Associative structure of the concept *Побратим / Sworn Brother* in Ukrainian linguistic consciousness

Sofiia Bulyk-Verkhola [a], Yuliya Tehlivets [a, *]

[a] Lviv Polytechnic National University, Ukraine

Abstract. This study aims to examine the concept *побратим* ('sworn brother') as a linguistic marker of unity, brotherhood, and social consolidation in modern Ukrainian consciousness during wartime by analysing its associative field structure, paradigmatic and syntagmatic connections. A free word association test revealed 226 verbal responses that determined the structure of the analysed associative field of the stimulus word *sworn brother*: the core consists of 136 responses (60.18 %), the close periphery – 69 responses (30.53 %), the far periphery – 21 single responses (9.29 %). Four thematic groups *of the associative field* were identified: names of persons (64.6 %), names of objectified actions, states, and processes (18.58 %), names of features, properties, and character traits (12.39 %), and collective names for people (4.42 %). The names of persons emphasise the individual dimension of brotherhood as a special type of interpersonal relationship – friendship, brotherhood, comradeship – pointing to the military context of this concept, actualised in connection with the Russian-Ukrainian war. The names of objectified actions, states, and processes reveal brotherhood as interaction, a dynamic state of unity, support, and mutual assistance. The names of qualities, properties, and traits form the moral and ethical core of the concept and indicate a high form of human dignity, which is grounded in mutual respect, trust, and moral responsibility. The collective names for people reflect the collective nature of the concept, within which brotherhood is part of a wider community – brotherhood, army, family, nation. The results demonstrate that the concept is primarily associated with the military community, friendship, mutual support, and trust, functioning as a cultural code that shapes national and moral unity in the context of wartime.

Keywords: 'sworn brother' concept, free word association test, linguistic consciousness, cultural code, Russo-Ukrainian war, associative field.

Булик-Верхола Софія, Теглівець Юлія. Асоціативна структура концепту *побратим* в українській мовній свідомості.

Анотація. Це дослідження вивчає концепт «побратим» як лінгвістичний маркер єдності, братерства та соціальної консолідації в сучасній українській свідомості під час

війни. Аналіз спрямований на структуру асоціативного поля та парадигматичні й синтагматичні зв'язки. Вільний асоціативний експеримент дав 226 вербальних реакцій. Ядро складається з 136 реакцій (60,18 %), близька периферія — з 69 реакцій (30,53 %), далека периферія — з 21 окремої реакції (9,29 %). У межах асоціативного поля було виокремлено чотири тематичні групи: імена осіб (64,6 %), назви об'єктивованих дій, станів і процесів (18,58 %), назви ознак, властивостей і рис характеру (12,39 %) та колективні назви людей (4,42 %). Імена осіб підкреслюють індивідуальний вимір братерства як особливого типу міжособистісних відносин — дружби, братерства, товариства. Це підкреслює військовий контекст концепту, актуалізований у російсько-українській війні. Назви об'єктивованих дій, станів і процесів розкривають братерство як взаємодію та динамічний стан єдності, підтримки та взаємодопомоги. Назви ознак, властивостей і рис характеру формують морально-етичне ядро концепту. Вони вказують на вищу форму людської гідності, засновану на взаємній повазі, довірі та моральній відповідальності. Колективні імена людей відображають колективний характер поняття. У цьому випадку братерство є частиною ширшої спільноти – братерства, армії, сім'ї, народу. Результати свідчать, що цей концепт здебільшого асоціюють із військовою спільнотою, дружбою, взаємною підтримкою та довірою. Він функціонує як культурний код, що формує національну та моральну єдність у воєнний час.

Ключові слова: концепт "побратим", вільний асоціативний експеримент, мовна свідомість, культурний код, асоціативне поле.

Introduction

In the context of the ongoing war in Ukraine, linguistic units reflecting national values, collective memory, and the moral and ethical guidelines of Ukrainian society take on special significance. One such unit is the lexeme *побратим (pobratym)* (literally, *'sworn brother'). Today, this word has historical and cultural importance, as well as* relevant socio-psychological and identitarian meaning. It is actively used in public, military, and daily discourse. The word denotes a special form of relationship based on mutual trust, support, and joint struggle.

The Ukrainian lexeme *побратим* (hereinafter, *'sworn brother'*) denotes a traditional form of fictive kinship, often established through ritual. Such a bond bound men as if they were biological brothers, a concept common in Cossack and folk culture. In addition to its cultural roots, 'sworn brother' also carries military meaning, similar to comrades-in-arms, and remains a strong cultural expression of loyalty and brotherhood.

The word has Proto-Slavic roots and derives from the combination of the prefix *no- (po-)* and the noun *брат (brat) [brother]*, meaning "one who has become a brother" (Melnychuk, 1982-2012, vol. 1, p. 246). In Slavic languages, this lexeme was used to refer to a person who entered a ritual brotherhood, becoming a brother not by blood relationship but through a voluntary rite of brotherhood with religious and social foundations.

The Ukrainian Language Dictionary (Bilodid, 1970-1980) gives only two meanings of the lexeme: 1. One who has entered into a brotherhood relationship with someone; a named brother. 2. A comrade in struggle, battle, combat [...] // A companion in some activity, a comrade (vol. 6, p. 624).

