Linguistic analysis of fiction texts in the context of the frame theory

Sofiia Kozak[1,*], Anna Ieliseienko[2], Mykhailo Zhylin[3], Anna Chernysh[4], Dmytro Chystiak[5]

[1] Department of German Philology, Faculty of Foreign Philology, Lesya Ukrainka Volyn National University, 43025 Lutsk, Ukraine

[2] Department of Language Training, Faculty of Management, Administration and Law, State Biotechnological University, 61002 Kharkiv, Ukraine

[3] Department of Practical Psychology, Educational and Scientific Maritime Institute of Humanities, Odesa National Maritime University, 65029 Odesa, Ukraine

[4] Department of Journalism and Philology, Faculty of Foreign Philology and Social Communications, Sumy State University, 40007 Sumy, Ukraine

[5] Department of Romanic Philology, Educational and Scientific Institute of Philology, Kyiv National Taras Shevchenko University, 01033 Kyiv, Ukraine

* Corresponding author: Sofiia Kozak, lingnlinguistic@gmail.com

ABSTRACT: The aim of the study is to identify and analyse frame structures, activators, and concepts in texts to reveal their impact on the reader's perception. The research employed the methods of semantic, structural, and intertextual frame analysis. Cronbach's alpha was also used to verify the instruments used. The following cases were used in the work: Oxford English Corpus and International Corpus of English (ICE). It is noted that frame activators such as "great heat," "hell heat", "hot wind", and "scorching sun" evoke associations with scorching heat and unusual warmth in the desert. These frames convey the impression of life danger, exhaustion, and severity of conditions. In turn, phraseological units such as "fresh waters", "bloody sunset", and "dried earth" reveal the contradictory nature of the image of the desert, where even such natural phenomena as water and sunset acquire a new, deep shade of meaning. The application of this theory was found to reveal complex language structures and their influence on the understanding and perception of texts. The obtained results open up new opportunities for educational and literary analysis, deepening the understanding of language mechanisms in fiction. Further studies in the field of linguistic analysis of texts should be aimed at considering the interaction between different works of art, focusing on the frame perspective. It is also worth paying attention to the possibilities of using the theory of frames to fulfill practical assignments, such as automatic text analysis.

KEYWORDS: intertextuality; artistic discourse; semantic analysis; structural analysis; literary studies

1. Introduction

1.1. Relevance

The study of fiction as an object of linguistic analysis is gaining special importance in the world. A deep understanding of the linguistic aspects of fiction texts opens wide opportunities for cultural

exchange and intercultural dialogue. The study of fiction texts contributes to a deeper understanding and perception of other cultures in the context of globalization and the growth of inter-ethnic ties, thereby helping to build harmonious relations between different nationalities. Fiction acts as an important mirror of knowledge about the society in which it is created. The study of linguistic and stylistic features of fiction texts helps to reveal the views, values, social problems, and ideological aspects of a certain historical period. The analysis of texts can shed light on non-trivial details of mentality reflected in literary works (Brugman et al., 2019).

Overcoming barriers between languages and cultures requires a deep understanding of the linguistic and cultural aspects of the textology of fiction discourse. The frame theory is one of the key theoretical paradigms, which is reflected in the analysis of literary works. Introducing the concept of frames into linguistic practice opens up new opportunities for understanding the structure, semantics, and syntax, as well as the way it is structured in language. It arose as part of cognitive linguistics and was widely used in the analysis of texts, including fiction (Kalinichenko, 2021).

A frame is a structured mental unit that includes knowledge, relationships, and events related to a specific situation, object, or concept. In the context of fiction, frames help to arrange information about characters, places, events, and ideas developing in the text. They help the reader to create mental models of situations and perceive the text with greater ease (Mendelsohn et al., 2020).

One of the key aspects of frame theory is frame structures. They describe the main components of the frame and their relationships. Scenes, roles, objects, and interactions between them form complex networks that reflect the content of events and situations. In the literary context, this means that frame structures determine the logic of plot development, creating a hint of the events that may happen next (Moskvichova, 2021; Kozak, 2022).

Activators are the key concept of frame theory. Activators are words or phrases that trigger or reproduce a specific frame. They help to associate knowledge related to a certain situation. In literature, activators can be keywords or symbols that authors deliberately use to create certain associations in readers (Molhamova, 2020).

The frame theory helps to analyse the linguistic and cognitive mechanisms that underlie the structure of texts. It reveals the internal structure and organization of information, which contributes to a deeper understanding of the text and the author's intentions. Frame theory is a powerful tool for analysing fiction, helping to identify hidden connections, symbolism, and deeper meaning in a text (Merigoet et al., 2014; Sadullaev, 2020).

