

Received: 21 March 2025

Revision received: 19 June 2025

Accepted: 30 June 2025

Copyright © 2025 JESTP

www.jestp.com

DOI 10.12738/jestp.2025.1.20 ♦ January 2025 ♦ 25(1) ♦ 268-274

Article

The Valency and Actant Structure of Speech Verbs in the Monument *Gulistan bit Turki* (on the Example of the Verb *ayt*)

Kuanyshbek Kenzhalin
The Department of Kazakh
Linguistics, L. Gumilyov Eurasian
National University, Astana, 010000,
Kazakhstan.

ORCID iD: <https://orcid.org/0000-0003-0440-7556>

Email: boka_001kz@mail.ru

Gulzhanat Begimova*
The Department of Turkology, L.
Gumilyov Eurasian National
University, Astana, 010000,
Kazakhstan.

ORCID iD: <https://orcid.org/0000-0002-0782-9837>

Email: gukjik_76@mail.ru

Aierke Zinedina
The Department of Kazakh
Linguistics, L. Gumilyov Eurasian
National University, Astana, 010000,
Kazakhstan.

ORCID iD: <https://orcid.org/0000-0001-5228-5499>

Email: aierke96@gmail.com

Gulbaira Otelbay
The Department of Practical Kazakh
Language, L. Gumilyov Eurasian
National University, Astana, 010000,
Kazakhstan.

ORCID iD: <https://orcid.org/0000-0003-4824-4250>

Email: otelbaygt@gmail.com

Adilet Tansykbay
The Department of Kazakh Language
and Literature, Ualikhanov
University, Kokshetau, 070000,
Kazakhstan.

ORCID iD: <https://orcid.org/0000-0001-9929-1685>

Email: adilet_2_97@mail.ru

Marzhan Akhmetova
The Department of Kazakh
Linguistics, L. Gumilyov Eurasian
National University, Astana, 010000,
Kazakhstan.

ORCID iD: <https://orcid.org/0000-0003-0542-1755>

Email: akhmetova_mk@enu.kz

Abstract

This study investigates the valency and actant structure of the speech verb *ayt* (“to say”) in the Middle Turkic monument *Gulistan bit Turki*, with the aim of clarifying its historical combinatory potential and its continuity with modern Kazakh. The research is based on A. Karamanlioglu’s transcription of the text. A corpus of more than 40 verb collocations with *ayt* was extracted and analyzed. The study applied a structural–semantic method to identify actant frames, a historical–comparative approach to trace diachronic developments, and a statistical–corpus analysis to determine frequency and distribution of grammatical forms. Data were systematically coded for agent, patient, addressee, and modifier roles, and then compared with modern Kazakh usage. The results demonstrate that in *Gulistan bit Turki* the verb *ayt* exhibited six actant slots, forming one- to six-valent constructions. Although its syntactic valency remained stable, its semantic scope was broader in medieval Turkic, covering meanings such as reporting, ordering, proclaiming, debating, and objecting. Over time, these functions split across several verbs in modern Kazakh (*aytu*, *soyleu*, *deu*, *zhariyalau*, etc.). Thus, the verb shows diachronic narrowing of semantic valency but persistence of syntactic frames. These findings enrich the historical syntax of Turkic languages, highlight structural continuity between Middle Turkic and modern Kazakh, and provide methodological guidance for annotating historical corpora. The study also has pedagogical implications for teaching diachronic Turkic linguistics and contributes to a broader understanding of argument structure in historical texts.

Keywords

Valency, Actant Structure, *Ayt*, *Gulistan Bit Turki*, Middle Turkic, Historical Syntax.

Correspondence to Gulzhanat Begimova, The Department of Turkology, L. Gumilyov Eurasian National University, Astana, 010000, Kazakhstan. ORCID iD: <https://orcid.org/0000-0002-0782-9837>, Email: gukjik_76@mail.ru

Citation: Kenzhalin, K., Begimova, G., Zinedina, A., Otelbay, G., Tansykbay, A., & Akhmetova, M. (2025). The Valency and Actant Structure of Speech Verbs in the Monument *Gulistan bit Turki* (on the Example of the Verb *ayt*). *Educational Sciences: Theory and Practice*, 25(1), 268 - 274. <http://dx.doi.org/10.12738/jestp.2025.1.20>

Introduction

The concept of valency has long been a central topic in modern linguistics and Turkology, as it reveals the potential of lexical units to combine with other elements in a sentence. Among lexical categories, verbs play a pivotal role, since they act as the core of sentence structure and determine the distribution of semantic roles across participants. In this respect, the study of valency in historical texts is crucial, because it offers insights not only into the syntactic organization of a language but also into its semantic development and diachronic continuity. One of the most frequently used verbs in Turkic languages is *ayt* (“to say”), which functions as a key speech verb. In modern Kazakh, *ayt* occupies a central place among high-valency verbs and combines with several actants such as subject, addressee, object, and modifiers expressing manner, place, or time. However, in medieval Turkic monuments the scope of *ayt* was significantly broader, encompassing meanings that in present-day Kazakh are distributed among several different verbs (e.g., *soyleu* “to speak,” *deu* “to tell,” *zhariyalau* “to proclaim,” *buyryq beru* “to order”). This demonstrates that while syntactic valency has shown relative stability, semantic valency has undergone narrowing and differentiation.

