

ABSTRACT

of the thesis on the topic “National features of discourse (based on materials of Kazakh, Russian, English languages)”
submitted by Nauryzbaikyzy Guldana for the degree of Doctor of Philosophy (PhD) under the educational program “8D02304 – Philology”

Description of the thesis topic. Discourse is a complex structure of communication and a key aspect of cultural diversity and intercultural interaction. It represents the mindset, values, and identities of various ethnic groups and nations. In the context of globalization and the spread of multilingualism, the study of national features of discourse in different languages makes it possible to gain a deeper understanding of cultural contexts and contributes to the improvement of intercultural communication.

This dissertation uses Kazakh, Russian, and English as representations of different linguocultural groups and focuses on the national features of discourse. A comparative analysis of discursive practices in these languages has made it possible to identify how linguistic and cultural features influence the modes of communication and perception within each of the cultural groups under consideration.

In each of the selected languages, specific semantic, syntactic, and stylistic features are found that affect the structure and content of discourse. In the course of the study, we examined how these features determine the organization of discourse, the choice of linguistic units, and the use of cultural markers. In addition, the study analyzed how the sociocultural context and historical heritage shape the features of discourse in each language.

The study of the national features of discourse makes it possible to understand the cultural features of language and to enrich intercultural dialogue. This study contributes to an in-depth analysis of the linguocultural aspects of discourse in Kazakh, Russian, and English.

Research relevance. Discourse reflects the national features, cultural and social values of each language. Discourse has a national character. Discourses with different national features intertwine and integrate within the contemporary process of globalization and the expansion of intercultural communication. Knowledge of the communicative model of each people, established in discourse, makes it possible to prevent misunderstandings in communication.

Compliance with global trends in the development of education, science, and the economy is conditioned by citizens' knowledge of foreign languages, including English. Therefore, the trilingual policy pursued in our country requires citizens who are fluent in Kazakh, Russian, and English to master the norms and culture of communication necessary for interaction in these languages. Knowledge of the national features of communication is particularly essential in the fields of education, translation, journalism, diplomacy, and so on. At the same time, the negative impact of globalization, cultural interaction, and information exchange in the Internet space on national and cultural-linguistic identity is acknowledged. A key task for the present generation is to preserve the uniqueness of their nation, its cultural and linguistic identity, and to pass it on to future generations. This task can be

accomplished only through discourse, since discourse is the linguistic reflection of national worldview, an important instrument for preserving and transmitting the spiritual heritage of the nation to future generations.

The study of the national features of discourse opens the way to a systematic understanding of the culture of national communication. Furthermore, the lack of special studies devoted to the analysis of the national features of discourse based on Kazakh, Russian, and English material underscores the relevance of the chosen topic.

The aim of the research is to identify and describe the national features of discourse through an analysis of family discourse in Kazakh, Russian, and English.

The research objectives are as follows:

- To define the theoretical and methodological foundations for studying the national features of discourse;
- To systematize the manifestations of national features in language and discourse from a theoretical perspective;
- To conduct a discursive-pragmatic analysis in order to reveal the national features of family discourse through a comparative analysis of family discourse in Kazakh, Russian, and English on the basis of literary texts;
- To examine the linguistic representation of national psychology through family discourse;
- To identify the features of linguistic communication within the family by means of empirical research.

Research object: literary and spoken texts that reflect the national features of Kazakh, Russian, and English discourse.

Research subject: the system of linguistic means and discursive structures that reflect the national and cultural features of family discourse.