The study was based on the principles of the frame theory developed in the works of modern linguists and literary critics. Moreover, an interdisciplinary approach is taken into account, using elements of cultural studies and translation studies. The study was based on the analysis of well-known fiction texts, proving the universality and variability of frame structures.

The research is of great importance because it updates and expands the understanding of the relationship between linguistic analysis and fiction, allowing a deeper study of language mechanisms. The results of this study can be important both for scientists working in the field of linguistics and literary studies and for teachers of literature and students who try to reveal the semantics and structure of texts more deeply.

1.2. Aim and objectives/questions

The aim of the research is to study the methodology of conducting a deep linguistic analysis of the

fiction text through the prism of the theory of frames. The main goal is to identify and study frame structures, activators, and concepts in texts, which will help reveal their internal organization and influence on the reader's perception.

a) In the quest to unravel the intricate layers of meaning within the text corpus, the primary research question revolves around the necessity of conducting a semantic analysis. By delving into the semantics, we aim to unveil the underlying significance of linguistic choices, uncovering the subtle nuances that may be concealed within the text.

b) Another crucial aspect of the investigation entails delving into the lexical dimensions of the text corpus. This research question centers on the need to conduct a comprehensive lexical analysis to decode the fundamental building blocks of language, thereby shedding light on the pivotal role that individual words and expressions play in shaping the overall text.

c) In the ever-evolving landscape of textual exploration, the question of conducting an intertextual analysis takes center stage. This inquiry seeks to navigate the intricate web of connections and influences between texts, dissecting the rich tapestry of intertextuality that weaves together various literary works. Through this analysis, we aim to uncover the threads that link different narratives and the profound impact of these connections on the construction of meaning.

2. Literature review

2.1. Theoretical backgrounds

Bateson (1972) serves as a pivotal work in the realms of systems theory, cybernetics, and interdisciplinary studies. In this seminal publication, Bateson explores the intricate relationships between communication, culture, and cognition. The book introduces the concept of the double bind, shedding light on the paradoxical nature of certain communication patterns, and it provides a holistic perspective on human behavior and interaction. Bateson's insights have had a lasting impact on a wide range of academic fields, including anthropology, psychology, and epistemology. His exploration of the interconnectedness of systems, both natural and social, has laid the foundation for further research and has left an indelible mark on contemporary scholarship.

Hallahan (2008) provides a comprehensive and insightful overview of the field of special education. The book delves into the fundamental principles and practices of special education, offering a valuable resource for educators, students, and professionals in the field. Hallahan's work covers a wide range of topics, including the historical development of special education, the legal and ethical aspects, and various exceptionalities and their characteristics. This text is an indispensable resource for understanding the diverse needs of exceptional learners and the strategies and interventions used to support their education. With its clear and engaging writing style, 'Exceptional learners offers a solid foundation for anyone seeking to explore the world of special education and is an essential reference in the field'.

Akram et al. (2021) developed an algorithm for group decision-making using linguistic q-rung ortho-pair fuzzy Einstein models. This approach can be important in various areas where group tasks are solved. It is useful for researchers working with decision-making and using fuzzy models in a group context. Furthermore, this research provides a valuable method for addressing complex decision-making scenarios where linguistic and fuzzy elements play a pivotal role. It offers a practical framework that can enhance the efficiency and accuracy of group decisions across different domains. Researchers can leverage the insights from this study to develop more sophisticated decision support systems and promote effective group interactions in their respective fields.

Biber (2019) deals with the approaches to the study of language register variations using text linguistic methods. Register analysis is an important tool for studying the structure and use of language in various communicative contexts. This examination underscores the significance of exploring language diversity, aiding researchers in comprehending how language functions within different social and communicative settings. Biber's work illuminates the need for a nuanced understanding of language registers and their contextual use, emphasizing the dynamic nature of language in diverse sociolinguistic environments.

Boychuk et al. (2020) evaluate the performance of a new tool for text rhythm analysis. They conducted research on the approach in the context of the English language using data from English texts. The research outcomes contribute to the development of more precise and efficient text rhythm analysis tools, which can benefit language researchers and educators alike. This work demonstrates the importance of advancing text analysis methods and tools for a deeper understanding of linguistic nuances within written language.

Ilhom et al. (2021) explore the role and place of small genre texts in genre properties. They analyse the interaction of these texts with the main features of the genre. The study helps to comprehend the contribution of small genre texts to the understanding of genre features. Their research delves into the intricacies of small genre texts and how they align with the overarching genre characteristics, shedding light on the often-overlooked elements of genre properties. By focusing on the interaction between small genre texts and the main features of a genre, this study enriches our understanding of the genre's components and the distinctive role played by smaller textual forms. In doing so, it contributes to a more comprehensive exploration of the genre features, making this research valuable for genre theorists and scholars examining textual genres.

