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MULTIMODAL GLOSSARY OF WAR (based on the Lexonomy toolkit)
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МУЛЬТИМОДАЛЬНИЙ СЛОВНИК ВІЙНИ (на матеріалі Lexonomy)
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Стаття висвітлює концепт, мету, процес створення та проміжні результати практичного наукового проєкту з прикладної лексикографії "The Multimodal Glossary of War", побудованого на базі лексикографічного інструменту Lexonomy від ELEXIS. Дослідження має на меті створити динамічний електронний глосарій англійських мілітарних термінів, який в подальшому буде використовуватися в роботі науковців, дослідників, журналістів, авторів, а також усіх зацікавлених у вивченні сучасного воєнного лексикону, включно з одиницями що виникли нещодавно. Теоретична частина дослідження фокусується на процесі відбору лексичних одиниць та побудові глосарію, а також алгоритмі його використання у тренуванні ШІ інструментів, Large Language Models (LLMs).

__Ключові слова:__ глосарій мілітарних термінів; сучасний воєнний лексикон; Lexonomy; ELEXIS; військова лексика; онлайн словник; штучний інтелект; прикладна лексикографія.

The article highlights the concept, purpose, process of creation, and intermediate results of a practical scientific project on applied lexicography, "The Multimodal Glossary of War", built on the basis of the lexicographical tool Lexonomy from ELEXIS. The study aims to create a dynamic electronic glossary of English military terms, which will be used in the future in the work of scientists, researchers, journalists, authors, as well as all those interested in the study of modern military lexicon, including units that have recently emerged. The theoretical part of the study focuses on the process of selecting lexical units and building a glossary, as well as the algorithm for its use in training AI tools, Large Language Models (LLMs).

__Keywords__: glossary of military terms; modern military lexicon; Lexonomy; ELEXIS; military terminology; online dictionary; artificial intelligence (AI); applied lexicography.

Introduction. Global armed conflicts continue to shape multiple spheres of the human endeavour, including politics, economy, culture, and, of course, language, which is an integral part of the latter. The most dynamic structure within the system, the lexicon, is the most heavily and notably influenced by the societal changes that reflect directly in speech. Considering the recent wars, the vocabulary of the English language has been enriched with loan words, jargon, and slang, most actively coined across news outlets and on social media – in particular, on such platforms as X (formerly Twitter), Facebook, Instagram, YouTube, TikTok, and whatnot. All of these can be defined under the same umbrella term of *Cyberspace* – a complex, multidimensional sphere of synthesis of

reality, human experience and activity mediated by the digital and information technologies, a component of the technosphere of human existence [1; 3].

Along with the military parlance that has been used for centuries, the English lexicon is now being actively enriched with neologisms, often of a foreign origin. One of the most striking examples is the terms that have been adopted as a result of the russo-Ukrainian War, which has been ongoing since 2014 and escalated into a full-scale invasion of Ukraine on February 24, 2022. Media outlets, both printed and web-based, are beaming with new military slang, transliterated into English directly from Ukrainian and, consequently, adopted not only by the Ukrainians themselves but by the non-indifferent people abroad. *The examples below demonstrate* a use case of the term *"Bavovna"* by Espresso.tv, a Ukrainian media outlet focused on news from russia and Ukraine's war in the region, and the following usage of the term by an X account Wium Lacock, based in Newcastle, South Africa.

Figure 1. "Bavovna" in a news article

Cotton (Bavovna)

This term originates from the prohibition on Russian media using the word "explosion" in reports concerning incidents targeting the Russian army or objects in Russia, Belarus, or territories temporarily controlled by the occupying forces. Instead, they used the word "хлопок" (khlopok), which means both "loud sound" and "cotton". The "cotton" meme first emerged on April 25, 2022, following explosions at a military unit and an oil depot in Bryansk, Russia. When news of the incident was translated from Russian sources using online translators, a confusion of homographs occurred. The translated news erroneously reported that "a powerful cotton was heard before the fire started" leading to the mockery of Russian reports using Ukrainian word "bavovna" (cotton) in meme culture, later becoming synonymous with "explosion".