Theoretical and methodological framework of the research. The theoretical and methodological foundation of the research consists of scientific results in the field of discourse theory (B. Kaliuly, N. Uali, Z.Sh. Ernazarova, D. Alkebaeva, Zh.M. Kenshinbaeva, G.G. Burkitbaeva, K.K. Sadirova, A.E. Sadenova, T.E. Pshenina, R.A. Omarova, F.B. Kozhakhmetova, N.I. Segizbaeva, B.G. Karilova, L.M. Abisheva, B.A. Akhatova, D.V. Sizov, A.M. Zhumagulova, A.B. Gumanova, G.A. Muratova, B.G. Dosmaganbetov, F.Z. Dulaeva, B.S. Zhumagulova, N.A. Shakhmetova, Sh.A. Nurmysheva, Zh.U. Yesinbaeva, Zh.K. Kishkenbaeva, A.M. Zhalalova, D.M. Akimzhanova, K.Z. Elshibaeva, N.K. Kultanbaeva, Sh.G. Abdirova, N.S. Iskakova, R.K. Koilybayeva, A. Shetieva, etc.), as well as research in the field of text linguistics (T.M. Nikolaeva, I.R. Galperin, R. Syzdyk, B. Shalabay, A. Zhubanov, Kh.M. Nurmukhanov, G.K. Anes, M.K. Akhmetova, A.B. Amirbekova, G.M. Azimzhanova, Zh. Koishygyulova, G.Zh. Baishukurova, G.A. Kulgildinova, E.A. Tverdokhlebova, G.K. Kushkarova, G.Kh. Ramazanova, L.V. Cherepanova, V.V. Savelieva, Zh.M. Ospanova, K.O. Yesenova, A.S. Adilova, A.O. Tymbolova, Sh.M. Yelemesova, Zh.S. Kanlybayeva, A.K. Aitbenbetova, M.A. Maretbayeva, G.T. Abikenova, B.A. Abdykhanova, A. Akkozova, Zh.K. Alshinbayeva, G.A. Abdimaulen, etc.).

The study, taking into account the multifaceted nature of the concept of discourse, is aimed at describing its national features in cognitive, social, linguocultural, and communicative aspects. Accordingly, the methodology of

discourse studies relies on the theoretical foundations of four approaches: structural, sociolinguistic, cognitive, and communicative-pragmatic.

Within the framework of structural linguistics, discourse is regarded as a linguistic structure at the level of the text. A significant contribution to the study of semantic integrity of the text was made by the French structuralists A. Greimas and J. Courtés, who describe discourse as a form of thematic and formal organization within the text. Greimas's theory of the semiotic square and narrative structures makes it possible to reveal the internal system of meanings of discourse.

The sociolinguistic approach views discourse as a structure that reflects social reality. The main principles of this approach are presented in the works of M. Foucault, Z. Harris, R. Wodak, J. Link, and P. Hartmann. Foucault characterizes discourse as a practice closely connected with the system of power and knowledge in society, defining it as a structure independent of the subject and subject to historical and social regularities. The method of critical discourse analysis, proposed by T. van Dijk, is oriented toward examining the role of discourse in shaping social reality and its political and ideological content.

In cognitive linguistics, discourse is regarded as a way of processing, understanding, and reproducing information in the mind. In this field, T. van Dijk systematized cognitive models of discourse (mental model, frame, script), providing a detailed description of the interrelation between discourse and cognition. In the domain of national conceptology, A. Wierzbicka, E.S. Kubryakova, and D.S. Likhachev proposed approaches to conceptualizing national identity through language. Kazakh researchers A. Kaidar, E. Zhanpeisov, Zh. Mankeeva, N. Uali, A. Islam, and M.S. Zholshaeva analyzed national worldview, the conceptual sphere, and the features of linguistic consciousness, exploring national codes in the Kazakh language. This approach interprets discourse as a linguistic action realized in a concrete act of communication and speech situation.

Researchers such as D. Schiffrin, Z. Harris, J. Austin, J. Searle, and H. Grice applied the theory of speech acts, pragmatic meaning, the principle of cooperation, addressivity, and categories of intention to define the pragmatic structure of discourse. Furthermore, in analyzing the national features of discourse from a linguistic perspective, reference was made not only to cognitive linguistics, linguoculturology, ethnolinguistics, and country studies, but also to a range of other theoretical investigations. These works can serve as a basis for demonstrating the reflection of national culture in discourse. An example is G. Hofstede's framework, in which culture is described through six dimensions. These parameters make it possible to analyze and interpret the manifestations of national features in discursive practice.

Research sources. The sources of the research were theoretical studies examining the national features of discourse and the issues of national discourse, as well as literary texts, associative experiments, and materials of oral interviews analyzed with the aim of identifying linguistic means and discursive structures that reflect the national features of discourse.

To identify the national features of Kazakh discourse, the novel "Atau-kere" by O. Bokey (Foliant, 2024, 14 printer's sheets) was selected; for the analysis of the national features of Russian discourse – L.N. Tolstoy's trilogy "Childhood. Boyhood.

