Little words, big meaning -Ideational and pragmatic markers in fictional war discourse

Serhii Zasiekin a, b

^a University College London, UK ^b Lesya Ukrainka Volyn National University, Ukraine

Abstract. War discourse has gained importance amid today's global instability due to war-related trauma. Because war often involves trauma, its fictional representation may disrupt language coherence. Discourse coherence, marked by specific linguistic cues, helps readers connect ideas. Without such markers, structure remains implicit, potentially hindering interpretation. From this perspective, ideational and pragmatic discourse markers - little linguistic items that structure and organise text - are vital. These connectives have "procedural meaning" (Blakemore, 2002), guiding readers towards comprehension with less cognitive effort. This article aims to examine how such words and other 'little words' function in fictional non-war and war discourse. Using the Ukrainian version of LIWC2015 and a Welch Two-Sample t-test in R, based on the specific weights of categories in the two sets of texts, it was possible to identify markers of trauma discourse in Bohdan Lepky's wartime stories. The results showed that war fiction had a statistically significant reduction in both ideational and discourse-pragmatic markers of coherence. Additionally, there was a trend towards higher lexical density and the use of 'tentative' words, or 'mitigation' pragmatic markers, and 'affect' words, including indicators of anxiety with a focus on the present. These findings offer new insights into how discourse and other pragmatic markers shape the representation of traumatic experiences in the works of individual authors or fictional characters.

Keywords: discourse markers, ideational markers, pragmatic markers, procedural meaning, LIWC, Bohdan Lepky, fictional war discourse.

Анотація. У сучасних умовах глобальної нестабільності воєнний дискурс набуває особливого значення. Оскільки війну часто супроводжує травма, її художнє може порушувати мовну когерентність. Когерентність дискурсу, маркована специфічними мовними сигналами, допомагає читачеві пов'язувати між собою його ідеї. За відсутності таких маркерів дискурсивна структура залишається імпліцитною, що може ускладнювати інтерпретацію. З цього погляду, семантичні та прагматичні маркери дискурсу — малі лінгвістичні одиниці, що структурують і

Serhii Zasiekin, oooo-oooi-9453-3534, sergiozasyekin@vnu.edu.ua
© Zasiekin, Serhii, 2025. This is an Open Access article distributed under the terms and conditions of the Creative Commons Attribution 4.0 International Licence (http://creativecommons.org/licenses/by/4.0). East European Journal of Psycholinguistics, 12(1), 311-324. https://doi.org/10.29038/eejpl.2025.12.1.zas

організовують текст — мають виняткове значення. Ці сполучники мають «процедурне значення» (Blakemore, 2002), допомагаючи читачам зрозуміти текст із меншими когнітивними зусиллями. У цій статті автор має за мету проаналізувати, як такі слова з процедурним значенням, а також інші «малі слова» функціонують у невоєнних та воєнних прозових творах. Використання української версії LIWC2015 та двовимірного t-критерію Велча в R на основі встановленої конкретної ваги категорій дало змогу встановити маркери дискурсу травми у воєнних оповіданнях Богдана Лепкого. Результати дослідження засвідчили статистично значуще зниження сигналів когерентності, а саме дискурсивних маркерів, — семантичних і прагматичних у воєнних текстах. Крім того, зафіксовано тенденцію до вищої частотності слівпозначників «непевності», тобто прагматичних маркерів «пом'якшення», та «афекту», включаючи мовні індикатори тривоги з акцентом на теперішньому. Одержані дані дають змогу по-новому поглянути на вплив дискурсивних та інших прагматичних маркерів на структурування травматичних переживань окремих авторів або персонажів, зображених у художній літературі.

Ключові слова: дискурсивні маркери, семантичні маркери, прагматичні маркери, процедурне значення, LIWC, Богдан Лепкий, художній воєнний дискурс.

