeper cultural and historical resonances. Symbolism in the military encompasses a wide range of meanings, from national flags that symbolize a country's sovereignty and loyalty to insignias that reflect one's rank and membership with a specific military unit [5; 12–15]. Along with material objects, the symbolic representation also includes operational language and terminology, combat chants, and names that capture strategic goals and ideological tenets.

Two main representations can be identified when examining the language structures of military symbols: anthropomorphic representations and non-anthropomorphic models. In military terminology and other spheres, anthropomorphic models empower non-human things with human features, attributes, or historical allusions [6; 4]. Conversely, non-anthropomorphic models use natural events or abstract ideas to symbolize military actions and strategic goals. When building anthropomorphic and non-anthropomorphic models, metaphoric transfer is part and parcel of effectively communicating new concepts within a particular field of expertise. It also involves interpreting the metaphor in a new domain to generate new conjectures, which are empirically validated, and theoretical ramifications are described [7; 126]. When considering the concept of

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metaphoric transfer, it is essential to note the transition of the meaning to create metaphors from the source domain to the target domain, where they are manifested. This process is associated with metaphorization, which is thought to be a cognitive model for creating new terms. In this case, it is advisable to rely on the Conceptual Metaphor Theory proposed by George Lakoff and Mark Johnson [8-9] and supported and elaborated later by George Lakoff (1993) [10], Raymond W. Gibbs Junior (2011) [11], *Zoltán Kövecses* (2016, 2020) [12-13], Peer F. Bundgaard (2019) [14]; Xin Zhang (2021) [15], Stefana Garello (2024) [16]. In this regard, metaphors are viewed as a reinterpretation of one concept belonging to the source domain through the embodiment of another represented by the target domain. Metaphors are widely used in the medical and psychology fields, especially in couples' therapy, to help partners understand and exchange their feelings and resolve conflicts [17]. They are also common in the arts, such as in songs, where metaphorical messages are often conveyed [18]. Additionally, both specialized and popular scientific texts use metaphorical language [19]. The education sector also actively incorporates metaphors and metaphorical concepts in the learning process [20].

The objective of the research is to classify and identify military terms that are generated through metaphoric transfer into anthropomorphic and non-anthropomorphic models. Moreover, it attempts to examine the basis that is employed to facilitate a metaphoric transfer from an object of one lexical domain and the impact of this process on the final meaning of the new metaphoric term, which is relevant to the military sphere.

The relevance of the research is justified by the significance of properly interpreting and comprehending military metaphoric terminology that is generated with the help of the metaphoric transfer, relying on form, structure, or function similarities, and utilizing anthropomorphic and non-anthropomorphic models. Metaphorical models constitute a coherent framework that validates the symbolic essence of cognitive processes in the formation of a concept. An examination of metaphorical terms within the military terminology of the English language demonstrates the extensive potential of this figure of speech as a means of naming terms. In addition, one can gain a deeper understanding of the semantic intricacies hidden behind military metaphors, as they sometimes go beyond the literal interpretation. Examining the connection between anthropomorphic and non-anthropomorphic models offered by metaphoric transfer might enhance cognitive understanding of new military terminology, benefiting not just military specialists but also a diverse audience.

Material and methods

Materials. The research has gone through numerous stages. The first stage involved choosing the scope materials, a broad collection of military-related news items gathered from current foreign web publications and dictionaries (2021–2024). With a special focus on examples of metaphorical transfer covering both anthropomorphic and non-anthropomorphic models, the resources were meticulously gathered to cover a wide variety of military symbolic language. To ensure a complete and inclusive representation, a particular emphasis was made on texts coming from many military branches and extending across a spectrum of geopolitical conditions. The 10 top online news websites were selected based on the highest numbers of entries calculated by Similarweb statistics provided by the PressGazzette in 2024 [21] — BBC, MSN, CNN, The New York Times, News Google, The Guardian, Fox News, Daily Mail, News18, Finance Yahoo — to showcase and cover the most frequently read and visited websites with the currently updated information. It is worth noting the metaphorical examples from these websites have been chosen using the continuous sampling method. The study encompasses a three-year period to reflect the most current alterations and developments in military metaphorical language, prompted by the increasing frequency of hostilities and wars in recent years.