Wiktionary records four meanings of the lexeme: 1. Someone who has entered into a brotherly relationship with someone else; a named brother, comrade, ally. 2. A close friend, comrade. 3. A comrade in struggle, battle, or combat. 4. A colleague in some activity, a comrade in service (Wiktionary: *Побратим (Pobratym)*, 2025).

The Ukrainian Associative Dictionary by Martinek (2007) gives the following most common responses: *побратим* 213 / 68: m I *друг (druh)* [friend] 33; *брат (brat)* [brother] 14; f I *друг (druh)* [friend]44; *товариш (tovarysh)* [comrade] 10 (vol. 1, p. 232). However, the lexeme is not recorded in the Dictionary of Associative Norms of the Ukrainian Language (Butenko, 1979).

Research into the linguistic and cognitive dimensions of the concept provides a deeper understanding of transformations in Ukrainian mentality in the context of social challenges and national struggle (Kovalchuk & Litkovych, 2022). In Ukrainian cognitive linguistics, the concept is understood as a dynamic, multi-layered formation that appears in verbalized form as a set of ideas, knowledge, and experience about certain objects, reflects an individual's view of the world, and changes along with the development of social and linguistic consciousness (Bulyk-Verkhola et al., 2023; Stepanov et al., 2025). The formation of a particular concept is often influenced by social narratives, especially war narratives transmitted through the media. Furthermore, it is social networks, rather than personal experience, that influence the dissemination of information and shape perceptions of particular events (Zasiekin et al., 2022). This consideration is particularly relevant for the study, as the respondents are not direct participants in military operations. Therefore, it is important to examine the meanings modern speakers associate with the lexeme *'sworn brother'*, the associative connections it evokes, and how it reflects the value orientations of modern Ukrainian society.

One of the most effective methods for studying linguistic consciousness is the free word association test (hereinafter referred to as FWAT), which involves recording the respondent's first spontaneous linguistic responses to a given stimulus without any restrictions on the form or content of the response (Zsarnóczaiová, 2020; Nedashkivska & Zagorodnia, 2015). This approach enables the identification of both established and situationally determined associations, as well as the tracking of changes in the perception of a particular lexeme within the dynamics of social processes.

Contemporary research demonstrates that associative connections reflect not only linguistic but also cognitive, cultural, and social aspects of human

consciousness (Auganbayeva et al., 2024; Artykbayeva et al., 2024; Mykhalchuk et al., 2023). Fast associative responses mainly reflect automatic activation of semantic memory. Slower responses may involve strategic thought. This distinction is important for interpreting associative data (Karimkhani et al., 2021).

In summary, the aim of the study is to conduct a complex analysis of the associative field of the concept *pobratym*, its structure, paradigmatic and syntagmatic connections in contemporary Ukrainian linguistic consciousness, and to determine its role as a linguistic marker of unity, brotherhood, and social consolidation in the context of the current war. By an associative field, we mean the set of associations elicited by a given stimulus word in respondents during FWAT.

Research objectives:
1. to determine the etymological origin and dictionary meanings of the lexeme *побратим* in contemporary Ukrainian;
2. to identify the main semantic components and structure of the associative field of the stimulus word *побратим* based on the results of FWAT;
3. to systematize the associative responses of respondents by thematic groups and analyze their frequency;
4. to identify the paradigmatic and syntagmatic connections of the lexeme *побратим* in the linguistic worldview of Ukrainians;
5. to ascertain the contemporary semantic transformations of this concept in the context of war and its significance for the formation of collective identity.

Research hypotheses:
1. The lexeme *побратим* is a linguistic marker of unity, brotherhood, and social consolidation.
2. In the linguistic consciousness of modern Ukrainians, *побратим* is associated primarily with the military community, friendship, mutual support, and trust.
3. The associative field of the word *побратим* has a multi-level structure that includes not only concepts of persons, but also actions, states, character traits, and collective names of social communities.
4. The concept *побратим* functions as a cultural code that shapes national and moral unity and reflects social values in the context of the Russian-Ukrainian war.

Methods

To achieve the research objectives and verify the hypotheses, a set of modern linguistic methods was used, including theoretical methods such as generalization and induction.

FWAT was used as the basis for forming the associative field of the stimulus word, as it allows linguistic thinking processes to be studied through the analysis of spontaneous verbal responses to verbal stimuli (Aeschbach et al., 2025). Despite its more than century-long history, FWAT continues to evolve owing to new theoretical approaches and technological capabilities (Denysevych, 2021).

FWAT allows us to most accurately reveal those hidden social meanings that cannot be established using other methodologies (Horoshko & Poliakova, 2019). This method helps to identify national and cultural images related to the concept, as it reduces the likelihood of interpreting the associative concept through the prism of the researcher's personal experience, providing material for analysis obtained from native speakers with different subjective experiences and levels of culture (Karimkhani et al., 2021, p. 154).

During FWAT, no restrictions are placed on the respondent's responses – neither in terms of time, form, nor semantics of associations. The collected associative responses enable the establishment of a lexeme's semantic field, the identification of its connotations, figurative components, and evaluative characteristics (Denysevych, 2021). Thanks to FWAT, it is possible to trace the dynamics of changes in the conceptual and linguistic pictures of the world of both an individual and society as a whole (Mykhalchuk et al., 2024).

The survey and observation methods were applied to 226 undergraduate students, of whom 64.16 % were female, and 35.84 % were male. The respondents were aged between 18 and 25. The study was conducted through anonymous questionnaires in the lecture halls of a higher education institution in April 2025.