Kytö (2019) examines the concept of register in historical linguistics. She analyses how register variations change in a historical context. This study helps to identify the role of the register in language evolution. By delving into the shifts and transformations in register variations over time, the research sheds light on the evolving role of register in the broader context of language evolution. Scholars and linguists can utilize the findings to gain deeper insights into the intricate relationship between linguistic registers and historical language development, offering new perspectives for language evolution studies.

2.2. Experimental backgrounds

Liu et al. (2021) propose a model for group decision-making using fuzzy linguistic data. They use the Dempster-Shafer theory to solve the problem. The study may be valuable in the context of developing methods for group analysis of decisions. Their research opens doors to potential advancements in the field of decision analysis, particularly in developing more robust methodologies for group decision-making processes. The findings contribute to the broader conversation on enhancing decision support systems and optimizing collaborative decision-making efforts across various domains.

Egbert and Mahlberg (2020) explored register variations in fiction, particularly speech and narrative in novels. They investigated the differences between these two types of language use in fiction. The study focuses on the internal language variations in fiction prose. By concentrating on the intricacies of language usage in fictional prose, their study highlights the significance of internal linguistic variations. The findings from this investigation shed light on the multifaceted nature of language within fiction, offering insights that can benefit both literary scholars and linguists in exploring the dynamics of narrative and dialogue in novels.

Goulart et al. (2020) consider linguistic perspectives on the concept of register. They analyse this concept in the context of different linguistic aspects and approaches. This article is an important contribution to the understanding and research of the notion of register from a linguistic perspective. This study by Goulart and colleagues delves into the intricate linguistic perspectives surrounding the concept of register, thoroughly examining various linguistic dimensions and methodologies. By exploring register in the multifaceted realm of linguistics, their research significantly advances the comprehension and scholarly investigation of this fundamental notion. It offers a comprehensive view of the register, fostering a more nuanced understanding of its role in linguistic analysis and contributing to the broader discourse on the subject.

Ma et al. (2018) propose a group decision-making method based on a probabilistic-linguistic approach from the reliability perspective. They use evidence-based thinking methods to process data. This approach can be useful for solving problems of group decision analysis.

Diachuk and Kryvoruchko (2021) consider the importance of frame theory in the linguistic paradigm. They investigate the impact of this theory on language comprehension and text analysis. The study identifies the significance of frame theory in linguistics. Diachuk and Kryvoruchko study and analyse how the concepts of frames reveal the essence of language, including various semantic aspects. Their conclusions clarify the concept of linguistic structures, which is emphasized by the importance of studying frame theory for linguistics as a whole. It is important in the context of building an academic dialogue about the purpose and meaning of the frame theory in modern research. They help to understand how frame theory complements and deepens views on different aspects of language and how it can contribute to a more detailed and in-depth revealing of language and text structures.

2.3. The current study

The following unsolved and poorly studied issues can be identified in the context of the research topic. It is necessary to study the impact of frame structures on the linguistic organization of the text, in particular, the choice of vocabulary, grammatical constructions, and rhetorical devices. It is also important to trace the influence of cultural differences on the interpretation and use of frame structures in fiction texts, which can reveal new nuances and features. The research that analyses how the frame structure changes historically and how this affects the perception of the text can add to the understanding of the evolution of linguistic features in fiction. It is necessary to conduct a detailed analysis of how frames affect the construction of images of characters, places, and events in the text, it can reveal new shades of the author's meaning and emotional means.

3. Methods

3.1. Design

The successive stages of research under the frame theory are significant in ensuring a systematic and deep revealing of the structure, semantics, and relationships in texts. The study of linguistic analysis of fiction texts under the frame theory consists of the following stages.

Stage 1. 2022. Selection of fiction texts and theoretical generalization. Fiction texts presented in different genres and periods were selected at this stage. A theoretical generalization of the main concepts and concepts of the frame theory was carried out, which will serve as the basis for the analysis.

Stage 2. January–March 2023. Analysis of texts by keyframe parameters. The second stage involved a detailed analysis of the selected fiction texts. Each text is examined for the identification of frame

structures, activators, and relevant concepts. This stage includes the definition of frame elements and their relationships.

Stage 3. May–August 2023. Analysis of intertextual connections and semantic regularities. The last stage is aimed at identifying intertextual connections between different artistic texts and studying semantic regularities arising from the use of frames. It explores the framing structures and concepts that may intersect or correlate across different texts.