Procedure. The Metaphor Identification Procedure devised by Gerard Steen and Pragglejaz Group [22] was applied to find metaphors and metaphoric terms in the texts following material collecting. Then a Coding Scheme (Table) based on the criteria distribution was developed to differentiate between non-anthropomorphic and anthropomorphic metaphorical models. When analyzing metaphors, it was necessary to categorize them into metaphorical models. To achieve this, a Coding Scheme was developed with 4 questions to determine the appropriate model for each metaphor. The questions were designed to identify the characteristics of anthropomorphic or non-anthropomorphic models. If three out of four answers were "yes" when using the Scheme, the metaphor was classified as an anthropomorphic model. Conversely, if three out of four answers were "no", the metaphor was classified as a non-anthropomorphic model.

Analysis. The next step was classifying the several kinds of anthropomorphic and non-anthropomorphic metaphorical models and providing examples with their relevant explanations for the type under research. Images will accompany some metaphors to show how metaphoric transfer can operate depending on the form, structure, and functionality of an object, therefore offering a more realistic visual portrayal for the general audience. After a comparative analysis of the chosen examples, the diagram with both models and their subcategories will be shown to illustrate the division of metaphoric models with the most productive groups. This graph with a statistical breakdown is created to display the distribution of metaphorical models in numbers and percentages, facilitating comparison and illustration of the most commonly found types. Overall, this research employed many advanced methods, including statistical analysis, modeling, content analysis, conceptual integration, synthesis, and classification.

T~a~b~l~e A Coding Scheme For Distinguishing Anthropomorphic and Non-Anthropomorphic Metaphoric Models

The question to ask when defining a metaphorical model	Anthropomorphic Meta-	Non-Anthropomorphic
	phoric Model	Metaphoric Model
Does the metaphor imply human emotions, intentions, or behav-		X
iors?		
Does it attribute cognitive abilities (thinking, deciding) to non-		X
human entities?		
Does it use language typically reserved for humans (e.g. de-		X
scribing inanimate objects as having desires or feelings)?		
Does the metaphor consist of the name of an object used to de-		X
scribe people's lives, activities, and environment?		

Results and discussion

The research investigates the application of metaphoric models in the English military terminology system, uncovering its potential as a technique for identifying specific terms and distinguishing thematic language. It also examines and delineates military terms that originated due to anthropomorphic and non-anthropomorphic models via metaphoric transfer. The models are denoted by a term in the framework that typically pertains to a certain aspect of human existence. However, when combined with another word, this term will form a new combination that can be interpreted as a military metaphor.

Anthropomorphic metaphoric models may be further classified, though not exclusively, as "Household Items", "Clothing/Apparel", "Food/Nourishment", "Body Parts", "Relations", and "Mythology and Religion" each of which symbolizes a distinct facet of human endeavor. The non-anthropomorphic metaphoric models chosen for the research were "Colors", "Landscape", "Animals", and "Plants", the elements of which served as a foundation for building a metaphor.

Beginning with the "Household Items" category, the term "pipe hitter" may not seem related to the military at first glance, as the two words have everyday meanings: "pipe" refers to a smoking device, a musical instrument, or a tube, and "hitter" is a baseball position. However, in the US military community, "pipe hitter" refers to special operations personnel such as Delta Force, SEALS, and Special Forces. These units are highly respected, well-trained, and qualified. There is no exact equivalent of this term in Russian, but in Kazakhstan, it can be translated to «condamы ydavu» or «κpanoвый берет BC PK». "Green Berets" is another name used by the US Armed Forces for their Special Forces. Today, "pipe hitter" is also used metaphorically outside of military contexts to describe a person willing to go to extreme lengths to accomplish things with a mentality focused on winning. In this case, the metaphoric transfer relies on the resemblance of the functional aspect. In addition, it is worth noting that this term originates from a play on words, drawing an analogy between the profession of a pipe fitter and a plumber who repairs pipelines. The latter is an equally essential and skilled profession, known as «cnecapь-водопроводчик».