The procedure for conducting FWAT consisted of creating a questionnaire using Google Forms, which included: information about the purpose and objectives of the study – to provide a one-word or phrase response to the stimulus word *'sworn brother'*, personal data (gender, age, education, profession, region of residence). The respondents' native language was Ukrainian. The experiment was conducted in Ukrainian. The number of respondents is sufficient to establish the characteristics of the associative field of the stimulus word *'sworn brother'*. The organization and conduct of the survey were carried out in accordance with the ethical norms of voluntary consent, based on the principles of respect for the honesty and dignity of respondents, in compliance with relevant domestic and international ethical standards. A sample questionnaire and survey results are available in the international repository Mendeley Data (https://data.mendeley.com/datasets/bxv8ffbjc2/2).

Using statistical methods, we analyzed the main trends in the distribution of associations and summarized all the respondents' responses. We determined the number of associates that form the core, close, and far periphery of the

associative field of the stimulus word *'sworn brother'*. In analyzing the survey data, we considered the overall distribution of responses.

In addition, we divided all associates into thematic groups using the component analysis method, identifying the most expressively marked lexemes.

The analysis of paradigmatic and syntagmatic connections allowed us to determine the place of the lexeme *'sworn brother'* in the system of lexical-semantic relations of the Ukrainian language, to identify typical word combinations and contextual connections.

An etymological analysis was used to establish the origin of the lexeme and to trace its semantic development across Slavic languages. Lexicographic analysis was used to identify definitions of the word in modern dictionaries and electronic resources, and to compare fixed meanings across sources. The comparative-descriptive method was used to compare the lexical and associative meanings of the stimulus word *'sworn brother'*. Cognitive-discursive analysis was used to interpret the associations obtained, taking into account contemporary sociocultural conditions, especially in the context of the war in Ukraine, as well as to establish the current value and mental meanings associated with the studied concept.

Results and Discussion

Traditionally, semantically close associations are represented in the associative field, ranked by frequency. The core of the associative field comprises the most frequent responses from respondents during the FWAT (10 or more responses). They reflect the most important, conceptually significant characteristics of the stimulus word and represent its basic meaning in linguistic consciousness.

The periphery of the associative field consists of less frequent, individual, or contextually determined responses. It can be divided into the close periphery (2-9 medium-frequency, less universal responses) and the far periphery (single individual, contextual, or random responses).
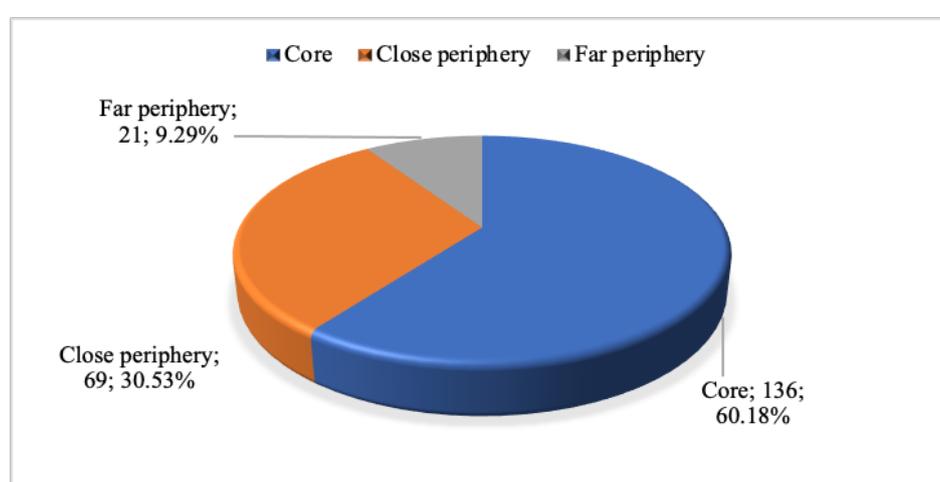
As a result of FWAT, 226 verbal responses to the stimulus word *'sworn brother'* were obtained, and the frequency of use of associates of the core, close, and far periphery was established (Fig. 1).

The far periphery consists of 21 (9.29%) single responses to the stimulus word *'sworn brother'*: *ATO (ATO) [Anti-Terrorist Operation], батько (batko) [father], сусід (susid) [neighbor], взаємодопомога (vzaiemodopomoha) [mutual assistance], взаємоповага (vzaiemapovaha) [mutual respect], відданість (viddanist) [loyalty], вірний (virnyi) [faithful], армія (armiia) [army], довіра (dovira) [trust], волонтер (volonter) [volunteer], життя (zhyttia) [life], кент*

(kent) [buddy], партнер (partner) [partner], нація (natsiia) [nation], служба (sluzhba) [service], чесний(chesnyi) [honest], побратим по зброї (pobratym po zbroi) [brother in arms], бойовий брат (boiovyi brat) [combat brother], військовий побратим (viiskovyi pobratym) [military brother], солдат ЗСУ (soldat Zbroinykh Syl Ukrainy) [soldier of the Armed Forces of Ukraine], член родини (chlen rodyny) [family member], людина у військовій формі (liudyna u viiskovii formi) [person in military uniform].

Figure 1
The Structure of the Associative Field of the Concept 'Sworn Brother'

According to the results of the FWAT, 136 responses (60.18 %) formed the core of the associative field of the stimulus word *'sworn brother'* (see Table 1).