The methods used in this study include the analysis of texts by keyframe parameters and the analysis of intertextual relationships and semantic patterns. Regarding the question of quantitative, qualitative, or mixed methods, this study used a mostly qualitative method because the analysis of frames and semantics of texts requires a more profound and qualitative understanding. The research design can be described as cross-sectional as it selected a variety of literary texts from different genres and periods for analysis. At each stage of the study, different texts were studied, and their analysis was performed simultaneously and compared to identify intertextual relationships and semantic patterns.

3.2. Samples of collected data for analysis

The work uses data from two corpora, which contain modern and ancient literary texts. This gave grounds to identify the main features of literary analysis based on the theory of frames.

Oxford English Corpus is the largest of the created corpora of the English language. It includes more than 2 billion words usages and reflects the current state of the English language around the world. The main part of the corpus consists of texts created since 2000, most of which are placed on the World Wide Web. Moreover, the corpus also contains textual materials on paper, including technical manuals, articles from newspapers and magazines, fiction, and others.

International Corpus of English (ICE) is a collection of national subcorporations reflecting variations in English usage from different countries. Each subcorpus, including Australia, Great Britain, Hong Kong, India, Ireland, Canada, Kenya, Malaysia, New Zealand, Singapore, the United States, and others, has a volume of 1 million words. The International Corpus of English project is under development. The British component of the corpus (ICE-GB) is fully prepared, its texts are morphologically and syntactically marked.

The text of Henryk Sienkiewicz's novel Adventures in the Desert (1912) was used as the material. The book tells about the dangerous travels of two children in Africa, who were kidnapped by supporters of Muhammed Ahmed, who rebelled against British rule. The texts of the novels, "The heir" by Maryna and Serhii Diachenko (1997), "Pride and prejudice" by Jane Austen (1813), and "Great expectations" by Charles Dickens (1861) were also used.

3.3. Instruments

The data was entered and processed using Microsoft Excel and SPSS Statistics 15.0. All data are given in relative (% of the number of respondents) values.

3.4. Data collection

Semantic analysis of frame activators. This method helped to identify and analyse linguistic constructions that cause the activation of certain frame structures in the text. Analysis of idioms, metaphors, allegories, and other linguistic means reveals how the author uses frames to enhance semantic depth and reproduce specific images.

Structural analysis of frame relationships. It is aimed at researching the sequence of frame structures

in the text. The reader's interpretation and emotional response changes are determined by analysing the way authors combine different frames and interact between them.

Intertextual analysis based on frames. In this research, it is focused on identifying and analysing frames that interact with other texts or cultural information. The study of frame structures used to adapt or transform other works reveals subtextual references and the author's relationship to literary traditions (Druzhenenko et al., 2023).

3.5. Analysis of data

The Cronbach's alpha coefficient indicates the internal consistency of the test items. The Cronbach's alpha coefficient is calculated by the Equation (1):

$$\frac{N}{N-1}\left(\frac{\sigma_x^2 - \sum_{i=1}^{N} \sigma_{Y_i}^2}{\sigma_x^2}\right) \tag{1}$$

where σ_x^2—variance of the score of the entire test; $\sigma_{Y_i}^2$—variance of the *i* element.

3.6. Ethical criteria

Adherence to ethical principles is important to ensure proper treatment of materials when studying fiction texts by means of frame theory. The main ethical criteria include the following. The research must be conducted with an academic purpose and objectivity. The results must be displayed accurately and without distortion. The data collected during the research should be used only for the purpose of analysing and interpreting the texts. Any use of the data in other contexts must be supported with the permission of the participants. While analysing the texts, one should maintain objectivity and avoid discrimination based on various parameters such as gender, race, nationality, etc. When using fiction texts for research, it is necessary to observe copyright and obtain appropriate permissions for use.

4. Results

Table 1 shows the results of the semantic analysis of frame activators in the text of Henrik Sienkiewicz's novel Adventures in the Desert. Frame activators indicate linguistic expressions that trigger the activation of particular frames. The semantic context in which they are used contributes to the formation of certain images and associations. Frames affect the perception of the text, deepening the feeling and atmosphere created by the author.

Table 1. The results of the semantic analysis of frame activators in the text of the novel adventures in the desert.