A "knife rest" (подставка для ножа и/или вилки) is a practical kitchen implement that provides a place to rest a previously used knife or fork, thereby preventing cooking fluids from contaminating countertops. It is straightforward to comprehend this word combination by translating its components. Nevertheless, this designation is frequently utilized within the military to denote «рогатка» — an engineering-sapper wire fence that operates without detonation. After analyzing the meanings of the two distinct objects and con-

trasting their physical appearances, it becomes apparent that the metaphor has been constructed based on their similar forms, as illustrated in Figure 1 [23-24].





Figure 1. Knife rest (a kitchen utensil) and a knife rest (fortification construction)

One example of the "Clothing/Apparel" category is an apron, a protective type of clothing used in many homes for cooking, although it has military uses, too. Its application could cover anything from an aircraft parking area (площадка для стоянки самолетов) to camouflage (маскировка, камуфляж) or wire entanglements (проволочные заграждения).

In this case, "apron" might serve as a metaphor based on the metaphoric transfer of form similarity. An "ammunition belt" is a term that refers to a strip of material used in combat to feed small arms such as machine guns, automatic cannons, and grenade launchers. The word "belt" is used metaphorically, as it retains the idea of a strip of material worn around the waist for support or decoration. The ammunition belt is a special tape with cartridges usually located in the cartridge box. The military term for an ammunition belt is «пулеметная лента, патронная лента» in Russian. In this case, we can observe the essence of a metaphorical transfer based on the form similarity.

The "Food/Nourishment" group is presented with a few objects. In the military, the term "sandwich" refers to a battle tactic where a fighter attacks from the outside, and a wingman follows behind to shoot the enemy from behind. The word is used metaphorically due to its form similarity in the "Food/Nutrition" category. The intriguing origin story of the metaphor "red herring" dates back to a time when a pungent smoked herring was utilized to divert hunting dogs from their intended prey. Over time, this tactic evolved into a symbol of trickery against one's foe. In Russian, the phrase «οπερεκαιουμιῦ мαμέβρ» is used to describe the same concept, drawing on the parallel function of the term.

The fourth group of anthropomorphic models — "Body Parts" — commences with the term "bridge-head", which consists of two components: "bridge", which refers to a structure used for crossing a river, ravine, or railway track, and "head", which denotes the upper part of a body. The "bridgehead" (завоеванный плацдарм на берегу реки, мостовое оборонное укрепление) military usage can be traced back to the High Middle Ages. A bridgehead was a military fortification that protected the end of a bridge in ancient times. Nowadays, it refers to a strategically important land area around the endpoint of a bridge or potential crossing over a water body. It is defended or taken over by opposing forces during conflict. A "beachhead" means creating a safe haven in hostile territory, often expanding into an enemy's territory. Sometimes, people use this term interchangeably with "foothold", which is more technically correct.

Another commonly used term belonging to this group in both military and layman circles is "corps". This term can be translated to «κορηνς», «mpyn», or «мертвец». While often used in media reporting on armed conflicts, "corps" can also refer to a large unit of armed forces, such as the Marine Corps, Infantry, Special Forces, or Air Defense Artillery. The next example of an anthropomorphic metaphor pertaining to the human body is the term "hair trigger". This metaphor has its roots in psychology and describes a proclivity to become easily provoked and have a brief fuse. In the realm of military weaponry, a "hair trigger" refers to a trigger on a firearm that is configured to discharge with minimal force. This concept can be translated as «cnyckoboŭ κριονοκ, πρεδυομαιά cπαδορο μακαπίση». The transfer of this metaphoric language is based on the similarity of attributes. "Teeth" is a term commonly used in the military to describe a particular corps type. The term "teeth arms" refers to branches of the military that engage in direct combat. This is also a military slang term connected to the expression "be armed to the teeth", — meaning fully equipped with a wide variety of effective weaponry. Being armed to the teeth is essential to the "Teeth Arms" military service branch.