Youth” (Publisher, 2023, 23 printer’s sheets); and to reveal the distinctions of English national discourse – T. Hardy’s work “Tess of the d’Urbervilles” (AST, 2023, 30 printer’s sheets). The choice of these literary texts is determined by the following factors: 1) Commonality of the issues addressed: all three works, representing national family discourse, raise questions about the role of the individual in the family, parent–child relationships, and moral and spiritual upbringing; 2) Depth of cultural context: the works contain a wide range of cultural and social content, such as national customs and traditions, moral principles, religious beliefs, and social structure. This makes it possible to study discourse comprehensively in linguocultural and cognitive aspects; 3) Genre commonality: each of the works belongs to the genre of psychological and philosophical literary prose; 4) Representation of national discourse through literary language: the texts pay special attention to the expression of national worldview by means of linguistic resources such as metaphors, phraseological units, proverbs and sayings, cultural concepts, and other discursive structures.

In the experiment aimed at identifying associations with the concept “family” in the minds of Kazakh-speaking, Russian-speaking, and English-speaking respondents, 300 participants took part; their responses were analyzed. To study the national and cultural features of family relationships in discourse, oral interviews were conducted and audio-recorded. The total number of participants was 70, with the overall duration of the recorded interviews amounting to 4 hours and 20 minutes.

Research methods. The dissertation employs the following scientific methods: discourse analysis, comparative-contrastive method, linguoculturological analysis, pragmalinguistic analysis, as well as the experimental method.

In conducting the experiment, the method of associative fields was applied, implemented in the form of free, directed, and chain associative experiments. To identify the national features of Kazakh, Russian, and English family discourse based on oral interviews, the method of semi-structured interviews was used.

When selecting research methods, the complex nature of discourse was taken into account, which determined the integrative approach as the main one. This approach made it possible to comprehensively apply methods of various directions depending on the features of the material under study. For example, texts with a dominant cognitive aspect were analyzed conceptually, while texts with a clearly defined speech situation were analyzed using pragmatic methods.

Main provisions to be submitted for defense:

1. Discourse represents not only a complex structure that unites language and culture, but also a communicative space that dynamically reflects the inner values of national culture, worldview models, and norms of communication. A comparative analysis of Kazakh, Russian, and English family discourse has shown that national cultural models are realized at the discursive level through various linguistic means.

Thus, in Kazakh discourse, *айналайын* – “*dear child*”, *анашым* – “*my dear mother*”) represent the national mentality and family relations. In Russian discourse, speech formulas (*голубчик мой* – “*my darling son*”, *душечка* – “*sweetheart*”) and religious codes characterize family relations based on the Orthodox worldview. In English discourse, forms of address (*my maid*, *my poppet*, *dear*) and rural customs reflect family relations and

culture.

2. The results of the comparative analysis demonstrated that the national features of discourse are shaped not only by linguistic signs but also by pragmatic categories (presupposition, implicature, speech acts) as well as by the culture of communication. The national features of discourse manifest themselves in the worldview of language speakers, in their cultural code, and in their system of values. In Kazakh discourse, presupposition reflects the significance of the son as the support of the family; emotional closeness is expressed through speech acts (endearing words, soft lexicon) and non-verbal means (hugs, kisses). In Russian discourse, directive speech acts play a central role, with presuppositions linked to the child's responsibility for study and behavior, while emotions are expressed openly. In English discourse, emotional relations and communication are predominantly conveyed through indirect speech acts and implicatures, emphasizing restraint and politeness.

3. Family discourse in Kazakh, Russian, and English literary texts reflects national-cultural and worldview features. The conceptual space of family discourse in each language is formed from different content components, while Kazakh, Russian, and English discourses converge at the level of universal values (respect, duty). However, the cultural, linguistic, and historical features of each nation determine the structure and content of this discourse. In Kazakh discourse, spiritual-national connections and traditions (бата беру – “blessing”, жоқтау – “lament”, ат қою – “naming”) as well as spatial and material symbols (шаңырақ – “yurt crown”, ошақ – “hearth”, туған жер – “homeland”, жайлау – “summer pasture”, самаурын – “samovar”) occupy a central place. In Russian discourse, ethical-religious consciousness predominates, with religious codes (панихида – “memorial service”, молебен – “prayer service”) playing a special role. In English discourse, a way of life based on social experience and labor (harvest, everyday work) is of particular importance.