Text	Frame activators	The semantic context initiates the frame	The role of the frame in the reproduction of semantics
The novel Adventures In the Desert	"great heat", "hell heat"	Description of the summer atmosphere	Evokes the image of heat and discomfort
	"hot wind", "burning sun"	Description of the desert landscape	Increases the feeling of heat and exhaustion
	"fresh waters", "bloody sunset"	Description of upset mood	Creates an association with great difficulties
	"reflect in the window"	Description of the main character's thoughts	Indicates a paradigm of internal conflict
	"long sands", "dried earth"	Description of the ruthlessness of the desert	Reproduces lifelessness and alienation

Source: created by the authors based on research results.

It can be noted in the analysis of the table, that frame activators such as "great heat", "hell heat",

"hot wind", and "burning sun" evoke associations with unusual heat in the desert. These frames reproduce the feeling of life's danger, exhaustion, and severity of conditions. In turn, the frames "freshwater", "bloody sunset", and "dried earth" reveal the contradictions of the image of the desert, where even such natural elements as water and sunset acquire a new, deep meaning.

The frame "reflected in the window" indicates the main character's inner thoughts and emphasizes his inner world. This frame reinforces the idea of internal conflict and reflections of the hero, which testify to his internal struggles.

So, the analysis of frame activators shows how frame theory can be applied to reveal the subtext and depth of semantics in fiction texts. One can gain a greater understanding of what language mechanisms are used to create effects and impressions in readers by analyzing frames.

Table 2 shows the results of the structural analysis of frame relationships in the novel, "The heirs". The main frame indicates the main topic of the text, subordinate frames reveal concepts that are related to the main topic. Interrelationships between frames indicate the interaction of concepts in the text, which contributes to the understanding of the structure and semantics of the novel.

Table 2. The results of the structural analysis of frame relationships in the novel "The heirs".

Text	The main frame	Subordinate frames	Relationships between frames
The novel "The heirs"	"family ties"	"father", "mother", "children", "family"	Identifying connections between family members
	"heritage"	"property", "ownership", "heir"	Establishing commonality between the concepts of "inheritance" and "property"
	"society"	"classes", "social roles", "politics"	Analysis of the interaction of different social groups
	"love"	"romance", "emotions", "feelings"	Consideration of the impact of feelings on character relationships

Source: created by the authors based on research results.

Analysis of **Table 2** reveals the depth of the thematic structure and interaction of key concepts in the text. The first row of the table deals with the main frame "family ties". This frame combines the concepts of "father", "mother", "children", and "family". Such a structural layout focuses on aspects of family relationships and the role they play in the novel. The second line analyses the "heritage" frame. Heritage is a key motif of the novel, and the analysis of this frame helps to reveal how the concepts of property and inheritance affect the lives of the characters and the development of the plot. The third line of the table examines the "society" frame. This frame allows us to analyse the social context of the novel, the interaction of different social groups, and the influence of social factors on the characters' actions. The fourth line of analysis concerns the "love" frame. It enables us to discover how the feelings and interactions of the characters affect the development of the plot and additionally emphasize the emotional aspect of the text. Analysis helps reveal the depth of themes and concepts in the novel, determine the relationships between them, and contribute to a deeper understanding of the content and semantics of the text.

Table 3 presents the analysis of the corpus of English literature texts through the method of structural analysis of frame relationships using the intertextual approach. The texts examine different aspects of the social, emotional, and cultural context, revealing interrelationships between frames and ideological parallels.

Table 3. Analysis of the corpus of texts through the method of frame interrelationships using the intertextual approach.

Text	The main frame	Subordinate frames	Relationships between frames
Pride and Prejudice	"kinship"	"parents", "generation", "heritage"	Revealing the influence of family ties on the heroes' lives
by Jane Austen	"class differences"	"social status", "distinction"	Identification of social parties in society
	"patriarchy"	"the role of the head of the family", "traditions"	Analysis of the interaction of family values and ideology
	"romantic relationship"	"love", "emotions", "compassion"	Revealing the influence of feelings on the characters' fate
	"social prestige"	"reputation", "dignity", "attention"	Analysis of the importance of social integrity
	"female role"	"gender stereotypes", "independence"	Consideration of the women's role in society and in the family
Great Expectations	"social class"	"wealth", "poverty", "position"	Determining the impact of social differences
by Charles Dickens	"education"	"learning", "intelligence", "knowledge"	Revealing the importance of education for heroes
	"postgraduate"	"dreams", "ambitions", "success"	Identifying the drive to achieve in life
	"family and	"layers", "heirs"	Analysis of the relationship between ancestral values and the heroes'
	personal values"		success

Source: created by the authors based on research results.

Table 3 shows the analysis of the corpus of English literature texts using the method of structural analysis of frame relationships, focusing on intertextual analysis. The table shows the mainframes of each text, which reflect the main thematic aspects, such as "kinship", "class differences", etc. The novel "Great expectations" highlights the frames of "social class", "education", etc., which allows for an in-depth analysis of the social and cultural aspects of the character's development.