The fifth category of anthropomorphic models in military terminology is devoted to the vocabulary field of "*Relations*", which employs words denoting interpersonal relations and transforms them into military terms with the help of metaphor transfer. A variety of examples have been chosen to illustrate how the process of metaphoric transfer operates to generate novel interpretations within the military domain, such as

"alien enemy", "buddy-buddy philosophy", "friend-or-foe", "friendly fire" and others. For example, the adjective "alien" is ubiquitously used to describe someone or something foreign, strange, or exotic. However, due to the change of the narrative in media because of the current conflicts, "alien" is usually accompanied by "enemy". According to Merriam-Webster Online Dictionary [25], an "alien enemy" («гражданин враждебного государства») is defined as a foreigner who resides in a country that is at war with the country of the person in question. "Buddy" is another term used in US slang to describe a person who is a really close friend.

The term "buddy-buddy philosophy" («философия войскового товарищества и взаимовыручки») refers to the formed bonds of solidarity and mutual assistance among military personnel. The term "friend-or-foe" (an ally or an enemy) is a military term that figuratively represents two contrasting sorts of human relationships, which have been applied in the military context. The "friend-or-foe" system, also known as «система радиолокационного распознавания «свой-чужой»» in Russian, is a sophisticated combination of hardware and software designed to automatically differentiate between friendly and enemy personnel, forces, and weaponry. This term is also employed as an acronym for "identification friend-or-foe" (IFF). Another example using a "friend" element is "friendly fire" (огонь по своим, обстрел со стороны своих по ошибке), which refers to an accidental firing or assault conducted by a military personnel or unit against their own soldiers or the troops of an ally. Within the United States Armed Forces, several more terms refer to the same distressing notion — "fratricide" («фратрицид» — «братоубийство»), "blue versus blue", and "blue-on-blue incident". The last two examples will be examined in greater detail under the "Colour" category of non-anthropomorphic models. This term has also transitioned from its original usage in the military domain to being commonly used in ordinary language. It is now employed figuratively to convey the idea of "inflicting harm upon your own supporters".

The "Mythology and Religion" concept encapsulates the enduring allure of the mysterious and uncharted, stemming from age-old myths and the theological and philosophical perspectives of the Middle Ages. When it comes to military terminology, this category includes terms like "baptism of fire", "dragon's teeth", "red devils" and a few others that were developed through the use of metaphorical transfer. Derived from the passage of John the Baptist in Matthew 3:11 [26; 114], the Christian theological concept of "baptism of fire" marks a full absorption into God's presence, therefore cleansing all sin and filth. This word has been adopted in the military context with a metaphorical connotation, referring to the initial combat experience of freshly enlisted soldiers («δοesoe κρεψεμμε», «nepsui δοῦ μοsoδραμψε»). Metaphorically, it can also be applied beyond military and religious contexts to refer to the initial or most significant challenge in any situation.

Built with the help of the metaphorical transfer of shape resemblance with animal's teeth, "dragon's teeth" offers still another fascinating example of a military engineer sapper term in the "Mythology and Religion" model. It begins in Greek mythology concerning the Phoenician Prince Cadmus and also appears in Jason's search for the Golden Fleece. According to legend, it is believed that if their teeth were buried, they would sprout into fully equipped warriors. In the military, "dragon's teeth" («бетонный противотанковый надолб», «невзрывные противотанковые заграждения «зубы дракона») are pyramidal anti-tank barriers made of reinforced concrete. They were first utilized during the Second World War to hinder the mobility of tanks and mechanized vehicles. The objective was to decelerate and direct tanks toward designated areas where they might be efficiently neutralized by anti-tank weaponry. Additionally, the NATO classification makes frequent use of this term. Figure 2 [27-28] provides a graphic depiction of "dragon's teeth" in each of its meanings.