Introduction

Linguistic Cues to Understanding Trauma Discourse

War discourse has become increasingly important due to today's turbulent period. The term 'war fiction' may be applied to military-related texts that describe war events, everyday activities, and the military-cultural aspects of civilians' and combatants' lives during times of war (Kočote & Smirnova, 2016). In a broader context, war testimonies, including war poetry, are viewed as an essential medium for articulating the psychological turmoil of combatants, particularly in relation to trauma, madness, and the fragmentation of the self (Kusumitha, 2025, p. 19). The textual ruptures reflect the fractured consciousness of combatants whose minds have been severely impacted by war. The war-induced literary works of Siegfried Sassoon, Wilfred Owen, Isaac Rosenberg, and Ivor Gurney, deeply analysed in Kusumitha (2025) through the lens of Freudian and Lacanian psychoanalysis, were a linguistic fabric full of incoherent and disrupted syntax, surreal imagery, and spectral voices to encapsulate the psychodynamics of madness.

Deppermann and Lucius-Hoene (2005) note that expressions of traumatic experiences exist on a spectrum that ranges from fully developed and organised narratives to disruptive accounts marked by gaps, pauses, and interruptions. This spectrum also reflects a tension between a deep, personal, and emotional engagement and a seemingly detached narrative that removes

the storyteller from their own experience. Because the description of war is often associated with trauma-related events, the language of war may become more disruptive, i.e., less coherent (Bifulco, 2022; Brewin, 2022; van der Kolk, 2014).

Discourse coherence has its markers. The markedness of discourse structure helps readers build meaningful connections between information segments. Without verbal markers, the ideational and pragmatic structure of discourse remains implicit. While this does not significantly hinder understanding, it can complicate interpretation and affect the relevance of information for the reader.

In this study, the terms 'discourse marker' and 'pragmatic marker' are treated separately (see also Zasiekin, 2016). While the former can also receive discourse-pragmatic status, it primarily refers to expressions in written or oral discourse that are used both ideationally and pragmatically (Redeker, 1990), serving a structuring and organisational function. These 'connectives' do not belong to the truth conditions of the adjacent propositions/utterances. Instead, they signal connections between them, allowing readers to achieve a higher cognitive effect with less cognitive processing effort (Sperber & Wilson, 1995). From the experimental pragmatics perspective (Gibbs & Colston, 2020), these linguistic cues save time and total cognitive effort required to process a particular kind of pragmatic meaning at the phrasal or sentence level. More to the point, their instrumental function is not limited to local coherent relations but can also be extrapolated to a global, i.e., topical, discourse level. Hence, the availability of discourse markers of local and 'global coherence (Lenk, 1998) is essential for avoiding disruptions in text interpretation. These 'products of grammaticalisation' (Nicolle, 2007) include not only conjunctions or prepositional phrases, but also adverbs (now, well, then, still, yet, thus, anyway), phrases (after all, in other words, in addition, at last, what's more, in any case, in that/this case, by the way, by the time, for example), verbs (listen, look), adverbial phrases (speaking of X, talking about/of), subject-predicate constructions (I mean, you know/see). Used as discourse markers, these linguistic items that previously had 'conceptual meaning' developed out of lexical expressions and gained 'procedural meaning' (Blakemore, 2002).

As a result, due to the loss of conceptual meaning, these 'little words' acquire the status of disjuncts, because they no longer belong to the truth-conditional propositional content in the discourse, serving as 'keys' to the proper interpretation of adjacent or distant discursive chunks – either utterances (pragmatic aspect) or propositions (ideational aspect).

Unlike discourse markers with a connective status, a group of words, which comprises parenthetical expressions, is referred to here as pragmatic markers of the speaker's (author's) attitude towards the propositional content. In other words, they convey a separate message that has the cognitive status of complementarity to the adjacent proposition/utterance. They are not markers of text coherence but modifiers of the illocutionary force of the adjacent speech act towards increasing or 'mitigating' (Caffi, 2013) its categoricality. They also have a status of 'disjuncts' capable of encoding a pragmatic relation as they are not part of the proposition/utterance.