An interesting and significant information about the interaction of the frame theory and fiction texts was revealed based on the analysis of the text corpus by the methods of semantic analysis of frame activators, structural analysis of frame relationships, and frame-based intertextual analysis. Semantic analysis of frame activators helped to identify those frames that activate certain semantic concepts in the texts. This made it possible to deepen the understanding of the internal mechanisms of the influence of linguistic means on the structure and semantics of fiction. The structural analysis of frame relationships revealed the interaction of different frames with each other and the impact of this interaction on the construction of texts and the creation of specific narrative structures. Frame-based intertextual analysis showed how certain frames can be reproduced or transformed in different texts, helping to identify common linguistic and semantic nuances between them.

The research results indicate the importance of frame theory for understanding the linguistic organization and semantics of fiction texts. These analyses emphasize how authors use linguistic devices to achieve certain effects on readers by creating atmosphere, compelling imagery, and deep linguistic connections.

5. Discussion

The study of linguistic analysis of texts in the context of frame theory provides grounds for important reflections that contribute to a deeper understanding of the relationship between linguistic

structures and fiction. Popova and Savaliuk (2021), as well as Song et al. (2020), emphasize the importance of frame theory for the analysis of fiction, which is supported by our results. The authors confirm the findings of this study that frame theory is an important tool for intertextual analysis. This method helps in the development of automated systems for processing fiction texts.

Shulzhuk (2019) and Wang et al. (2023) indicate the importance of the study of small genres in the study of literary features. The approach covered in this study complements this by showing the applications of the frame theory to the analysis of larger fiction texts and the discovery of deep linguistic connections within them. Instead, Herrmann et al. (2019) and Tewksbury and Scheufele (2019) express skeptical concern about the effectiveness of the frame theory in building a universal analytical model. The authors insist on the need for further research in the field of intertextual analysis of the work.

A comparison of the obtained results with the works of Gregoriou (2023) and Slabinska and Trakun (2021) shows that the discussion of linguistic aspects of registration and interaction of language structures is important in both theoretical and practical contexts. The identification of paradigmatic frame structures in fiction texts deepens our understanding of the linguistic mechanisms that support the construction of images, narrative, and atmosphere.

This study makes it clear that frame analysis can be an important tool for uncovering deep linguistic connections in fiction. This fully coincides with the opinion of Werner (2021) and Tursunovich (2022). Their findings indicate that frame structures can be key elements in constructing the semantics and structure of a text, influencing readers' perception and interpretation.

The theoretical significance of this study reveals more deeply the complex dynamics between frame theory and fiction. Studying this relationship helps not only to expand but also to redefine how concepts of frames build literary contexts. The discovery of how frame structures affect the semantics, structure, and intertextual connections in texts stimulates further enrichment of the analysis of linguistic devices that contribute to the creation of a specific atmosphere and impression on readers (Schöch et al., 2021).

This study offers a new perspective on the use of language mechanisms in fiction, helping to identify how authors achieve certain effects on readers thanks to frame structures. So, it not only reveals hidden language strategies but also indicates their role in the formation of deep perception and understanding of texts.

The practical significance of this research is revealed in its potential to enrich the process of learning and critical analysis of literary works. Literature teachers will be able to tell their students in great depth about the use of language tools that determine the structure of the content and create a special atmosphere in the texts. They will be able to teach students to understand and analyze how frame structures contribute to building literary images, plot, and mood.

A further extension of practical significance is found in the ability of literary critics to analyse and reveal complex textual strategies used by authors to achieve certain effects on readers. They will be able to penetrate deep language mechanisms, highlight key points, and open new layers of meaning, revealing what may remain unnoticed for superficial analysis.

The study can be expanded due to a larger volume of artistic texts of various genres and periods. This will allow a deeper study of the variety of frame structures in literature and their interaction with text features. Also, it is possible to expand the research due to comparative analysis between different languages and cultures. This will allow us to study how frames differ in other literary traditions. Future research could explore how framing structures affect readers' perception of texts, including their

emotional response and perception of content.

Among the main limitations of this study, it is worth noting that it may not cover all possible variations and aspects of the interaction between frame theory and fiction. Frame analysis can have its own peculiarities in different genres and literary directions, which were not fully studied in this research. The possible influence of subjectivity in the results of the analysis should also be taken into account. The interpretation of frame structures and their impact on the text may vary depending on the researcher's individual approach.