Figure 2. "Bavovna" used in an X post

Wium Lacock
@wiumlacock

Beautiful bavovna. Excellent news 👏

3:04 PM · Oct 2, 2025 · **6** Views
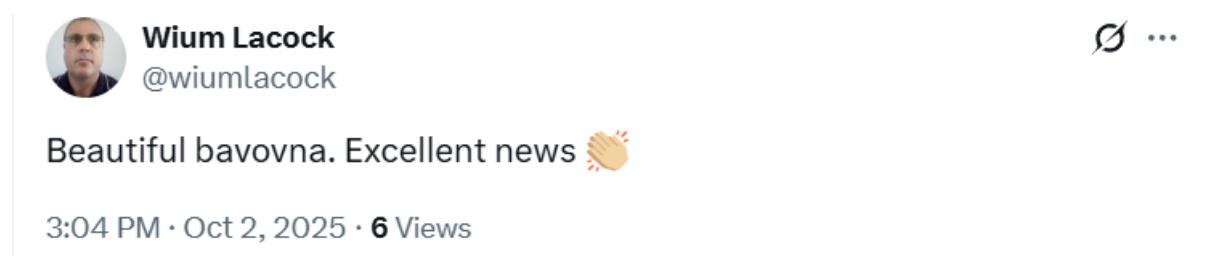
Military-specific vocabulary that has emerged in the English language as a direct consequence of the new military technology is not limited to slang alone. For example, after an experimental launch of the newest russian ICBM (Intercontinental Ballistic Missile), infamously known as "Oreshnik", at the city of Dnipro, Ukraine, on November 21, 2024, the abbreviation "ICBM" has been adopted for active use both on news platforms and across social media.

Figure 2. "ICBM" across the media

Some of these terms are purely informal and humorous ("unbombed", "drop a nuke" in the sense of starting an argument with someone), while others are technical and heavily context-dependent ("bunker buster", "saturation attack", "liberation", "peace deal", etc.). Either way, both types constitute inseparable parts of the contemporary military discourse in cyberspace, which is an integral environment, demanding new cognition and perception ways via complex philosophic, cultural, social, linguistic approaches, providing unlimited opportunities for human intellect, language development, and research [2; 1].

The war-related layer of the English lexicon, in turn, will continue to expand, develop, and progress for as long as armed conflicts worldwide keep unfolding and for generations afterwards. For linguists and, in particular, lexicographers, this causes a prominent and long-standing issue, which is the absence of a clear, structured, flexible, and unified glossary of military terminology compiled with both long-adopted terms and the newest lexical units, which continue to appear every day.

Aim. This article aims to highlight the interim results of the research and the practical project titled *"The Multimodal Glossary of War"* and its scientific relevance in the context of contemporary lexicography, as well as the tools and platforms employed in the process of the research and glossary compilation.

Process of the research. Properly reflecting the aim of this research requires a structured, carefully curated methodology, as well as a set of lexicographic tools that would be flexible and expandable, and provide open access to anyone wishing to look up an entry or contribute to the glossary's compilation. Therefore, the main tool used at the core of the practical project is *Lexonomy,* a cloud-based dictionary-writing and online-dictionary-publishing system developed by Elexis. *Lexonomy* is suitable for editing and online publishing of domain-specific glossaries or terminology resources. Developed in the European Union, it is one of the best contemporary tools for compiling general and domain-specific dictionaries of any size. In this research, *Lexonomy* is the core platform for building the final version of *The Multimodal Glossary of War.*

At the same time, the compilation process encompasses a larger arsenal of tools and web-based platforms, such as a pre-collected and compiled corpus of war-related news pieces and blog articles from sources such as *The Economist, Reuters, The Kyiv Independent, Espresso.tv, The New York Times, Ukrinform, RBC News, Defence Express, Diplomatic Courier,* and others, as well as AI tools like OpenAI (ChatGPT), Gemini, and Perplexity AI for extracting terms from the corpus and

providing their definitions.

The use of Large Language Models (LLMs) is commonly linked to the contemporary military discourse. Social media users and other interested parties often refer to tools like ChatGPT, Gemini, or Grok (X's native language model) for information and clarification on the topic of the ongoing armed conflicts, including the Russo-Ukrainian war and the war in the Middle East. However, the scope and precision of the responses given require a considerable amount of correction via manual intervention, both accuracy- and clarity-wise. The reason this research employs AI in the course of the glossary compilation can be broken down into two major aspects: first, to test how well the LLMs already respond to the requests related to war and whether they use the correct terminology in every given case, and second, to further utilise the ready-made glossary in the process of AI machine teaching. This teaching process occurs through manually *feeding* the vague and newly coined lexicon to the LLMs in order to improve the quality of their responses. *The image below provides an illustrative example* of an AI model, Perplexity AI, being unable to discern the meaning of a war-related slang term of Ukrainian origin.