Now, it seems important to distinguish between the linguistic items that convey procedural meaning and do not belong to the propositional content, and other 'little words' that also convey procedural meaning but meet the truth-conditions of the proposition, being part of it (Wilson, 2011). These include pronouns, which are also products of grammaticalisation, whose function is to help the addressee fulfil the task of reference (Nicolle, 2007). Thus, pronouns constitute a special group of linguistic items that convey procedural meaning. From the perspective of cognitive grammar (Langacker, 2008), they profile nominal grounding. Grounding is a grammatical means of marking the epistemic status of a thing, e.g., a noun, or a process (temporal relation), e.g., a verb, or a state (atemporal relation). The latter group includes interjections, particles, modal words, discourse markers, prepositions, and conjunctions that offer clear procedures for constructing higher-order forming either the speaker's (author's) attitude to the propositional content or connecting (parts of) propositions into a logical sequence (Alves & Gonçalves, 2013, p. 111).

Today, these linguistic units are the focus of attention not only of linguists, but also of psycholinguists, cognitive, clinical and social psychologists (Brewin & Field, 2024; Pennebaker, 2007). Pennebaker and colleagues (2015) refer to the entire group of encoders of procedural meaning as functional or 'style' words, which account for around a third of the words used in an average speaker's discourse in Ukrainian and about half in English. Notably, their number is only 500-600 words (approximately 0.5-0.6 per cent) of all words in a language.

Thus, the paper aims to examine the role ideational and pragmatic discourse markers of coherence and pragmatic markers – modifiers of speech acts – play in the structuring of the fictional war discourse by Bohdan Lepky. The study is informed by the theoretical frameworks and empirical findings reviewed above, and accordingly addresses the following research questions:

Research Question 1: How does the author's use of ideational and pragmatic markers of coherence change in non-war and war stories?

Research Question 2: What other linguistic and psychological markers characterise fictional trauma-related war discourse?

Method

Material

As Searle (1975) noted, the utterance acts in fiction are indistinguishable from the utterance acts of serious discourse, so there is no textual property that will identify a stretch of discourse as a work of fiction (pp. 327-330). Most fictional stories contain nonfictional elements. Fictional war discourse can be created both by writers and poets who were active duty combatants and by those who did not have any war experience. However, the latter attempt to provide their readers with the opportunity to perceive events that may be relatively distant in time and space as something close and realistic (Cobley, 1995). As Eisler (2022) argues, a skilled writer can use their imagination to create a realistic portrayal of war (p. 1).

Bohdan Lepky (1872–1941), a prolific Ukrainian writer who skillfully depicted the tragic chapters of the Ukrainian nation's history (Zasiekin, 2024), was not on the front line of the war. However, the peculiarity of his fictional discourse lies in the difference between naturalistic novels, fairy tales, and science fiction, which is defined by the extent to which the author commits to representing specific facts about war. As Lepky's war testimonies are realistic fiction, the author references real places and events, depicting "violent, traumatic reality" (Blacker, 2019, p. 4) of cities and towns and associating these with fictional ones, thus making it possible to treat his fictional stories as an extension of our existing knowledge about the war. The study analysed Lepky's 33 fictional non-war and 24 war stories on the First World War. The first sample size is 82,376 words, while the second is 33,252 words.

Tools

A comparative analysis of the chosen corpora of Lepky's fictional non-war and wartime short stories employed the Ukrainian version (Taraban et al., 2022) of the Linguistic Inquiry and Word Count (LIWC2015) software tool (Pennebaker et al., 2015). Nowadays, LIWC is a popular tool for linguists and psychologists who deal with language related to trauma, aiming to analyse a wide range of

issues – from responses and participant self-reported narratives of trauma experiences to self-reported measures of trauma, adverse childhood experiences, and positive childhood experiences (see Ryan, 2023).

LIWC consists of two main components: a processing block and a set of dictionaries. The program is designed to assign detected words in the text to one or more appropriate categories, so that each in-text word is linked to a corresponding word in the dictionary (cf Zasiekin et al., 2022). This distinction is made between function words and full-meaning words for categorisation purposes. The 2015 Ukrainian version of the software includes over 10,000 words grouped into categories such as grammatical, psychological, social relations, and personal themes (e.g., friend, female, male, work, religion, family, home, leisure, death, money). Function, or 'style' words, play a special role in LIWC because they serve as linguistic and psychometric indicators of aspects that are not immediately apparent in text – they can measure the social and psychological experiences of the speaker (Tausczik & Pennebaker, 2010).