Table 1
The Core of the Associative Field of the Stimulus Word 'Sworn Brother'

Reaction	Number	Per cent
друг (druh) [friend]	56	24.88
брат (brat) [brother]	32	14.16
товариш (tovarysh) [comrade]	24	10.71
військовий (viiskovyi) [military]	14	6.19
підтримка (pidtrymka) [support]	10	4.24

The close periphery is represented by 69 responses (30.53 %) (see Table 2).

Table 2

Close Periphery of the Associative Field of the Stimulus Word 'Sworn Brother'

Reaction	Number	Per cent
вірність (virnist) [loyalty]	9	3.98
довіра (dovira) [trust]	9	3.98
дружба (druzhba) [friendship]	8	3.54
братство (bratstvo) [brotherhood]	6	2.65
допомога (dopomoha) [help]	5	2.21
братерство (braterstvo) [fraternity]	4	1.77
близький (blyzkyi) [close]	3	1.34
єдність (yednist) [unity]	3	1.34
колега (koleha) [colleague]	3	1.34
опора (opora) [support]	3	1.34
взаємопідтримка (vzaiemopidtrymka) [mutual support]	2	.88
війна (viina) [war]	2	.88
воїн (voin) [warrior]	2	.88
надійність (nadiinist) [reliability]	2	.88
рідна людина (ridna liudyna) [close person]	2	.88
родина (rodyna) [family]	2	.88
соратник (soratnyk) [comrade-in-arms]	2	.88
союзник (soiuznyk) [ally]	2	.88

In the current conditions of war, the concept *побратим (sworn brother)* acquires special significance as an expression of collective memory, resilience, and moral mutual assistance. The associative field of the stimulus word *побратим* is diverse and reflects various aspects of contemporary Ukrainian society. Therefore, four thematic groups of responses to the stimulus word *побратим* can be identified (see Fig. 2).
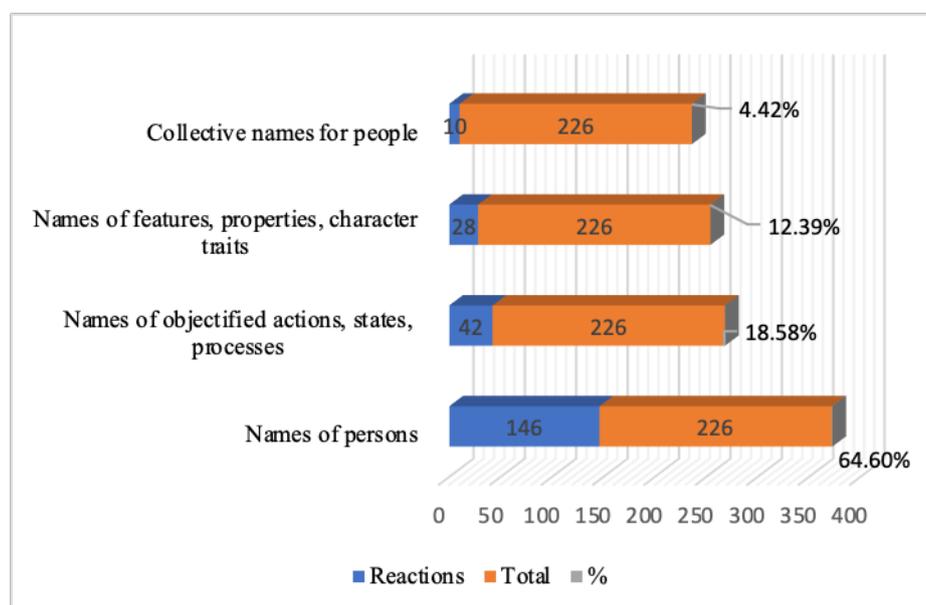
Names of Persons (146; 64.6 %)

During the analysis of associative responses to the stimulus word *'sworn brother'*, the thematic group *Names of persons* was found to dominate, accounting for the largest number of associations – 146. This indicates that respondents perceive the lexeme *'sworn brother'* primarily as a noun denoting a

person with certain characteristic features and a social or emotional function, most often in a military or friendly context.

Figure 2
Thematic Groups of the Associative Field of the Stimulus Word 'Sworn Brother'

The domination of emotionally positive connotations in the perception of the lexeme *'sworn brother'* is reflected in the synonymous responses *друг (druh) [friend]* (56 responses), *товариш (tovarysh) [comrade]* (24), *кент (kent) [buddy]* (1). A significant proportion of associations fall on the word *брат (brat) [brother]* (32). These responses represent concepts that are close in meaning, such as family or friendly closeness, mutual support, and trust. The frequency of these responses indicates that the word *'sworn brother'* is deeply rooted in the concepts of trust, loyalty, and brotherhood.

Particular attention is drawn to the presence of lexemes with military semantics: *військовий (viiskovyi) [military]* (14), *воїн (voin) [warrior]* (2), *волонтер (volonter) [volunteer]* (1), *побратим по зброї (pobratym po zbroi) [brother in arms]* (1), *бойовий брат (boiovyi brat) [combat brother]* (1), *солдат ЗСУ (soldat Zbroinykh Syl Ukrainy) [soldier of the Armed Forces of Ukraine]* (1), *людина у військовій формі (liudyna u viiskovii formi) [person in military uniform]* (1). This indicates that in the modern Ukrainian context, especially in wartime, the concept of *'sworn brother'* is increasingly identified with military personnel and comrades-in-arms. Thus, the lexeme *'sworn brother'* has acquired a modernized, actualized meaning closely related to the realities of war.