Figure 3. "Chornobaite" when fed into Perplexity AI

Evidently, there is still a long road ahead before Large Language Models learn to correctly discern the meaning of all war-related lexicon, and the *Multimodal Glossary of War,* as an ongoing electronic lexicographic project [3; 1], aims to contribute to the AI training process. This way, the final product of the research can become an indispensable consulting tool for humans and machines alike. In addition, the open nature of *Lexonomy* allows anyone to contribute to the expansion of the glossary with new entries. As the final result, we are hoping to create a dynamic, open-access online glossary of the military lexicon, which can be consulted for the purposes of teaching, learning, writing, and self-education.

Once a list of terms is extracted from the corpus, with a number of manually added words found on social media, the AI tools are employed to provide clear and concise definitions of each. ChatGPT, Gemini, and Perplexity AI each participate in the creation of every entry: the definitions are then compared both between themselves and, when possible, with the entries from a conventional dictionary. Word definitions, along with usage examples, translation, and source, are then added to the Glossary using a pre-configured markup:

Figure 4. Lexonomy Markup for the Multimodal Glossary of War
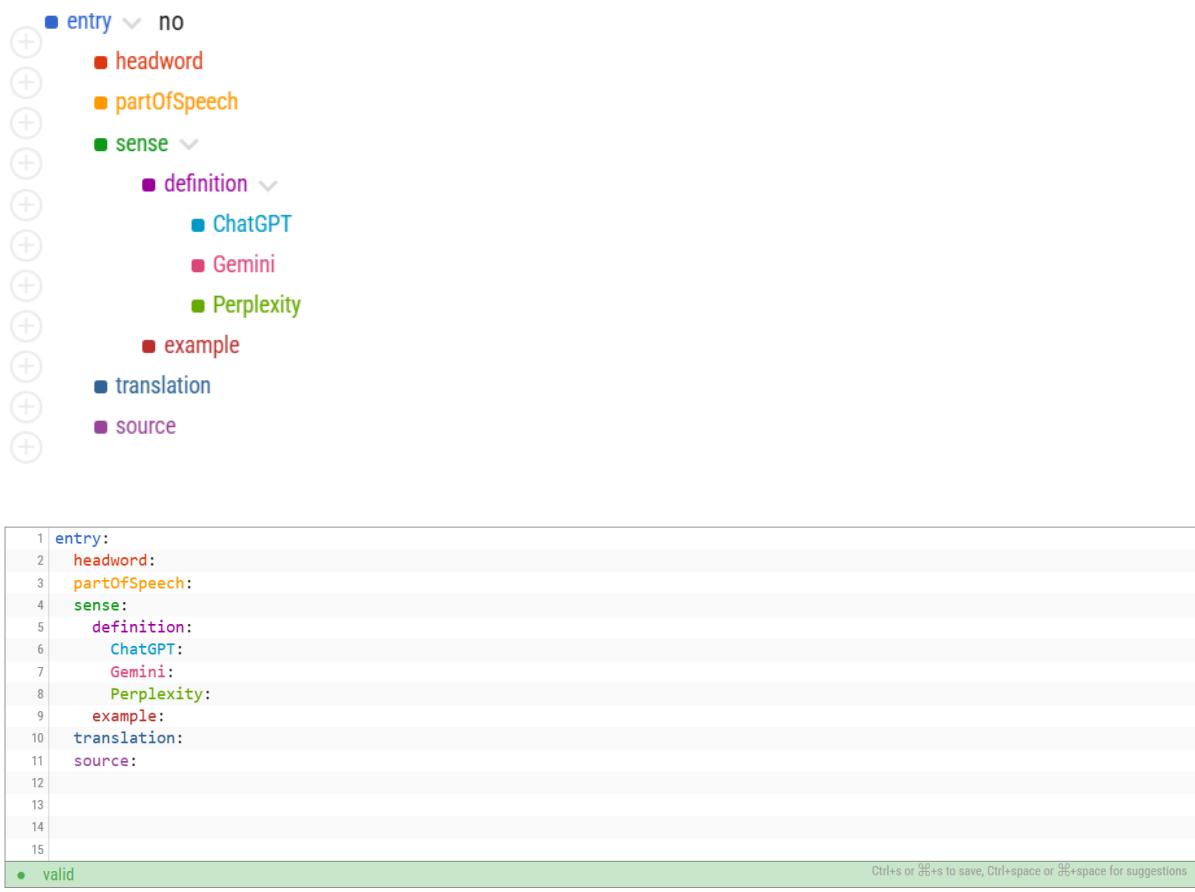

```
1  entry:
2    headword:
3    partOfSpeech:
4    sense:
5      definition:
6        ChatGPT:
7        Gemini:
8        Perplexity:
9      example:
10   translation:
11   source:
12
13
14
15
```
● valid   Ctrl+s or ⌘+s to save, Ctrl+space or ⌘+space for suggestions