4. National psychology in literary texts manifests itself through a set of lexical units (emotional expressions, metaphorical constructions, phraseological units, proverbs and sayings) and grammatical means (interjections, modality, imperative mood, pronouns, verb tense forms), which are realized in discursive strategies. This enables the comprehension of national worldview at the cognitive-discursive level. In Kazakh discourse, national psychology is expressed through emotional closeness with the use of diminutive-endearing suffixes (*Кел, шырағым, кел* – “Come, my dear, come”; *Қоя тұр, келінжан* – “Wait, dear daughter-in-law”) and through the strategy of hierarchical relations by means of the imperative mood (*Қайта қолыңнан келген жақсылығыңды аяма* – “Do not withhold any kindness you can offer”; *Қойыңызшы, ана* – “Please stop, mother”; *Еңбектің де емдік қасиеті бар, балам, көп қимылда...* – “Work has healing qualities too, my child, keep moving...”). In Russian discourse, emotional expressiveness predominates (*Слезы душили меня* – “I was choked with tears”; *...я же захлебывался от слез* – “...I was drowning in tears”), and the strategy of communication is based on moral values, primarily through phraseological units (*...что готов был провалиться сквозь землю* – “...so ashamed I wished the ground would swallow me up”; *будешь впредь совать нос* – “you will keep sticking your nose in”). In English discourse,

national psychology is revealed through the strategy of duty and obligation to the family, using modal verbs (*You must go to her and claim kin*), while everyday difficulties are reflected through proverbs and phraseological units (*Where there's a will there's a way*).

5. Empirical data complemented the results obtained from literary texts and confirmed the interconnection between language and national consciousness: the concept “family” elicited different associative reactions from Kazakh-speaking, Russian-speaking, and English-speaking respondents. In Kazakh, the most frequent units were *жанұя* (“family”, 16 occurrences), *шаңырақ* (“yurt crown, a symbol of the hearth, family, and lineage”, 11 occurrences), and *Отан* (“homeland”, 9 occurrences). In Russian, the following reactions were recorded: *очаг* (“hearth”, 12 occurrences), *уют* (“coziness”, 10 occurrences), *родители* (“parents”, 10 occurrences). In English, the most frequent associations were *parents* (14 occurrences), *relationship* (11 occurrences), and *happiness* (10 occurrences).

6. The data obtained from oral interviews revealed the conceptual reflection of national features: in Kazakh family discourse, verbal communication relies on national traditions and carries an educational character. The utterances of elders directed at children are most often framed as sayings, blessings, or admonitions (*Жасың ұзақ болсын* – “*May your years be long*”; *Қадамың құтты болсын* – “*May your step be blessed*”). Here, traditional collectivism and kinship ties prevail, and interactions between family members are hierarchical. In Russian family discourse, communication is more informal, with open emotional expression: *Ну хватум* – “*That's enough*”; *Что происходит?* – “*What's going on?*”; *Чтоб всё было и ничего за это не было!* – “*May you have everything and never be punished for it!*” In English family discourse, communication is characterized by relative brevity and the neutrality of speech formulas (*All the best!*, *Congratulations!*). As a rule, parents give children instructions or advice without strong emotional coloring: *Talk about it*.

Description of research main findings. The dissertation describes the theoretical and methodological foundations of the study of the national features of discourse, systematizes scientific definitions of the term “discourse,” the directions and methods of its study, reveals the meanings of the terms “national features” and “national identity” in scholarship, and examines the cognitive, linguocultural, and discursive aspects of the concept of “national features.”

The conceptual sphere, pragmatic features, and national psychology of family discourse were identified in Kazakh (O. Bokey, Atau-kere), Russian (L. Tolstoy, *Childhood. Boyhood. Youth*), and English (T. Hardy, *Tess of the d'Urbervilles*) literary texts. In the course of conceptual analysis, elements of national significance were revealed, such as kinship relations, ethical principles, traditions, space, and symbols. In the pragmalinguistic analysis, intrafamilial dialogue, polite communication, speech acts directed at the addressee, as well as speech subtext (implicature, presupposition) were identified. The use of grammatical forms, proverbs, and phraseological units in the text was analyzed as an indicator of the worldview of each nation and of intergenerational continuity.

On the basis of oral interviews and associative experiments, the features and national content of the concept “family” in the minds of Kazakh-speaking, Russian-speaking, and English-speaking respondents were studied. The style of family

communication, national cultural codes, speech etiquette, and the phenomena of bilingualism and code-switching were confirmed by specific linguistic data. The results of the empirical study complemented the theoretical positions derived from literary texts and made it possible to identify the features inherent in the structure of family discourse, the nature of communication, and the national values in each language.