6. Conclusions

Relevance: The relevance of this research is its contribution to the expansion and deepening of the understanding of the structure and significance of fiction texts through the prism of the frame theory. In the context of modern trends in linguistic analysis and literary studies, the use of the frame approach reveals peculiarities that have not been studied before.

Findings: An in-depth linguistic analysis of fiction texts under the frame theory was carried out in the article. The results of the study emphasized the importance and relevance of using the theory of frames for the analysis of fiction, which provides a deeper understanding of the language mechanisms underlying the construction of texts and the creation of effects for readers. The importance of the study is that it not only adds to our understanding of language mechanisms in literary works but also provides practical tools for analysing and interpreting texts. The Literature teacher and students will be able to apply the acquired knowledge in the educational process, and literary critics will have the opportunity to deeply analyse the linguistic and semantic aspects of fiction.

Applications: The results of this study can be applied in various fields where the study of literary texts and linguistic analysis are significant. They can be used to gain a deeper understanding of fiction, its structure, semantics, and interaction with cultural and historical contexts. This can help develop new approaches to the interpretation of literary texts. The results of the study can contribute to the further development of the frame theory in linguistics and the study of mental structures in texts. This can influence the methodology of linguistic analysis and help reveal the deep semantics of texts.

Prospects for further research

Further research in the field of linguistic analysis of texts should be aimed at studying the interaction between different fiction texts through the prism of frames. The issue of applying the frame theory to practical assignments, such as automatic text analysis, machine translation, and text generation, which can improve the quality and efficiency of these technologies, is also promising.

Author contributions

Conceptualization, SK, AI, MZ, AC, and DC; methodology, AI, MZ, and AC; validation, MZ, AC, and DC; formal analysis, SK, AI, MZ, AC, and DC; investigation, SK, AI, MZ, AC, and DC; resources, SK, AI, MZ, AC, and DC; data curation, SK, AI, MZ, AC, and DC; writing—original draft preparation, AI, MZ, and AC; writing—review and editing, SK and DC; visualization, AI, MZ and AC; supervision, SK, AI, MZ, AC and DC. All authors have read and agreed to the published version of the manuscript.

Conflict of interest

The authors declare no conflict of interest.

References

Akram M, Naz S, Edalatpanah SA, et al. (2021). Group decision-making framework under linguistic q-rung ortho-pair fuzzy Einstein models. Soft Computing, 25(15): 10309-10334. https://doi.org/10.1007/s00500-021-05771-9

Bateson G (1972). Steps to an ecology of mind. University of Chicago Press.

Biber D (2019). Text-linguistic approaches to register variation. Register Studies, 1(1): 42-75. https://doi.org/10.1075/rs.18007.bib

Boychuk E, Lagutina K, Vorontsova I, et al. (2020). Evaluating the Performance of a New Text Rhythm Analysis Tool. English Studies at NBU, 6(2): 217-232.

Brugman BC, Burgers C, Vis B (2019). Metaphorical framing in political discourse through words vs. concepts: A meta-analysis. Language and Cognition, 11(1): 41-65. https://doi.org/10.1017/langcog.2019.5

Diachuk NV, Kryvoruchko TV (2021). The significance of frame theory in linguistic paradigm. Scientific notes of V.I. Vernadsky Taurida National University, 32(4): 135-139. https://doi.org/10.32838/2710-4656/2021.4-1/23

Druzhenenko R, Popova O, Ruskulis L (2023). Workshop on linguistic text analysis. Available online: http://dspace.mdu.edu.ua/jspui/bitstream/123456789/1148/1/Дружененко%2С%20Попова%2С%20Рускуліс_Практикум%20з%20ЛАТ.pdf (accessed on 5 December 2023).

Egbert J, Mahlberg M (2020). Fiction-one register or two? Speech and narration in novels. Register Studies, 2(1): 72-101. https://doi.org/10.1075/rs.19006.egb

Goulart L, Gray B, Staples S, et al. (2020). Linguistic perspectives on register. Annual Review of Linguistics, 6: 435-455. https://doi.org/10.1146/annurev-linguistics-011718-012644

Gregoriou C (2023). The linguistic levels of foregrounding in stylistics. Available online: https://www.taylorfrancis.com/chapters/edit/10.4324/9780367568887-8/linguistic-levels-foregrounding-stylistics-christiana-gregoriou (accessed on 5 December 2023).

Hallahan DP (2008). Exceptional learners: Introduction to special education. Pearson Education.

Herrmann JBB, Woll K, Dorst AG (2019). Linguistic metaphor identification in German. Available online: https://www.torrossa.com/en/resources/an/5001520#page=120 (accessed on 5 December 2023).