The current analysis involved calculating and comparing the LIWC-processed text data in terms of the percentages of words belonging to over eighty predefined linguistic and psychological categories. In the LIWC2015 categories, ideational and discourse-pragmatic markers are encoded as 'conj' and 'filler', respectively. Pragmatic modifiers are labelled 'tentat', meaning hedges, and 'certain', meaning boosters.

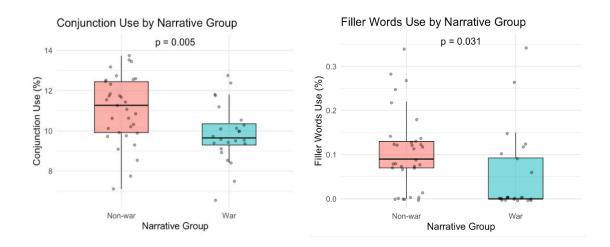
The statistical analysis of the data obtained from LIWC2015 employed a Welch Two-Sample t-test using the R package. This version of the t-test is considered more reliable than Student's t-test when the two samples have unequal sample sizes (Lu & Yuan, 2010).

Results

Based on the established specific weight of categories in the comparable sets of texts, it was possible to identify and then compare function words under study, including ideational discourse markers of local coherence, e.g. *i (and)*, бо (because), але (but), and pragmatic markers of 'global coherence' (Lenk, 1998), like ну (well), втім (апумау), тобто (I теап), знаєш (you know), in the discourse of Lepky's non-war and wartime short stories.

As the statistical analysis showed, the language of Lepky's war stories tends to be less abundant in discourse markers. The results demonstrated that war discourse exhibited a significant reduction in ideational connectives (Mean=11.07 to 9.85) and a decrease in pragmatic markers of global coherence (Mean=.11 to .05) (see Fig. 1).

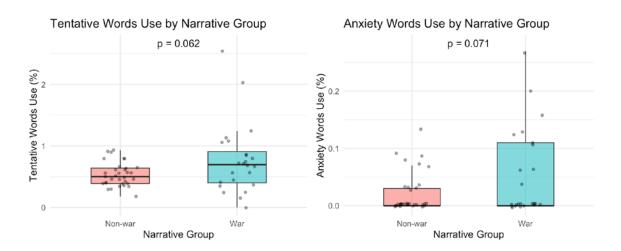
Figure 1
T-test Outcomes for Ideational and Discourse-Pragmatic Markers in Lepky's Non-War (n=33) and War Stories (n=24)



However, there was a trend towards more frequently used 'tentative' language (Mean = .53 to .77), viewed as signals of a mitigation strategy supported by negative emotion words, such as anxiety (Mean = .02 to .05), which fall into the LIWC's broader category of 'affect' (see Fig. 2).

Figure 2

T-test Outcomes for Pragmatic Markers of Mitigation and Anxiety in Lepky's Non-War (n=33) and War Stories (n=24)



Besides, the war corpus gained a more significant focus on the present (Mean = .78 to 1.37) with fewer verbs (Mean = 1.81 to 1.48) (see Fig. 3) and first-person singular pronouns (Mean = 1.76 to .95), but with a higher weight of third-person plural pronouns (Mean = .27 to .59, respectively) (see Fig. 4).

Figure 3

T-test Outcomes for Verb Use and Focus on Present in Lepky's Non-War (n=33) and War Stories (n=24)

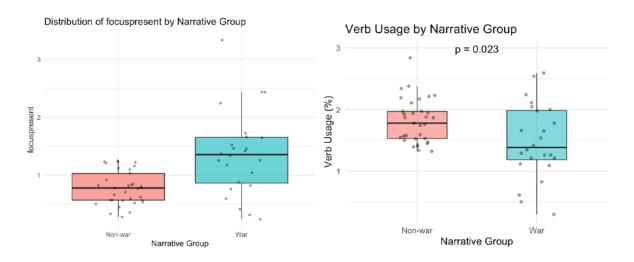
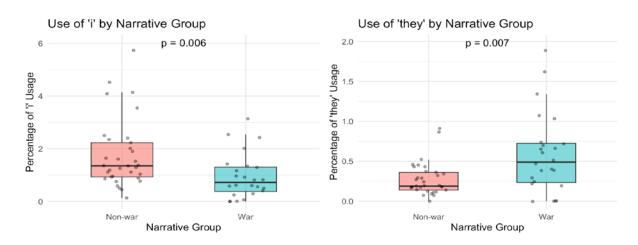