Justification of research novelty and its significance. In the dissertation, the national features of discourse are for the first time defined through a comparative analysis of Kazakh, Russian, and English family discourse. The theoretical and methodological foundations of studying the national features of discourse were systematized; definitions of the term “discourse” presented in scholarly research were analyzed, classified, and compared according to the directions and approaches of discourse theory. The terms “national features” and “national identity” were examined in relation to discourse, and their definitions were proposed. National features were studied in cognitive, linguocultural, and discursive aspects, supported by materials of Kazakh, Russian, and English, and grounded in the findings of domestic and international scholars. The concept of “family discourse” was refined and defined as a type of institutional discourse. Based on the analysis of literary texts (in Kazakh – O. Bokey’s novel *Atau-kere*; in Russian – L.N. Tolstoy’s trilogy *Childhood. Boyhood. Youth*; in English – T. Hardy’s novel *Tess of the d’Urbervilles*), a comparative analysis of the conceptual sphere of family discourse in the three languages was carried out. The results were systematized and presented in a table, which highlighted both common and distinctive features.

Family discourse is a special communicative space in which ethnocultural values and the national worldview are reflected. Based on the material of the three literary texts, a comparative pragmalinguistic analysis was conducted, examining speech acts and their functions (command, statement, question, accusation), as well as presuppositions and implicatures, namely meanings and cultural conditionings shared by family members without direct expression. The analysis also addressed the character of communication, speech purposes, and emotional coloring. As a result, both the common and distinctive features of the discourse of the three cultures were identified. In the scientific study, for the first time, the linguistic representation of national psychology in family discourse was examined on the material of Kazakh, Russian, and English. As a result of comparison, the features of the representation of national psychology in the family discourse of the three languages were analyzed and generalized through phraseological units, proverbs, and grammatical forms, which were systematized in a table. In addition, the dissertation identified and analyzed the features of associating the concept “*family*” in the minds of Kazakh-speaking, Russian-speaking, and English-speaking respondents (a total of 300), through specially conducted free, directed, and chain associative experiments. Another element of the scientific novelty of the dissertation is that, for the first time, in order to identify the national features of Kazakh, Russian, and English family discourse, oral interviews were conducted (number of participants – 70, total length of recorded interviews – 4 hours 20 minutes), and the materials collected by the semi-structured interview method were subjected to comparative analysis and generalization. For the first time, common and distinctive features of set expressions and discursive strategies reflecting family values in Kazakh, Russian, and English cultures were systematized on the basis of a comparative analysis of empirical research results. Moreover, based on discourse analysis, the national-cultural content of key concepts such as *жанұя* (“family”), *шаңырақ* (“yurt crown, a symbol of the hearth, family, and

lineage”), *oyaz* (“hearth”), *blood* (kinship) was reconsidered in a new way. As a result of the research, the criteria that determine the national features of discourse were systematized, and new data were introduced, complementing the typology of national discourse.

Research theoretical significance. The results of the research complement the theoretical frameworks in the fields of discourse studies, linguoculturology, ethnolinguistics, pragmalinguistics, and intercultural communication. The comparative analyses deepen the theoretical understanding of national consciousness, the interrelation between language and culture, as well as cognitive structures.

Research practical significance. The results of the research can be applied in the preparation of educational and methodological materials necessary for the training of linguists, teachers, translators, and specialists in the field of intercultural communication, as well as in the further conduct of scientific research in this area.

Research evaluation. The results of the dissertation research were presented and discussed at national and international research institutions and higher educational establishments. In particular, a report on the topic “The Concept of National Discourse” was delivered at the XVIII Republican Scientific and Practical Youth Conference “Youth, Science and Innovations”, organized by K. Zhubanov Aktobe Regional University (2022). At the XII International Conference held at Ufa University of Science and Technology, a report entitled “Discourse as Reflection of National Character” was presented (2024). In addition, a presentation “Opportunities for Transferring Content Reflecting the National Features of Discourse into Large Language Models” was given to participants of a joint project with the Institute of Smart Systems and Artificial Intelligence (ISSAI) of Nazarbayev University (2025). Furthermore, empirical studies were conducted to identify the national features of family discourse: 1) an online survey on the Google Forms platform aimed at revealing the associative features of the concept “family”; 2) oral interviews carried out to determine linguistic features, communicative strategies, and models of interaction based on cultural norms of family discourse.