Ilhom TR, Jumaqul SM, Abduaziz AB (2021). The place of small genre texts in genre features. Annals of the Romanian Society for Cell Biology, 25(4): 5325-5331.

Kalinichenko TM (2021). Analysis of "The fundamental dictionary of the environment dicoenviro" in comparison with electronic resources framenet, propbank, verbnet in the framework of modern theoretical lexicographic paradigm. Available online: http://dspace.hnpu.edu.ua/handle/123456789/6084 (accessed on 5 December 2023).

Kozak S (2022). Semantics of frames and field theory: correlative connections. Available online: https://er.chdtu.edu.ua/bitstream/ChSTU/4150/1/AL3D_abstracts%202022.pdf#page=25 (accessed on 5 December 2023).

Kytö M (2019). Register in historical linguistics. Register Studies, 1(1): 136-167. https://doi.org/10.1075/rs.18011.kyt

Liu P, Zhang X, Pedrycz W (2021). A consensus model for hesitant fuzzy linguistic group decision-making in the framework of Dempster–Shafer evidence theory. Knowledge-Based Systems, 212: 106559. https://doi.org/10.1016/j.knosys.2020.106559

Ma Z, Zhu J, Chen Y (2018). A probabilistic linguistic group decision-making method from a reliability perspective based on evidential reasoning. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 50(7): 2421-2435. https://doi.org/10.1109/TSMC.2018.2815716

Mendelsohn J, Tsvetkov Y, Jurafsky D (2020). A framework for the computational linguistic analysis of dehumanization. Frontiers in artificial intelligence, 3: 55. https://doi.org/10.3389/frai.2020.00055

Merigo JM, Casanovas M, Palacios-Marques D (2014). Linguistic group decision-making with induced aggregation operators and probabilistic information. Applied Soft Computing, 24: 669-678. https://doi.org/10.1016/j.asoc.2014.08.035

Molhamova LO (2020). Frame model of the concept name DEATH. Alfred Nobel University Journal of Philology, 1(19): 304-308. https://doi.org/10.32342/2523-4463-2020-1-19-30

Moskvichova OA (2021). The microsegment of the fractal poetical model of the world in the linguistic and the cognitive survey. New Philology, 2(81): 7-17. https://doi.org/10.26661/2414-1135-2021-81-2-1

Popova O, Savaliuk I (2021). Compositional and speech frames of English advertising and information texts and their implementation in Ukrainian translation. Available online: http://dspace.pdpu.edu.ua/handle/123456789/15664 (accessed on 5 December 2023).

Sadullaev DB (2020). Problems of Understanding Philosophical Text as a Linguistic Phenomenon. JournalNX, 6(6): 128-136.

Schöch C, Erjavec T, Patras R, et al. (2021). Creating the European Literary Text Collection (ELTeC): Challenges and Perspectives. Modern Languages Open. http://doi.org/10.3828/mlo.v0i0.364

Shulzhuk N (2019). The peculiarities of the linguistic analysis of literary text as pragmatic and communicative unity. Linguostylistic Studies, 10: 195-203. https://doi.org/10.29038/2413-0923-2019-10-195-203

Slabinska LD, Trakun MM (2021). Artistic text as an object of linguistic research. Available online: https://sci-conf.com.ua/wp-content/uploads/2021/09/MODERN-DIRECTIONS-OF-SCIENTIFIC-RESEARCH-DEVELOPMENT-1-3.09.21.pdf#page=391 (accessed on 5 December 2023).

Song C, Wang XK, Cheng PF, et al. (2020). SACPC: A framework based on probabilistic linguistic terms for short text sentiment analysis. Knowledge-Based Systems, 194: 105572. https://doi.org/10.1016/j.knosys.2020.105572

Tewksbury D, Scheufele DA (2019). News framing theory and research. Available online: https://www.taylorfrancis.com/chapters/edit/10.4324/9780429491146-4/news-framing-theory-research-david-tewksbury-dietram-scheufele (accessed on 5 December 2023).

Tursunovich RI (2022). Linguistic and cultural aspects of literary translation and translation skills. British Journal of Global Ecology and Sustainable Development, 10: 168-173.

Wang XK, Deng MH, Hou WH, et al. (2023). Probabilistic linguistic group decision-making based on evidential reasoning considering correlations between linguistic terms. Available online: https://link.springer.com/article/10.1007/s40815-023-01550-w (accessed on 5 December 2023).

Werner V (2021). Text-linguistic analysis of performed language: revisiting and re-modeling Koch and Oesterreicher. Linguistics, 59(3): 541-575. https://doi.org/10.1515/ling-2021-0036