This consistent markup makes it possible for anyone interested to supply the glossary with new entries at their discretion. A universal entry template is ideal for a project in the sector of digital lexicography, as it makes the glossary simple and intuitive in use, even for non-language specialists. As such, the purpose of making the *Multimodal Glossary of War* universally accessible and editable to anyone in the cyberspace is achieved in full.

Results of the research. At the beginning of the research, a survey on the Military-Themed Lexicon Use Online was conducted among sixteen participants aged from 18 to 40. The chosen respondents were professionals in the fields of linguistics and translation, IT and cybersecurity, fine arts, and social studies. The survey set the stage for further exploration of the topic and helped develop the roadmap for building a thematic military-centred glossary for bilingual speakers of English and Ukrainian.

The responses have demonstrated that more than half of the participants (56.3%) prefer to receive relevant information on the ongoing armed conflicts from multiple sources at once, including social media, online news outlets, and even public news channels on Telegram, especially relevant for the coverage of the War in Ukraine (see chart below). Such a breakdown allowed us to allocate the research time and resources to retrieving related vocabulary equally from all the aforementioned sources. Public media outlets provided formal, domain-specific terminology that has emerged in the English language as a result of the new inventions and modifications in the global military sector (terms like ICBM, Shahed, etc). Social media and Telegram public channels, on the other hand, contributed to the search for war-related slang and neologisms, predominantly used by the younger generation (words like bavovna, Chornobaite, and so on).

***Figure 5. Chart on the Main Sources of Information about the Ongoing Armed Conflicts in the World***

(Multiple choice) Where do you usually obtain new information on the ongoing armed conflicts (War in Ukraine, War in Gaza, etc.)?

16 responses

Source	Count
Social media	7 (43.8%)
Online news outlets (The Kyiv Independent, Reuters, The Eco…	1 (6.3%)
In Telegram public channels	7 (43.8%)
All of the above	9 (56.3%)
I don't read any war-related news	0 (0%)
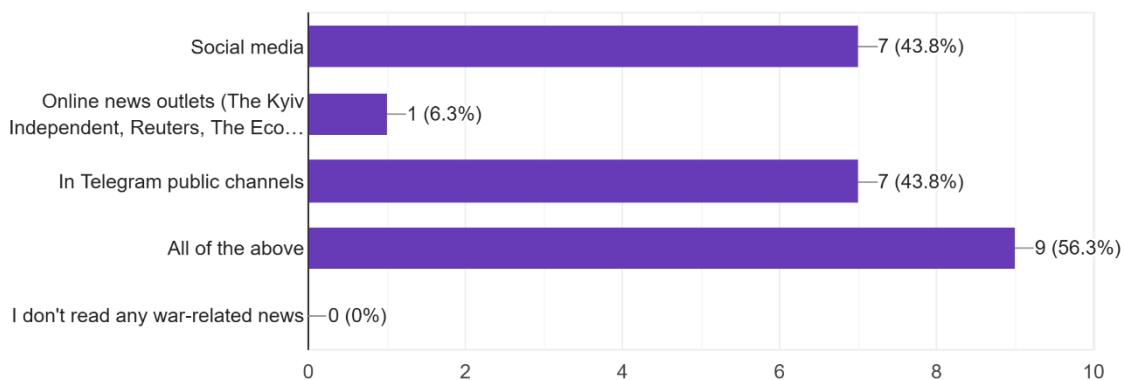
The majority of respondents (56.3%) have assessed the importance of understanding war-related lexicon by ordinary people, not affiliated with armed conflicts directly (as in, non-journalists, writers, and war researchers) as high (see chart).