Figure 4 T-test Outcomes for 'I' and 'They' Use in Lepky's Non-War (n=33) and War Stories (n=24)



The lexical density showed a slight upward trend in wartime stories (Mean = 21.16, 22.63, respectively).

Discussion

Although being fictitious, the writer's short stories are also deep reflections on war and testimony to 'personal histories' (Antonissen, 2020, p. 370) of depicted characters that model how they were differently affected when experiencing traumatic events of war and how they would deal with personal and social relations in the times of war. Moreover, these are realistic stories not only about combatants but also about civilians who went through military violence and even atrocities. Despite the expected coherence in discourse structuring, as Lepky recreated testimonies in the form of *pre-fabricated* texts, the stories tended to lose their discourse coherence due to a decreased ratio of discourse markers of local and global coherence.

Reduced use of coherence markers suggests disruption, aligning with research on trauma narratives. As Busch and McNamara (2020) note, narratives produced in traumatic contexts often fail to meet institutional expectations in terms of coherence and accuracy. Fewer filler words imply weaker coherence of discourse macrostructure (Beaudreau et al., 2006), and a lack of global coherence markers negatively affects thematic continuity. In line with the experiment recounting a personal story by Beaudreau and colleagues (2006), our data demonstrated that using filler words, which function as indicators of topic introduction, resumption, or deviation, may suggest the degree to which the story is well-formed. Thus, fewer markers of topical shifts, e.g.: втім (anyway), omow (so), causes incoherence in the macrostructure. In our case, their decreased ratio negatively contributes to the textual thematic structure, i.e. global coherence in the sense of well-formedness. From the perspective of Relevance Theory (Sperber & Wilson, 1995) and the procedural-conceptual meaning distinction (Blakemore, 2002), the availability of ideational and pragmatic discourse markers facilitates higher cognitive effects with minimal processing effort, thereby increasing the relevance of the communicated utterance(s) for the reader. Therefore, a significant decrease in ideational and discourse-pragmatic connectives may indicate a disruptive 'trauma discourse' (Matei, 2013).

The more frequent use of 'tentative' words, or pragmatic markers of mitigation, combined with a significant drop in the use of ideational and discourse-pragmatic markers of local and global coherence, may suggest that the author was insecure about the topic (Tauczik & Pennebaker, 2010) and was unable to form it into a coherent story. This phenomenon is evidenced in Holmes and colleagues' work (2007), where the markers of uncertainty may also indicate a lack of traumatic event processing by the author himself. In

other words, when people are insecure about their topic, they tend to use tentative language combined with discourse markers as indicators of being unsure about the described events. Pragmatic markers of mitigation revealed in the study, such as $2a\partial a\omega$ (I guess), Momnuso (maybe), and $Hi\delta u$ (sort of), repetitions or hesitations, often reflect uncertainty, trauma, or fear. At the same time, they can indicate stress, emotional struggle or even moral injury (see also Zasiekin et al., 2025). Lepky explicitly revealed his moral injury in the autobiographical story *The Fugitive's Notes*. The shift from "own eyes" to "observer" (Wardell et al., 2023; King et al., 2024) perspective reinforces our assumptions regarding the attempt to distance from painful recollections. With 'anxiety' in the background, a considerable shift in the war stories from 'I' to 'they' perspective also manifests the author's alienation of the concepts "we" and "others" (adversaries).

Furthermore, a tendency to a higher lexical density in the war stories is in line with Menne and colleagues' (2025) research describing the negative sentiment (e.g., anxiety) prevalence and the use of less frequent words in PTSD participants' speech. Combined with the previously discovered (Zasiekin, 2024) significant prevalence of 'anger' markers in Lepky's war narratives compared to the reference corpus, the ascending trend of anxiety markers' use in the present study amplifies the author's immersion in traumatic events (Holmes et al., 2007).