Figure 2. Dragon's teeth (an animal) and dragon's teeth (a fortification construction)

The concept of the devil, which corresponds to the ultimate level of evil and is typically opposed to God, holds a significant position in the field of religion, particularly in the Christian and Jewish belief systems. A figurative use of the word "devil" was employed by Germans during the Second World War to refer to extremely talented and fierce British paratroopers. The military troops who served in the elite parachute units of the British Army were referred to as "Red Devils", which is an informal moniker. The color red represents the color of their tail straps. Furthermore, these corps are connected to the British Special Air Service (SAS) and might be compared to the Kazakhstani Air Assault Forces regarding their capabilities. Since it has become a moniker for players on the Belgian National Football Team and the Manchester United Football Club, the term "Red Devils" has entered the sports language.

Turning to non-anthropomorphic metaphoric models, the first category called "Colors" with its most frequently encountered examples will be analyzed. "Blue-on-Blue fire" («ошибочное ведение огня», «огонь по своим») is a military metaphor that employs color to convey its meaning, necessitating additional knowledge. According to the NATO classification, the blue color denotes the soldiers of an individual country or their allies in the foreign armed forces. Conversely, in Kazakhstan, red in military topography helps us to identify our military troops and armed forces. This tradition originated in the Soviet Union during the Great Patriotic War when our troops were assigned the color red because of their connection to the Red Army name.

One more example of using the color red as a part of a military metaphor is "red cell", which denotes the adversary's forces or the opposing team during the military training exercises. Moreover, "red cell" can also denote the National Security Coordination Teams (NSCT) of the US government. In accordance with NATO Joint Military Symbology, two additional colors are employed to denote the affiliation of objects depicted on maps in military topography. The color green signifies neutrality, while the color yellow signifies an uncertain affiliation [29].

"Silver Triangle" is not exclusively a military metaphor, although its meaning is fixed in the Dictionary of Military and Associated Terms as a primary illegal drug manufacturing area, which includes three countries — Peru, Bolivia, and Colombia [30].

In the field of military topography, different zones are categorized based on their level of security. The term "red zone" («районы, прилегающие к линии фронта») is used metaphorically to describe a dangerous location where active combat is taking place. The "yellow zone" («зона, сохраняющая присутствие террористической/военной опасности») refers to a risky area that should only be visited under the supervision of a public relations officer or another commander. On the other hand, the "green zone" («условно безопасная зона») primarily represents a safe location [31; 88], [32].

Frequently, the human mind links a particular area (whether it is actual or imagined) with the concept of a landscape. The category "Landscape" is often used in the military metaphorical sphere as a part of non-anthropomorphic models. For example, a channel refers to a naturally occurring narrow body of water. However, in a military context, "channel" («канал коммуникативной связи») denotes communication through radio or video transmissions. This term may evoke the image of water channels because the signal waves are long and capable of connecting many locations, and is created through a metaphoric transfer of both form and function similarity.

A "ditch" is typically a lengthy and narrow trench that is excavated into the earth at the side of a road or field. Upon its transition to the military domain, this term has acquired a new definition: a linear trench, which is either wet (moat) or dry, and is designed to serve as a barrier against assailants or a protected line of communication for defenders («ров окопа», «траншея») [33]. "Ditch" (often capitalized) («Ла-Манш») is a metaphor for the English Channel in military aviation. Should "ditch" be employed as a verb, it will now have a different connotation: to make an emergency water landing.

"Trail" is another component of terrain chosen for the study; generally speaking, this refers to an unpaved road, such as the little route one takes across the forest on one's hike. Often used as a command, military specialists allude to "trail arms" («у ноги (положение оружия в движении)») to a posture in a military exercise whereby a rifle butt is lifted a few inches above the ground and the muzzle slanted forward such that the barrel creates an angle of roughly 30 degrees with the vertical. One may follow the link between the military and the original landscape meaning regarding the medium applied in both situations: legs.