Figure 6. The Importance of Understanding War-Related Lexicon by Those Not Directly Affiliated with Armed Conflicts

How would you assess the importance of understanding war-related lexicon by ordinary people, not affiliated with armed conflicts directly (as in, non-jo...archers)? 1 - not important at all; 5 - very important

16 responses

Rating	Count
1	0 (0%)
2	0 (0%)
3	1 (6.3%)
4	9 (56.3%)
5	6 (37.5%)
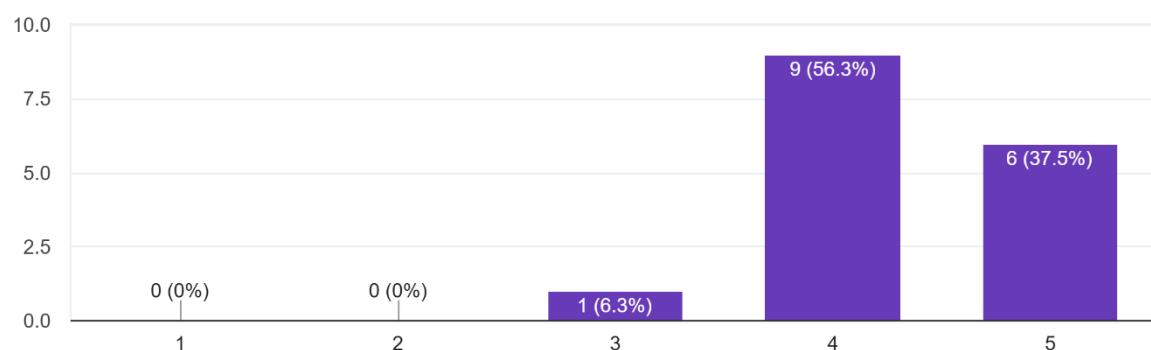
Additionally, half of the respondents claimed that knowing and using war-related slang in the military discourse is important for people both in Ukraine and abroad (see chart below). This statistic further highlighted the need for contemporary, digitalised, and universally accessible lexicographic tools, such as the *Multimodal Glossary of War*.

Figure 7. The Importance of Knowing and Using War-Related Slang in the Military Discourse

How would you assess the importance of knowing and using war-related slang in the military discourse (terms like "ruscism", "bavovna", "moped", ...abroad? 1 - not important at all; 5 - very important
16 responses
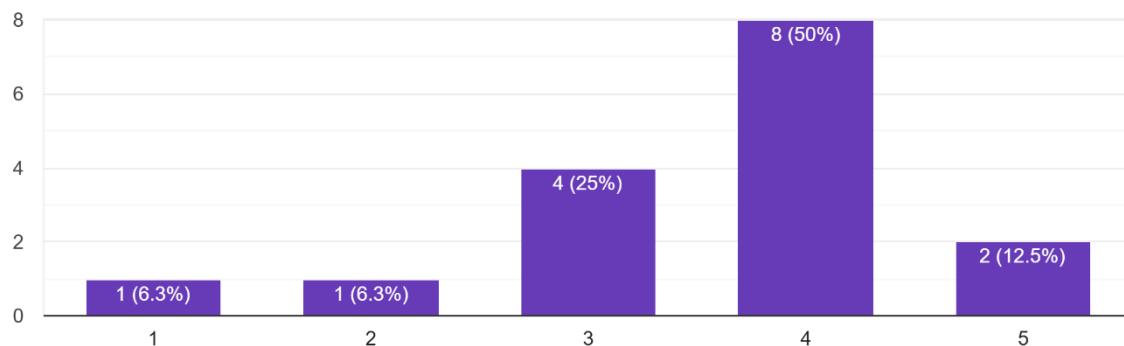
Another important finding in the survey process was that only 31.3% of the respondents found textbooks effective in teaching students war-related lexicon in English (see chart below). Instead, the majority (87.5%) preferred military blogs and war-themed documentaries as the main source of the contemporary military lexicon. Web-based blogs and videoblogs, including social media profiles and channels of real-life soldiers and war reporters, are among the sources used in the compiling process for the *Multimodal Glossary of War.*