Associations such as *колега (koleha) [colleague]* (3), *соратник (soratnyk) [comrade-in-arms]* (2), *союзник (soiuznyk) [ally]* (2), *партнер (partner) [partner]* (1), emphasize the cooperative aspect of interaction between brothers-in-arms – partnership in a common cause, struggle, or service.

Some responses, such as *рідна людина (ridna liudyna) [close person]* (2), *батько (batko) [father]* (1), *член родини (chlen rodyny) [family member]* (1), indicate a high degree of emotional significance, probably a metaphorical perception of *'sworn brother'* as a member of one's closest social circle.

These data provide grounds for asserting that, in the linguistic consciousness of modern Ukrainian speakers, *'sworn brother'* is a multidimensional concept centered on the category of person. However, its meanings also encompass emotional and professional aspects, including military ones. It is precisely this polysemy and contextual variability that contribute to the high semantic richness of the word and its active functioning in contemporary military, public, and everyday discourse.

Names of Objectified Actions, States, Processes (42; 18.58 %)

The second-largest group of associations with the stimulus word *'sworn brother'* consists of names of objectified actions, states, and processes – a total of 42 responses. These associations represent the abstract semantic plane of the lexeme, allowing us to trace the concepts associated with brotherhood as a phenomenon or socio-psychological state.

The dominant lexeme in this group is *підтримка (pidtrymka) [support]* (10 responses), which clearly indicates the main function of brotherhood in communicative and mental practice – to be a reliable support in difficult situations. The word *допомога (dopomoha) [help]* (5), which is close in meaning, as well as *взаємопідтримка (vzaiemopidtrymka) [mutual support]* (2), *взаємодопомога (vzaiemodopomoha) [mutual assistance]* (1), *опора (opora) [support]* (3), and *взаємоповага (vzaiemapovaha) [mutual respect]* (1) form the semantic core of this group. They emphasize the symmetrical nature of the relationship between brothers-in-arms – an equal partnership based on mutual trust, support, and respect.

A significant number of associations are related to positive emotional social states: *дружба (druzhba) [friendship]* (8), *єдність (yednist) [unity]* (3), and *братство (bratstvo) [brotherhood]* (4). These concepts reflect the idea of internal cohesion and a sense of community that goes beyond individual experience and takes on the character of collective identity. In this sense, brotherhood is not just a relationship between two people, but a model of coexistence grounded in moral and value principles.

A separate semantic group consists of associations with military and social semantics: *війна (viina) [war]* (2), *АТО (ATO) [Anti-Terrorist Operation]* (1), *служба (sluzhba) [service]* (1). These units once again emphasize the relevance of the concept of pobratym in the context of the Russian-Ukrainian war and its transformation from an archaic or folkloric-historical to an extremely modern and vitally important one. The word *життя (zhyttia) [life]* (1) stands out in this thematic group and can be seen as a symbolic marker of the fact that brotherhood is support not only in war but also in life's trials in general.

Thus, the names of actions, states, and processes associated with the lexeme *'sworn brother'* emphasize the emotional, ethical, social, and contextual-military aspects of this concept. Brotherhood is understood not only as personal or ideological affiliation, but as an active action, a joint process, and a state that has profound significance in the context of contemporary challenges.

Names of Features, Properties, Character Traits (28; 12.39 %)

The third largest group of associations with the stimulus word *'sworn brother'* consists of names of features, properties, and character traits – 26 units. These lexemes reflect not only the perception of a brother as a person, but also emphasize his inner qualities, moral values, and ethical assessment.

The absolute dominants in this group are the associates *вірність (virnist) [loyalty]* (9) and *довіра (dovira) [trust]* (9), which together account for more than half of all responses. Both concepts reflect the high level of emotional and interpersonal stability attributed to brotherhood. *Loyalty* implies constancy in devotion and steadfastness in defending shared beliefs, while *trust* implies a deep interpersonal connection that does not require constant confirmation, grounded in confidence in the other's support and sincerity.

The answers include the nouns *надійність (nadiinist) [reliability]* (2), *відданість (viddanist) [loyalty]* (1) and the adjectives *вірний (virnyi) [faithful]*, (1) and *чесний (chesnyi) [honest]* (1). These associations emphasize the value dimension of the concept *'sworn brother'*, which lies not so much in emotional or family closeness as in ethical responsibility and inner strength. *'sworn brother'* is a person who can be relied upon in any situation, who will not betray and will remain faithful to the common cause.

The associates *близький (blyzkyi) [close]* (3) and *сусід (susid) [neighbor]* (1) emphasize the spatial, psychological, and emotional closeness of a brother. This refers to a person from the closest social circle who is associated with trust, understanding, and support. It is a metaphor for a "close circle" that also conveys the depth of the relationship between brothers.

Thus, in the linguistic consciousness of modern Ukrainians, the lexeme *'sworn brother'* is associated with a complex of positive character traits, in particular loyalty, honesty, reliability, and devotion. These qualities form the moral and ethical core of the concept and reflect the idea of brotherhood as a high form of human dignity, grounded in mutual respect, trust, and moral responsibility.

Collective Names for People (10; 4.42 %)

The fourth group of associations with the word pobratym consists of collective names for people – 10 responses representing collective ideas about the social communities to which pobratym belongs.