Terms created based on specific animal features (physical or human-imaginable mental) form the metaphorical model "Animals". The term "cluster" typically refers to a group of similar things that occur together. This word can be translated into different languages as «скопление», «гроздь», «рой (пчёл)», ог «кисть», all of which signify an object consisting of multiple combinations. In the military context, "clus-

ter" is a metaphor for a type of weapon that releases or disperses smaller submunitions over a wide area. These bombs are effective against enemy personnel and armored vehicles, but they can also cause harm to civilians during military operations, as well as for many years after. Their use is considered inhumane and is prohibited in many countries. The issue of cluster munitions gained attention in the media during the Russia-Ukraine conflict. In this context, "cluster" is translated as «кассетный боеприпас», and the metaphorical transfer is based on the similarity of form.

"Shell shock" («боевой посттравматический синдром») is a prevalent metaphorical term that denotes post-traumatic stress disorder that develops in response to intensive stressors that occur during wartime (such as combat). The shell concept in this instance serves as a refuge for preserving painful memories acquired on the battlefield, a function that the shell also performs in animals, particularly in armadillos. In South America, armadillos are commonly as "men-at-arms" or "knights in armor" in Spanish, which might have an amusing connection to the military domain once again.

The next "animalistic" instance of non-anthropomorphic models, known as "dogfight", is unrelated to actual canines engaging in combat, contrary to common perception. Soldiers commonly used this metaphor, specifically in reference to military aviation, to describe a close-range duel between two or more fighter planes ("ближний маневренный воздушный бой"). This usage was particularly prevalent during the Second World War.

The name "caterpillar track" («гусеничный трак») has been applied to warfare as a metaphorical transfer of similarities in form and function. The motion of a caterpillar track closely matches the structure and mechanism of movement exhibited by the legs of a caterpillar, which will be presented in Figure 3 [34-35].





Figure 3. Caterpillar (insect larvae belonging to the order Lepidoptera) and a caterpillar track (metal chain of vehicles)

The last category of non-anthropomorphic models for consideration is called "*Plants*". This model is closely related to the metaphorical model of "Animals". The transfer in this model is based on the external similarity between the nominated phrase and a representative of the plant kingdom. The gooseberry is a spiky shrub with prickly thorns and huge, tangy-sweet berries that both novice farmers and food enthusiasts enjoy. Gooseberries are commonly named the "royal" berry because of the exquisite flavor of the jam produced from their berries, specifically offered to Empress Catherine the Great.

"Tanglefoot" is another exciting term transformed into a military metaphor. The term "tanglefoot" is made up of two words: "tangle" — meaning knot (клубок ниток), thicket (заросли), thread tangling (путаница) or even seaweed (водоросли); and "foot" — meaning a part of the body (нога). These words give us an idea of what natural and military objects can look like. Tanglefoot, deciduous beech (Nothofagus gunnii), is a shrub or small tree found exclusively in Tasmania, Australia's highlands. This particular plant has the potential to reach the height of a small tree but tends to grow in a way that entangles surrounding objects or soil. Its leaves are shaped like eggs and have jagged edges, while its stems resemble ropes or chains. It is worth noting this description, as the plant's appearance has inspired a military engineering device that shares its name. In the context of the military, "tanglefoot" (спотыкач) is a discreet wire fence made of a wire net on low stakes, designed to impede other machines. Even without any expertise in the military sphere, a layperson can understand the purpose of this device by looking at the images in Figure 5 [36-37].



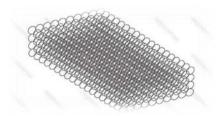


Figure 4. Tanglefoot (a plant) and a tanglefoot (fortification construction)

The military "gooseberry" («проволочное заграждение «ёж») is a basic and uncomplicated anti-ram barrier. When attempting to surmount, it elevates the vehicle above the ground, which may resemble the thorns of a gooseberry plant. This can make it challenging to reverse. Its mobility is comparatively high in comparison to that of the dragon's teeth. It might be argued that the name of the gooseberry plant has been metaphorically transferred to military usage due to the similarity in form between its thorns and the construction of a gooseberry engineer sapper fortification. Another military term, "caltrops" («шип — пехотное малозаметное препятствие», «проволочные силки»), has a symbolic link to a plant. The spiny-headed flower with sharp, jagged leaves provides the name for this type of defense tool. The same name is metaphorically transferred from a military term using this plant as the foundation. In the military setting, a caltrop is a concealed barrier designed to discourage and damage individuals using spiked construction. The military caltrop can be easily associated with the botanical caltrop because of their similar form and appearance. Figure 5 provides visual evidence of the striking similarities between both [38-39].