The dissertation was carried out within the framework of the grant project “Creation of a large language model (LLM) to maintain the implementation of Kazakh language and increase technological progress” (IRN BR24993001), as part of a broader program of scientific research. The main goal of the project is to promote the development of the Kazakh language in the modern technological space, expand its digital resources, and integrate it into next-generation artificial intelligence systems. The project is oriented not only toward the technical improvement of the language model but also toward incorporating national culture and worldview features. In line with these aims, the dissertation analyzed family discourse in Kazakh, Russian, and English, identifying and characterizing its national features. The findings make it possible to identify the linguistic representations of national psychology. These data provide the basis for embedding cultural-cognitive information into multilingual language models. In this way, the study contributes to improving the quality of data integrated into models for the digital support of the Kazakh language and enriches the semantic richness of the language model through the description of national features.

Research approval and publication. Six articles presenting the main results of

the research have been published.

Articles published in journals included in the international scientific database Scopus:

1. National Features of Family Discourse: A Comparison of Kazakh, Russian, and English Languages // International Journal of Society, Culture & Language (IJSCL)/No.1/2023 (Vol. 11, Issue 1, March 2023) – Pages 61-75. Процентиль 89%, Q1 // https://www.ijscel.com/article_696914.html

2. National Features of Discourse: A Systematic Review // World Journal of English language // Процентиль 66%, Q2. <https://doi.org/10.5430/wjel.v16n2p44>

Articles published in publications recommended for publication based on the results of scientific activities by the Committee for Quality Assurance in Science and Higher Education of the Ministry of Science and Higher Education of the Republic of Kazakhstan:

1. “National Features of Discourse.” Bulletin of Abylai Khan Kazakh University of International Relations and World Languages. Series “Philological Sciences”, no. 2 (69), 2023, pp. 141–158.

<https://bulletin-philology.ablaikhan.kz/index.php/j1/article/view/704/241>

2. “National Features of Political Discourse.” Bulletin of Abylai Khan Kazakh University of International Relations and World Languages. Series “Philological Sciences”, no. 3 (74), 2024, pp. 172–188.

<https://bulletin-philology.ablaikhan.kz/index.php/j1/article/view/1316/441>

Materials published in the proceedings of international conferences:

1. The Concept of National Discourse.” Proceedings of the XVIII Republican Scientific and Practical Youth Conference “Youth, Science and Innovations.” Aktobe, 2022, pp. 680–682.

2. “Discourse as Reflection of National Character.” Proceedings of the XII International Scientific Conference (Ufa, April 25, 2024) / Ed. by A.R. Mukhtarullina. Ufa: RIC Ufa University of Science and Technology, 2024, pp. 15–24. ISBN 978-5-7477-5917-6.

Research structure and scope. The dissertation consists of an introduction, three chapters, a conclusion, a list of references, a reference apparatus, and appendices. The total volume of the research work is 166 pages.

The dissertation research has been prepared in line with relevant fields of linguistics, such as discourse studies, cognitive linguistics, and pragmalinguistics, and is based on the following programmatic documents of the Republic of Kazakhstan:

Resolution of the Government of the Republic of Kazakhstan No. 914 of 16 October 2023. “On approval of the Concept for the Development of Language Policy in the Republic of Kazakhstan for 2023–2029.”

Resolution of the Government of the Republic of Kazakhstan. “On approval of the national project ‘National Spiritual Revival’”: approved by Order No. 724 of 12 October 2021.

Decree of the Government of the Republic of Kazakhstan. On approval of the state program for the implementation of language policy in the Republic of Kazakhstan for 2020-2025: approved on December 31, 2019 No. 1045.

Historical and cultural heritage and spiritual values of Kazakhstan. The unity of history and culture, literature and language, customs and values // On the approval of

the State Program for the Development of Education and Science of the Republic of Kazakhstan for 2020-2025: Resolution of the Government of the Republic of Kazakhstan dated December 27, 2019, No. 988.

PhD candidate's contribution to preparing each research publication. The entire volume of the dissertation, the choice of research methods, and the solution of tasks in accordance with the research aim, as well as the preparation of publications on the research topic, were carried out independently by the author. The formulation of tasks related to the research topic and the discussion of the results obtained were conducted jointly with the academic supervisors.