Figure 8. Effective Methods in Teaching Students War-Related Lexicon in English

Tick all the methods you consider effective in teaching students war-related lexicon in English.
16 responses
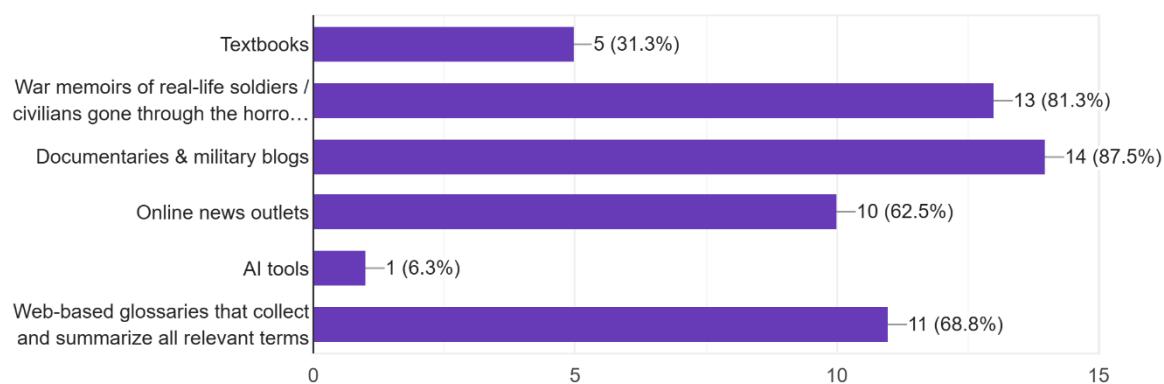
A high percentage of the respondents (68.8%) also ticked web-based glossaries that collect and summarise all relevant terms as an effective method of vocabulary teaching. In fact, the *Multimodal Glossary of War* extracts and connects relevant lexical elements from all the relevant sources at once, which eliminates the need to use and juggle multiple tools at once. In addition, textbooks quickly get outdated, as the military parlance transforms on a daily basis, and new slang terms appear faster than linguists can register them and timely update all the corresponding educational and lexicographic sources. Henceforth, the web-based nature of this project is superior in usability, flexibility, and scale to any other teaching and learning method. Instead of surfing multiple sources at once in the search for the newly emerged war terms, users will be able to consult the *Multimodal Glossary of War* at any time, getting all the relevant information about a specific entry

under one umbrella: definition in three interpretations, an example of use in the context, and a Ukrainian translation.

Finally, 75% of the survey respondents claimed that they would use an online tool, such as the *Multimodal Glossary of War,* for educational and other purposes (see chart below). The project, then, is devised in accordance with the reflected demand, prioritising relevant, frequently used terms that can be used for text interpretation, supporting war-related conversations, expressing public opinions, etc.

Figure 9. The Respondents' Demand for a Multimodal Glossary of War

Suppose there was an open-access online glossary of war-related terms, including contemporary jargon and slang, would you use such a tool for educational or any other purposes?

16 responses

Response	Value
Yes, to look up the unknown words related to war	12 (75%)
Yes, for writing/academic purposes	6 (37.5%)
Yes, to be able to support a war-related conversation online	11 (68.8%)
Depends on the nature and scope of the glossary	5 (31.3%)
Depends on how convenient the glossary is in use	8 (50%)
No, I have no need in such a tool	0 (0%)
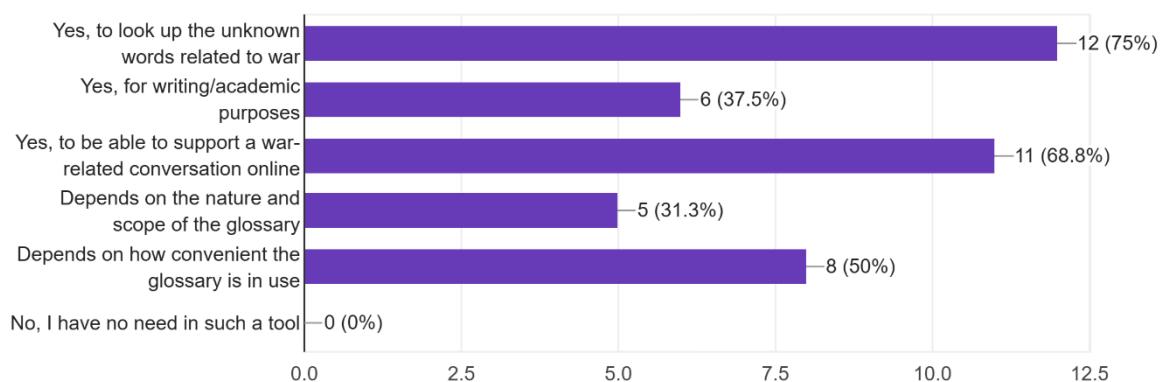
At the moment, the final version of the project is in a stage of active development: terms are being extracted and processed by AI tools, and definitions – properly organised and added as separate entries, along with examples of use, translations, and sources. Some of the terms that have already been added to the glossary in the proper and universally structured markup *are demonstrated in the world cloud below,* created with the assistance of the WordClouds.com online tool.