Figure 5. Caltrops (a flowery plant) and caltrops (a military barrier)

The great range of discovered metaphorical models helps us find the points of contact between military terminology and common language. As the examples indicate, semantic and cognitive parallels based on external and functional similarity with items surrounding a person define the basis for the development of metaphorical transfer. This is why the foundation of metaphorization is anthropomorphic models. Interestingly, individuals often refer to even lethal objects and circumstances under "peaceful" terms.

As Figure 6 shows, the presented content analysis of military metaphors consisted of 233 examples in total that were divided into two major groups — anthropomorphic and non-anthropomorphic models, with 168 and 65 metaphors respectively. 168 anthropomorphic model metaphors were further divided into 6 categories with "Household Items" being the largest with 31.3 % examples of the total number of metaphors chosen for the study (73 examples) and 43.4 % of all anthropomorphic examples exclusively.

The "Body Parts" category constitutes the second largest group of anthropomorphic models, accounting for 18.4 % of all selected metaphors and 25.6 % of solely anthropomorphic examples. The categories "Relations" (17 examples), "Mythology and Religion" (15 examples), and "Clothing/Apparel" (14 examples) are nearly evenly distributed, with their respective percentages out of all metaphors being 7.3 %, 6.4 %, and 6 %. The distribution of anthropomorphic metaphoric models can be categorized as follows: 8.3 % fall under the group of "Clothing/Apparel", 8.9 % for "Mythology and Religion", and 10.1 % for "Relations". The category of military metaphors least represented is "Food/Nourishment", comprising 6 examples, which accounts for 2.5 % of the overall number of metaphor cases and 3.6 % of all anthropomorphic models.

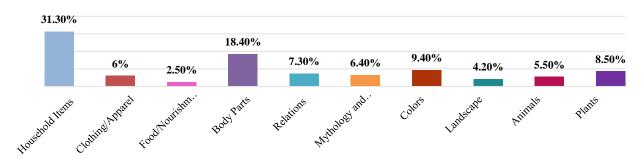


Figure 6. Distribution of anthropomorphic and non-anthropomorphic metaphoric examples

Non-anthropomorphic models can be classified into four categories: "Colors", "Landscape", "Animals", and "Plants". These categories collectively contain 65 metaphors, which were picked from a total of 233 examples of the study. The "Colors" category is the most effective type of non-anthropomorphic models, with 22 examples, representing 9.4 % of the total selected examples and 33.8 % of non-anthropomorphic metaphors. The "Plants" category trails the top by only roughly 1 percent, accounting for 8.5 % (20 examples) of all metaphors and 30.7 % of metaphoric examples that are exclusively non-anthropomorphic. Only 13 metaphors from all the chosen examples can be described as "animalistic". These metaphors make up 5.5 % of all the chosen metaphors and represent one-fifth (20 %) of the non-anthropomorphic instances. In the split of the non-anthropomorphic metaphoric model, the "Landscape" category is ranked last, with 10 examples. These examples account for 4.2 % of all the selected examples and 15.3 % of only the non-anthropomorphic examples.