The most frequent response in this group is the word братство *братство (bratstvo) [brotherhood]* (6 responses). It embodies not only a metaphor of closeness, but also symbolizes a certain ideological or spiritual community. In this context, the word *pobratym* is not a person but an integral part of a brotherhood – a morally and emotionally united group that acts as a single whole. This association testifies to the deep roots of the concept of brotherhood in Ukrainian cultural tradition, particularly Cossack tradition, where brotherhood had not only social but also sacred significance.

Other associations – *родина (rodyna) [family]* (2), *армія (armiia) [army]* (1), *нація (natsiia) [nation]* (1) – broaden the scope of interpretation. The family conveys the meaning of brotherhood through its relationships, emphasizing warmth, security, and unconditional support. *The army* as a collective unit emphasizes the professional military context in which *'sworn brother'* appears as *побратим по зброї (pobratym po zbroi) [brother in arms]* (1) within a single armed group. The association with *the nation* is particularly significant, as it indicates the transfer of the idea of brotherhood to the macro level of the national community, where all citizens are perceived as equal participants in a common struggle and service to common values.

In general, this group of associations reflects the collective, supra-personal dimension of the concept of *'sworn brother'*. In the linguistic consciousness of respondents, *'sworn brother'* is not only a close person, but also a member of a cohesive community characterized by a high degree of solidarity, a common goal, and moral responsibility for one another.

The paradigmatic and syntagmatic relationships among associative responses to the stimulus word *'sworn brother' reveal* a deep semantic interdependence among the concepts of personal and collective kinship, moral qualities, and joint action.

There are paradigmatic connections between the lexemes within each group, demonstrating their semantic relatedness. Synonymous and hyponymic

connections prevail among the names of persons: *friend, comrade, colleague, brother in arms* are functional or ideological equivalents of the word *'sworn brother'*. In the names of actions, states, and processes, there is a paradigm of social interaction: *support, help, friendship, and mutual respect* are components of typical brotherhood. Among the characteristics, properties, and traits, the words *loyalty, trust,* and *reliability* denote values that support a brother's status and functions. Collective names – *brotherhood, family, army, nation* – are paradigmatically linked as supra-personal units, in which the image of a collective member as a participant in it is embedded. Thus, the meaning of the lexeme *'sworn brother'* expands to the level of a community or nation.

Syntagmatic connections are found in typical combinations of lexemes between groups. In the syntagmatic connection, *'sworn brother'* most often appears with concepts of action (*helps, protects*), emotional qualities (*loyal, reliable*), and belonging (*from the brotherhood, from the people*). Constructions such as *virnyi pobratym [loyal brother], dopomoha pobratyma [brother's help], pobratym z viiska [brother from the army], pobratymstvo yak opora [brotherhood as support]* indicate stable patterns of compatibility between a person, action/state, and category of value. The syntagmatic field of the lexeme *'sworn brother'* is structured around the concepts of trust, support, interaction, and shared experience, primarily in the context of military or national-existential solidarity. The most productive are attributive and predicative models with a value connotation.

Thus, paradigmatic and syntagmatic connections around the lexeme *'sworn brother'* are organized around the central ideas of trust, community, and national-moral unity.

Conclusions

The study found that the lexeme *'sworn brother'* is a significant element of the Ukrainian linguistic worldview, reflecting a nationally marked cultural concept deeply rooted in the historical, social and mental space of Ukrainians. The origin and dictionary meanings of the lexeme *'sworn brother'*, which has Proto-Slavic roots and historically denoted a person connected through a ritual of brotherhood and, in modern usage, a friend, companion, or comrade, especially in a military context, were analyzed.nalyzed.

It has been found that in the linguistic consciousness of Ukrainians, the lexeme *'sworn brother'* is associated with positive social roles and morally significant qualities. The word association test has established that the core of the associative field consists of the lexemes *friend, brother, and comrade, indicating* a stable perception of *'sworn brother'* as a close person, a reliable friend, and an ally.

Four thematic groups dominate the structure of the associative field of the lexeme *'sworn brother'*: names of persons (64.6%), names of objectified actions, states, processes (18.58%), names of characteristics, properties, traits (12.39%), and collective names for people (4.42%). This indicates the multifaceted nature of the concept, which combines personal, emotional, social, and collective levels. Names of persons emphasize the individual dimension of brotherhood as a special type of interpersonal relationship (friendship, brotherhood, combat comradeship), which indicates the military context of this concept, actualized in connection with the Russian-Ukrainian war. The names of actions, states, and processes reveal brotherhood as interaction, a dynamic state of unity, support, and mutual assistance. The names of characteristics, properties, and traits constitute the moral and ethical core of the concept and reflect a high form of human dignity grounded in mutual respect, trust, and moral responsibility. Collective names for people testify to the collective nature of the concept, within which a brother-in-arms is part of a wider community – a brotherhood, an army, a family, a nation. Such collective identification elevates brotherhood into a symbol of unity that transcends personal relationships.

In modern Ukrainian speech, especially in wartime, the concept of pobratym has become much more relevant and is primarily used to refer to military brotherhood, solidarity, support, and joint struggle. Military semantics is among the leading examples of modern associative responses, indicating the semantic evolution of the lexeme.

The analysis of paradigmatic and syntagmatic connections confirmed that the lexeme 'sworn brother' belongs to the synonymous series of concepts such as *friend, comrade, brother,* and *colleague*, and is actively combined with lexemes denoting *interaction, trust, support, and commonality*.