Finally, more static war discourse, characterised by a significant decrease in verb use and the first-person singular pronoun, in particular, and a present-tense focus in general, may be a hallmark of the author's discourse when discussing an undisclosed event (Pasupathi, 2007). While the use of the past tense verb may be indicative of increased psychological distance and a higher degree of resolution for disclosed events, discourse with a greater focus on the present may indicate a path to reexperiencing the traumatic event (Brewin, 2025).

Conclusions and Interdisciplinary Implications

Overall, the act of storytelling serves as a means for the author to disclose individual painful experiences that have not been shared before. Social psychologists acknowledged this strategy as a mechanism for relieving traumatic stress (Pennebaker & Seagal, 1999). By embedding the studied 'little words' in the fabric of his war stories, Lepky mimics oral storytelling and potential trauma loops in characters. In war fiction, pragmatic markers can contribute to naturalistic dialogue, helping to differentiate characters based on

their background, rank, or experience and making conversations sound more authentic and immersive.

Regarding Research Question 1, this study of functioning 'little words' in war fiction affirms that Lepky's war stories exhibited fewer discourse markers of local and global coherence. As for Research Question 2, the study discovered that fictional trauma-related war discourse tended to contain a higher lexical variety, a greater degree of 'tentative' language, laden by increased negative emotion words indicating anxiety. Besides, while third-person plural pronouns carried more weight, the war stories focused on the present and were more static, with less narrator agentivity due to fewer verbs and fewer first-person singular pronouns.

To conclude, the results reported here shed new light on the role ideational and pragmatic markers play in the individual author's, often "beyond pain" (Lepky, 1922), or characters' traumatic experiences reflected in fiction. In light of these findings, the study offers prospects and implications for the further psycholinguistic analysis of the current war testimonies shared by today's civilians and combatants, with a possible step toward 'the land' of the pragmatics of trauma discourse. The study can also be of interest for computational linguists and experts in machine learning in creating a nomenclature of linguistic markers of posttraumatic stress disorder and moral injury. Also, for translators, being mindful of 'little words' means not omitting them or, conversely, adding them because they may mark meaningful discourse experiences.

Limitations

Although the findings may reveal some specific semantic and pragmatic markers of fictional war discourse structure, this study is far from unveiling a set of reliable markers of 'language of trauma' because it requires a more considerable corpus of war fiction discourse. Regarding the focus on the present, as Lepky wrote his war stories chronologically later, there might be a time factor – a tendency, as Pennebaker and Stone (2003) noted, of ageing writers to pay more attention to the present and decrease their use of the first-person singular over time.

Acknowledgments

The author would like to acknowledge the support of the British Academy in funding this research.