Conclusion

Having traced the process, metaphoric terms have to undergo to transfer from one lexical domain to the military one; it is determined anthropomorphic and non-anthropomorphic models imbue these terms with distinct features to associate them with the characteristics of these models. The analysis has revealed that the primary sources for the creation of metaphoric military terms are anthropomorphic models, which can be attributed to the concepts of anthropocentrism — humans being the central focus of the universe and everything revolving around them. Non-anthropomorphic models are significantly less prevalent than anthropomorphic models in nominating English military terms. Among the 233 military metaphoric terms analyzed, a significant majority (72 %) were represented by anthropomorphic models, which accounted for 168 examples. According to Figure 6, the main anthropomorphic models employed in forming metaphorical terms in English military terminology are "Household Items" and "Body Parts". People often seem to name items based on the attributes of the objects they see most frequently in their daily lives. Household items and body parts have been ingrained in our consciousness for an extended time, forming an integral language component. While food is an integral part of human existence and is vastly present in our daily lives, the naming conventions used in the military almost do not incorporate metaphorical references to food. This is because food-related metaphors are unlikely to evoke the intense emotions associated with warfare and battle. Regarding non-anthropomorphic models, the study has identified four categories that are considered the most prolific. Out of these categories, "Colors" (with 22 examples) and "Plants" (with 20 examples) comprise less than one-fifth of the total metaphoric examples chosen for the study. The selected models represent the items and phenomena that play a central role in the world surrounding us. The content analysis has demonstrated the process of metaphoric transfer, which involves utilizing the resemblance in form, structure, and function between items to develop new terms that resemble their original objects. Gaining comprehension of the underlying mechanisms of this process enables both military specialists and the public audience to interpret and decipher the meaning of such metaphoric expressions accurately. The findings of the study and the procedure for selecting metaphoric models and distributing them into anthropomorphic and non-anthropomorphic categories have the potential for application in various specialized fields such as law, pedagogy, economics, and political discourse. This could greatly enhance our understanding of the formation of metaphoric models and their impact on symbolic language.

Overall, the study outlines procedures for differentiating between anthropomorphic and non-anthropomorphic models and categorizing metaphoric examples into distinct selected categories. These techniques can be utilized in other specialized fields of terminology to identify patterns that can be used as a foundation for metaphoric transfer.

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Е.А. Моругова

Терминжасамдағы метафоралық тасымалдау: әскери метафоралық тілдегі антропоморфтық және антропоморфтық емес үлгілерді зерттеу

Мақалада антропоморфтық және антропоморфтық емес үлгілерге ерекше назар аудара отырып, әскери терминологияда метафоралық тасымалдаудың қалай қолданылатыны талданған. Зерттеудің мақсаты метафоралық тасымалдау нәтижесінде пайда болатын метафоралық үлгілерді жіктеу және анықтау, сондай-ақ олардың негізін және әскери саладағы жаңа терминдердің мағынасына әсерін зерттеу. Әскери метафораларды түсіну және дұрыс түсіндіру сарапшылардың да, көпшіліктің де жаңа әскери терминдерді жақсырақ қабылдауы үшін маңызды. Талдау көрсеткендей, антропоморфтық үлгілер антропоморфтық емес үлгілерге қарағанда өте көп, өйткені адамға қатысты объектілер күнделікті өмірде мағыналы және жиі кездеседі. Зерттеу нәтижелері метафоралық тасымалдауды және терминологияның басқа салаларындағы антропоморфтық және антропоморфтық емес үлгілер арасындағы айырмашылықтарды одан әрі зерттеуге негіз бола алады.

Кілт сөздер: метафоралық тасымалдау, әскери терминология, антропоморфтық үлгілер, антропоморфтық емес үлгілер, әскери метафоралар.

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Метафорический перенос в терминообразовании: исследование антропоморфных и неантропоморфных моделей в военном метафорическом языке

Авторы статьи проанализировали, как метафорический перенос используется в военной терминологии, обращая особое внимание на антропоморфные и неантропоморфные модели. Цель исследования — классифицировать и выявить метафорические модели, возникающие в результате метафорического переноса, а также изучить их основы и влияние на значение новых терминов в военной сфере. Понимание и правильная интерпретация военных метафор важны для лучшего восприятия новых военных терминов как экспертами, так и широкой аудиторией. Анализ показал, что антропоморфные модели встречаются чаще, чем неантропоморфные, поскольку объекты, связанные с человеком, более значимы и распространены в повседневной жизни. Результаты исследования могут послужить основой для дальнейшего изучения метафорического переноса и различий между антропоморфными и неантропоморфными моделями в других областях терминологии.

Ключевые слова: метафорический перенос, военная терминология, антропоморфные модели, неантропоморфные модели, военные метафоры.

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