The analysis allows us to conclude that the lexeme 'sworn brother' is representative of the Ukrainian cultural code, which accumulates ideas of brotherhood, national unity, mutual support, and moral responsibility. The concept 'sworn brother' performs an important identifying and unifying function in contemporary Ukrainian society.

Data Availability Statement

A sample questionnaire and survey results are available in the international repository Mendeley Data at https://data.mendeley.com/datasets/bxv8ffbjc2/2.

Disclosure Statement

The authors reported no potential conflicts of interest.

References

Aeschbach, S., Mata, R., & Wulff, D. U. (2025). Mapping mental representations with free associations: A tutorial using the R package associatoR. *Journal of Cognition, 8*(1), Article 3. https://doi.org/10.5334/joc.407

Artykbayeva, F., Spatay, A., Raimov, A., Bakirova, S., & Taiteliyeva, M. (2024). Value characteristics of the core of the mental lexicon of native speakers of language and culture in the light of intercultural communication. *Journal of Psycholinguistic Research, 53,* Article 32. https://doi.org/10.1007/s10936-024-10074-9

Auganbayeva, M., Turguntayeva, G., Anafinova, M., Kopbayeva, M., & Mukashev, T. (2024). Linguacultural and cognitive peculiarities of linguistic universals. *Journal of Psycholinguistic Research, 53,* Article 3. https://doi.org/10.1007/s10936-024-10050-3

Білодід, І. (Гол. ред.). (1970–1980). Словник української мови: В 11 т. Наукова думка.

Bulyk-Verkhola, S., Hnatyuk, M., Shmilyk, I., Tehlivets, Y., & Kharchuk, L. (2023). Linguistic images of man and woman in the story of Ivan Franko "Cross-Paths": Attributive compatibility. In N. Kryvinska, M. Greguš, & S. Fedushko (Eds.), Developments in information and knowledge management systems for business applications. Studies in Systems, Decision and Control (Vol. 466). Springer. https://doi.org/10.1007/978-3-031-27506-7_5

Бутенко, Н. П. (1979). Словник асоціативних норм української мови. Вища школа.

Вікісловник: Побратим. (2025). https://uk.wiktionary.org

Горошко, О., & Полякова, Т. (2019). Освіта 2.0: психолінгвістичний аналіз. *Psycholinguistics, 26*(2), 27–45. https://doi.org/10.31470/2309-1797-2019-26-2-27-45

Денисевич, О. В. (2021). Стереотипність реакцій в асоціативних полях слів-стимулів рекламної лексики. *Наукові записки Національного університету «Острозька академія»: Серія «Філологія», 12*(80), 20–25. https://doi.org/10.25264/2519-2558-2021-12(80)-20-25

Karimkhani, F., Rahmani, H., Zare, A., Sahebnassagh, R., & Aghakasiri, K. (2021). Tarvajeh: Word association norms for Persian words. *Journal of Psycholinguistic Research, 50*(4), 863–882. https://doi.org/10.1007/s10936-020-09751-2

Kovalchuk, L., & Litkovych, Y. (2022). Psycholinguistic aspects of representing aggression in wartime media discourse. *East European Journal of Psycholinguistics, 9*(2), 67–81. https://doi.org/10.29038/eejpl.2022.9.2.kov

Мартінек, С. (2007). Український асоціативний словник: У 2 т. Т. 1. Від стимулу до реакції. Видавничий центр ЛНУ імені Івана Франка.

Мельничук, О. (Гол. ред.). (1982–2012). Етимологічний словник української мови: в 7 т. (Т. 1). Наукова думка.

Mykhalchuk, N., Kharchenko, N., Kalmykov, H., Ivashkevych, E., Hupavtseva, N., & Mysan, I. (2024). Concept "EDUCATION" and its subconcepts in the consciousness of Ukrainian managers. *Psycholinguistics, 36*(1), 154–188. https://doi.org/10.31470/2309-1797-2024-36-1-154-188

Mykhalchuk, N., Plakhtii, A., Panchenko, O., Ivashkevych, E., Khupavtseva, N., & Chebykin, O. (2023). Concept "ENGLAND" and its subconcepts in the consciousness of Ukrainian students. *Psycholinguistics, 34*(2), 6–47. https://doi.org/10.31470/2309-1797-2023-34-2-6-47

Недашківська, Т., & Загородня, О. (2015). Комплексний аналіз стимулів в асоціатив-ному експерименті. *Psycholinguistics, 18*(2), 42–61.

Stepanov, V., Yemelianova, O., Baranova, S., & Nabok, M. (2025). Foreign metaphoric consideration of the UKRAINE concept in the journalistic discourse: A corpus research of the 2022-2025 wartime period. *East European Journal of Psycholinguistics, 12*(1), 193–225. https://doi.org/10.29038/eejpl.2025.12.1.ste

Zasiekin, S., Kuperman, V., Hlova, I., & Zasiekina, L. (2022). War stories in social media: Personal experience of Russia-Ukraine war. *East European Journal of Psycholinguistics, 9*(2), 160–170. https://doi.org/10.29038/eejpl.2022.9.2.zas

Жарноцайова, Ж. (2020). Методика асоціативного експерименту. *Slavica Slovaca, 55*(1), 69–81.