References

- Alves F. & Gonçalves J. L. (2013). Investigating the conceptual-procedural distinction in the translation process. *Target*, 25(1), 107–124. https://doi.org/10.1075/target.25.1.09alv
- Anthonissen, C. (2020). Autobiographical narrative of traumatic experience: Disruption and resilience in South African Truth Commission Testimonies. Applied Linguistics, 41(3), 370-388. https://doi.org/10.1093/applin/amaa010
- Beaudreau, S. A., Storandt, M., & Strube, M. J. (2006). A comparison of narratives told by younger and older adults. *Experimental Aging Research*, 32, 105–117. http://dx.doi.org/10.1080/03610730500326481
- Bifulco, A. (2021). Childhood Trauma in Women and Fragmented Interview Narratives Some Interdisciplinary Methodological and Clinical Implications. *East European Journal of Psycholinguistics*, 8(1), 12–27. https://doi.org/10.29038/eejpl.2021.8.1.bif
- Blacker, U. (2021). Memory, the City and the Legacy of World War II in East Central Europe. The Ghosts of Others. Routledge.
- Blakemore, D. (2002). Relevance and Linguistic Meaning: The Semantics and Pragmatics of Discourse Markers. Cambridge University Press.
- Brewin, C. R.(2025). Key concepts, methods, findings, and questions about traumatic memories. Journal of Traumatic Stress. https://doi.org/10.1002/jts.23164
- Brewin, C. R., & Field, A. P. (2024). Meta-Analysis shows trauma memories in posttraumatic stress disorder lack coherence: A response to Taylor et al. (2022). *Clinical Psychological Science*, 12(5), 1027–1033. https://doi.org/10.1177/21677026241240456
- Busch, B., & McNamara, T. (2020). Language and Trauma: An Introduction. *Applied Linguistics*, 41(3), 323–333. https://doi.org/10.1093/applin/amaa002
- Caffi, C. (2013). Mitigation. In M. Sbisà and K. Turner (Eds.), Pragmatics of speech actions (pp. 257–285). De Gruyter Mouton.
- Cobley, E. (1995). Postmodernist War Fiction: Findley's The Wars. *Canadian Literature*, 147, 98–124. https://doi.org/10.29038/eejpl.2021.8.1.bif
- Deppermann, A., & Lucius-Hoene, G. (2005). Trauma erzählen kommunikative, sprachliche und stimmliche Verfahren der Darstellung traumatischer Erlebnisse. *Psychotherapie und Sozialwissenschaft: Zeitschrift für Qualitative Forschung und klinische Praxis*, 7(1), 35–73.
- Eisler, D. F. (2022). Writing Wars: Authorship and American War Fiction, WWI to Present. University of Iowa Press. Retrieved from https://doi.org/10.2307/j.ctv2xoow38
- Gibbs, R. W., Colston, H. L. (2020). Pragmatics always matters: An expanded vision of Experimental Pragmatics. *Frontiers in Psychology, 11*, 1619. https://doi.org/10.3389/fpsyg.2020.01619
- Holmes, D., Alpers, G. W., Ismailji, T., Classen, C., Wales, T., Cheasty, V., Miller, A. & Koopman, C. (2007). Cognitive and emotional processing in narratives of women abused by intimate partners. *Violence Against Women*, *1*3, 1192–1205. https://doi.org/10.1177/1077801207307801
- King, C. I., Romero, A. S. L., Schacter, D. L., & St. Jacques, P. L. (2022). The influence of shifting perspective on episodic and semantic details during autobiographical memory recall. *Memory*, 30(8), 942–954. https://doi.org/10.1080/09658211.2022.2061003