Figure 10. Word Cloud of Entries that Can Be Found in the Multimodal Glossary of War

The process of selecting terms for the *Multimodal Glossary of War* follows several key principles that ensure the collected material is relevant, reliable, and representative of how war is discussed in different contexts today.

1. **Relevance to the Field of War Studies**. Each term must have a clear connection to the topic of war. This includes words that describe military actions, strategies, technologies, and their effects, as well as terms that reflect the political, social, and emotional sides of conflict. This principle helps to show war as a complex phenomenon that extends beyond the battlefield.

2. **Presence Across Different Modes of Communication**. Since the glossary is multimodal, priority is given to terms that appear in various forms of media – written texts, images, and digital platforms. For example, a term may be found in a news headline, a social media post, or a political cartoon. This shows how war language functions across different types of communication.

3. **Balance Between Historical and Modern Terms**. The glossary includes both older, well-established terms (such as *armistice* or *trench warfare*) and newer expressions that reflect recent conflicts (like *cyberwarfare* or *information front*). This combination allows for observing how the language of war evolves over time and adapts to technological and ideological changes.

4. **Frequency and Visibility in Public Discourse**. Preference is given to terms that appear often in public communication – news, speeches, online discussions, and media reports. The more visible a term is, the more it influences how people understand and talk about war.

5. **Emotional and Ideological Value**. Many war-related terms carry emotional or ideological meanings. For instance, some words may serve propaganda purposes or express sympathy or hostility. Including such terms helps to explore how language can be used to influence opinions and shape collective attitudes toward conflict.

6. **Cross-Cultural and International Use**. Some terms are used across different countries and languages, especially in the global media space. Including these internationally recognized expressions helps to show how war discourse circulates globally and how certain concepts become shared across cultures.

7. **Variation in Meaning and Use**. The same term can be used in different ways – literally, metaphorically, or even ironically. The glossary considers this variation to show how language about war changes depending on context, intention, and audience.

8. **Authenticity and Reliability of Sources.** All terms are taken from real, verifiable sources, including online news, official documents, and public social media posts. Using authentic materials ensures that the glossary reflects how people actually use war-related vocabulary in real communication.

Together, these principles ensure that the *Multimodal Glossary of War* captures the complexity of contemporary war discourse. By combining linguistic, cultural, and multimodal perspectives, the glossary not only documents relevant vocabulary but also highlights the ways in which language and imagery shape public understanding of conflict. This systematic approach allows the collected terms to serve as both linguistic data and cultural evidence, forming a solid foundation for further analysis of how war is represented and interpreted across different media contexts.

Any necessary corrections to the structure of the glossary and separate entries are being added during the periodic reviews of the project's technical and semantic integrity. The periodic reviews are conducted on a weekly basis or, alternatively, after each full batch of new entries added to the glossary. The open nature of *Lexonomy* allows for quick and effortless error correction at any point of the project's development.

Conclusions and perspectives for further research.

The current aim is to have at least *a hundred entries* added to the glossary by the time this research reaches its final stage. At the same time, the product of the research will live on, with *anyone,* including the creator, being able to supply the *Multimodal Glossary of War* with new terms as they appear in the English lexicon. As this project reflects the dynamic nature of the English war-related vocabulary, the glossary is intended to remain open and adaptable, continuously evolving along with changes in global discourse and technology.

Future research may focus on several directions. One possible area is the comparative study of war-related terminology across different languages to identify cross-cultural patterns and semantic shifts. Another promising direction involves exploring the interaction between linguistic and visual elements in multimodal representations of war, which could deepen the understanding of how conflict is framed and perceived in modern media. Additionally, expanding the glossary with corpus-based frequency data or discourse annotations could enhance its analytical value and make it a useful tool for interdisciplinary studies in linguistics, communication, and media analysis.

Overall, the *Multimodal Glossary of War* serves as both a linguistic resource and a methodological experiment, illustrating how digital tools can support the study of contemporary language in motion. Its open-ended design ensures that the project will continue to grow and remain relevant as new conflicts, technologies, and forms of expression emerge in the ever-changing landscape of war discourse.

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