References (translated and transliterated)

Aeschbach, S., Mata, R., & Wulff, D. U. (2025). Mapping mental representations with free associations: A tutorial using the R package associatoR. *Journal of Cognition, 8*(1), Article 3. https://doi.org/10.5334/joc.407

Artykbayeva, F., Spatay, A., Raimov, A., Bakirova, S., & Taiteliyeva, M. (2024). Value characteristics of the core of the mental lexicon of native speakers of language and culture in the light of intercultural communication. *Journal of Psycholinguistic Research, 53,* Article 32. https://doi.org/10.1007/s10936-024-10074-9

Auganbayeva, M., Turguntayeva, G., Anafinova, M., Kopbayeva, M., & Mukashev, T. (2024). Linguacultural and cognitive peculiarities of linguistic universals. *Journal of Psycholinguistic Research, 53,* Article 3. https://doi.org/10.1007/s10936-024-10050-3

Bilodid, I. (Ed.). (1970–1980). Slovnyk ukrainskoi movy: V 11 tomakh [Dictionary of the Ukrainian language: In 11 volumes]. Naukova Dumka.

Bulyk-Verkhola, S., Hnatyuk, M., Shmilyk, I., Tehlivets, Y., & Kharchuk, L. (2023). Linguistic images of man and woman in the story of Ivan Franko "Cross-Paths": Attributive compatibility. In N. Kryvinska, M. Greguš, & S. Fedushko (Eds.), Developments in information and knowledge management systems for business applications. Studies in Systems, Decision and Control (Vol. 466). Springer. https://doi.org/10.1007/978-3-031-27506-7_5

Butenko, N. P. (1979). Slovnyk asotsiatyvnykh norm ukrainskoi movy [Dictionary of associative norms of the Ukrainian language]. Vyshcha Shkola.

Denysevych, O. (2021). Stereotypnist reaktsii v asotsiatyvnykh poliakh sliv-stymuliv reklamnoi leksyky [Stereotypes of responses in associative fields of words-stimuli of advertising vocabulary]. *Naukovi zapysky Natsionalnoho universytetu «Ostrozka akademiia»: seriia Filolohiia, 12*(80), 20-25. https://doi.org/10.25264/2519-2558-2021-12(80)-20-25

Goroshko, O., & Poliakova, T. (2019). Osvita 2.0: psykholinhvistychnyi analiz [Education 2.0: Psycholinguistic Analysis]. *Psycholinguistics, 26*(2), 27–45. https://doi.org/10.31470/2309-1797-2019-26-2-27-45

Karimkhani, F., Rahmani, H., Zare, A., Sahebnassagh, R., & Aghakasiri, K. (2021). Tarvajeh: Word association norms for Persian words. *Journal of Psycholinguistic Research, 50*(4), 863–882. https://doi.org/10.1007/s10936-020-09751-2

Kovalchuk, L., & Litkovych, Y. (2022). Psycholinguistic aspects of representing aggression in wartime media discourse. *East European Journal of Psycholinguistics, 9*(2), 67–81. https://doi.org/10.29038/eejpl.2022.9.2.kov

Martinek, S. (2007). Ukrainskyi asotsiatyvnyi slovnyk: U 2 tomakh (T. 1. Vid stymulu do reaktsii) [Ukrainian associative dictionary: In 2 volumes (Vol. 1. From stimulus to reaction)]. Ivan Franko LNU Publishing Center.

Melnychuk, O. (Ed.). (1982–2012). Etymolohichnyi slovnyk ukrainskoi movy: V 7 tomakh (T. 1) [Etymological dictionary of the Ukrainian language: In 7 volumes (Vol. 1)]. Naukova Dumka.

Mykhalchuk, N., Kharchenko, N., Kalmykov, H., Ivashkevych, E., Hupavtseva, N., & Mysan, I. (2024). Concept "EDUCATION" and its subconcepts in the consciousness of Ukrainian managers. *Psycholinguistics, 36*(1), 154–188. https://doi.org/10.31470/2309-1797-2024-36-1-154-188

Mykhalchuk, N., Plakhtii, A., Panchenko, O., Ivashkevych, E., Khupavtseva, N., & Chebykin, O. (2023). Concept "ENGLAND" and its subconcepts in the consciousness of Ukrainian students. *Psycholinguistics, 34*(2), 6–47. https://doi.org/10.31470/2309-1797-2023-34-2-6-47

Nedashkivska, T., & Zagorodnia, O. (2015). Kompleksnyi analiz stymuliv v asotsiatyvnomu eksperymenti [Multipurpose analysis of stimuli in the word association test]. *Psycholinguistics, 18*(2), 42–61.

Stepanov, V., Yemelianova, O., Baranova, S., & Nabok, M. (2025). Foreign metaphoric consideration of the UKRAINE concept in the journalistic discourse: A corpus research of the 2022-2025 wartime period. *East European Journal of Psycholinguistics, 12*(1), 193–225. https://doi.org/10.29038/eejpl.2025.12.1.ste

Wiktionary: Pobratym. (2025). https://uk.wiktionary.org

Zasiekin, S., Kuperman, V., Hlova, I., & Zasiekina, L. (2022). War stories in social media: Personal experience of Russia-Ukraine war. *East European Journal of Psycholinguistics, 9*(2), 160–170. https://doi.org/10.29038/eejpl.2022.9.2.zas

Zsarnóczaiová, Ž. (2020). Metodyka asotsiatyvnoho eksperymentu [Methodology of the word association test]. *Slavica Slovaca, 55*(1), 69–81.