- Kočote, I., & Smirnova, T. (2016). Aspects of military-related text translation from English into Latvian. *Procedia Social and Behavioral Sciences*, 231, 107-113. https://doi.org/10.1016/j.sbspro.2016.09.078
- Kusumitha, R. (2025). Ruptured minds, fractured verses: The psychodynamics of madness in war poetry. *International Journal of Arts, Science and Humanities*, 12(S4), 18-24. https://doi.org/10.34293/sijash.v12iS4.May.9146
- Langacker, R.W. (2008). Cognitive grammar. A basic introduction. Oxford University Press.
- Lenk, U. (1998). Discourse markers and global coherence in conversation, Journal of Pragmatics, 30(2), 245–257. https://doi.org/10.1016/S0378-2166(98)00027-7
- Lepkyi, B. (1922). Poza mezhamy boliu. *Nezabutni. Literaturni Narysy.* Ukrains'ke slovo, 66–73.
- Lu, Z., & Yuan, K. H. (2010). Welch's t-test. In N. J. Salkind (Ed.), *SAGE Encyclopedia of Research Design* (pp. 1620–1623). Sage Publishers.
- Matei, M. (2013). The linguistic mechanisms of trauma discourse. *Procedia Social and Behavioral Sciences*, 92, 517-522. https://doi.org/10.1016/j.sbspro.2013.08.711
- Menne, F., Schäfer, S., Linz, N., Tröger, J., Schwed, L., Ettore, E., & König, A. (2025). Using speech analysis in virtual agent conversations to differentiate PTSD patients from control participants. *Psychiatry Research*, 348, 116486. https://doi.org/10.1016/j.psychres.2025.116486
- Nicolle, S. (2007). The grammaticalisation of tense markers: A pragmatic reanalysis. In *Tense, mood and aspect* (pp. 47–65). Brill Rodopi.
- Pasupathi, M. (2007). Telling and the remembered self: Linguistic differences in memories for previously disclosed and previously undisclosed events, *Memory*, *1*5, 3, 258–270. https://doi.org/10.1080/09658210701256456
- Pennebaker J.W., Boyd R.L., Jordan K., & Blackburn K. (2015). The Development and Psychometric Properties of LIWC2015. University of Texas at Austin.
- Pennebaker, J. W., & Seagal, J. D. (1999). Forming a story: The health benefits of narrative. Journal of Clinical Psychology, 55(10), 1243-1254. https://doi.org/10.1002/(sici)1097-4679(199910)55:10%3C1243::aid-jclp6%3E3.o.co;2-n
- Pennebaker, J. W., & Stone, L. D. (2003). Words of wisdom: language use over the life span. *Journal of Personality and Social Psychology*, 85(2), 291–301. https://doi.org/10.1037/0022-3514.85.2.291
- Redeker, G. (1990). Ideational and pragmatic markers of discourse structure. *Journal of Pragmatics*, 14(3), 367–381. https://doi.org/10.1016/0378-2166(90)90095-U
- Ryan, R.A. (2023). Trauma and Linguistic Markers for Symptom Severity in Prolonged Exposure for Primary Care, as Observed Through the Use of Narrative Review. Unpublished PhD thesis. Melbourne, FL, USA.
- Searle, J. R. (1975). The Logical Status of Fictional Discourse. *New Literary History*, *6*(2), 319–332. https://doi.org/10.2307/468422
- Sperber, D., & Wilson, D. (1995). Relevance: Communication and cognition (2nd ed.). Blackwell Publishing.
- Taraban, R., Saraff, S., Zasiekin, S., Biswal, R. (2022). A psycholinguistic analysis of interethnic views of ethics. East European Journal of Psycholinguistics, 9(1), 265–278. https://doi.org/10.29038/eejpl.2022.9.1.tar

- Tausczik, Y. R., & Pennebaker, J. W. (2010). The psychological meaning of words: LIWC and computerised text analysis methods. *Journal of Language and Social Psychology*, 29(1), 24–54. https://doi.org/10.1177/0261927X09351676
- van der Kolk, B. (2014). The Body Keeps the Score: Brain, Mind, and Body in the Healing of Trauma. Viking.
- Wardell, V., Jameson, T., Bontkes, O. J. R., Le, M. L., Duan, T., St. Jacques, P. L., Madan, C. R., & Palombo, D. J. (2023). Fade in, fade out: Do shifts in visual perspective predict the consistency of real-world memories? *Psychological Science*, 34(8), 932-946. https://doi.org/10.1177/09567976231180588
- Wilson, D. The conceptual-procedural distinction: Past, present and future. In V. Escandell-Vidal, M. Leonetti & A. Ahern (Eds.). Procedural Meaning: Problems and Perspectives (pp. 3–31). Emerald.
- Zasiekin, S. (2016). Understanding translation universals. *Babel*, 62(1), 122-134. http://dx.doi.org/10.1075/babel.62.1.07zas
- 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
- Zasiekin, S. (2024). Living through narratives: A psycholinguistic study of war stories by Bohdan Lepky and today's Ukrainians in print and digital media. *Digital Culture & Society*, 10(1), 83-96. https://doi.org/10.14361/dcs-2024-0106
- Zasiekin, S., Zasiekina, L. Altman, E., Hryntus, M. & Kuperman, V. (2025). The narratives of war (NoW) corpus of written testimonies of the Russia-Ukraine war. *Language Resources and Evaluation*, 59, 2415-2426. https://doi.org/10.1007/s10579-025-09813-8

Sources

- Lepky, B. (2011). Vybrani Tvory [Selected Works]. In 2 Volumes. N. Bilyk & N. Havdyda, (Eds.). 2nd ed. Smoloskyp.
- Lepky, B. (1905). Kara ta Inshi Opovidannia [Punishment and Other Stories]. Ukrainsko-Ruska Vydavnycha Spilka.
- Lepky, B. (1975). Opovidannia [Story-book]. V. Lutsiv, Ed. State College, PA.