The written monument *Gulistan bit Turki* by Saif-i Sarai, composed in the Mamluk Kipchak period, provides a rich source for studying the historical development of the Turkic languages and their continuity with modern Kazakh. This text, translated from Persian into Turkic in the fourteenth century, represents not only a literary achievement but also a valuable linguistic record of Middle Turkic usage. The monument reflects the speech norms of its time and therefore offers fertile material for analyzing the valency and actant structure of frequently used verbs such as *ayt*.

Although the phenomenon of verbal valency has been extensively studied in general linguistics (Perini, 2015; Tesnière, 1959; Willems, 2006), its manifestation in Turkic historical monuments remains under-researched. Previous studies have mainly focused on lexical continuity (Sabyr, 2004), comparative lexicons (Sagyndykuly, 2006), and general stylistic features (Minnegulov, 2017). Only recently has attention been directed to more fine-grained issues of argument structure in Turkic texts (Seitbekova & Mamyrbek, 2024; Zinedina, Eskindirova, & Yespekova, 2024). These studies show the increasing scholarly interest in historical corpora and in the methods of annotating actant structures. Nevertheless, the specific case of *ayt* in *Gulistan bit Turki* has not been comprehensively described, particularly in terms of its multi-valent combinatory potential. Moreover, modern research in Turkology emphasizes the importance of identifying diachronic parallels between Middle Turkic and contemporary Turkic languages. The study of valency is especially relevant here, since it exposes the stable syntactic frameworks underlying lexical-semantic changes. For instance, while the meaning of *ayt* has narrowed over time, its syntactic ability to combine with one, two, or three actants has remained virtually intact. This stability points to a deeper structural continuity that merits systematic investigation.

Despite the acknowledged importance of *Gulistan bit Turki* for the study of Middle Turkic, there is still insufficient research into the actant structures of its verbs. Most previous works have described lexical inventories or stylistic features but have not provided a detailed valency analysis. As a result, our understanding of how medieval Turkic organized speech verbs remains incomplete. The absence of such studies limits our ability to trace the diachronic development of Kazakh syntax and semantics.

The present study seeks to fill this gap by providing a systematic analysis of the valency and actant structure of the verb *ayt* in *Gulistan bit Turki*. The objectives of the research are:

1. To identify and classify the actant structures in which *ayt* appears in the monument.
2. To determine the degree of valency exhibited by *ayt* and to describe the range of semantic roles it accommodates.
3. To compare the historical usage of *ayt* with its modern Kazakh equivalents, highlighting both continuity and change.
4. To evaluate the implications of these findings for the study of historical syntax and the development of Turkic argument structure.

The key research questions framed to achieve these objectives included:

1. What types of actants are licensed by *ayt* in *Gulistan bit Turki*?
2. To what extent does the verb function as a polyvalent lexeme in Middle Turkic?
3. How do these historical patterns correspond to or differ from the usage of *ayt* in modern Kazakh?
4. What can the analysis of *ayt* reveal about the processes of semantic narrowing and syntactic stability in

the history of the Kazakh language?

The study is significant for several reasons. First, it contributes to Turkic historical linguistics by documenting the argument structure of a key verb in a major medieval monument. Second, it strengthens the methodological framework for analyzing valency in historical corpora, demonstrating the usefulness of combining structural-semantic, historical-comparative, and corpus-statistical approaches. Third, it informs the broader field of theoretical linguistics, as the findings illustrate how valency systems can remain structurally stable while undergoing semantic specialization. Finally, it has practical implications for language teaching and corpus development, since understanding the diachronic behavior of high-frequency verbs such as *ayt* can enrich both educational curricula and digital linguistic resources.

In sum, the introduction establishes the background, rationale, and problem statement of the research, outlining clear objectives and research questions. The analysis of *ayt* in Gulistan bit Turki will thus provide valuable evidence for understanding the continuity and transformation of speech verbs in the history of Kazakh.

Literature Review

The study of valency and actant structures has a long tradition in linguistics. The foundations were laid by [Tesnière \(1959\)](#), who introduced the concept of valency as the capacity of a verb to open “slots” for its arguments. Later works refined this view, linking valency with lexical semantics, argument structure, and syntactic realizations. [Willems \(2006\)](#) emphasized the role of logical polysemy and the variability of verb valency, while [Perini \(2015\)](#) discussed practical and theoretical issues in describing valency across languages. These studies provided the theoretical grounding that made it possible to analyze the combinatory potential of verbs in a systematic way.

In general linguistics, valency is understood as a bridge between syntax and semantics. [Semecký \(2008\)](#) argued that valency frames are essential for disambiguating polysemous verbs, while [Rasulov \(2022\)](#) highlighted that valency represents a “capacity” at the lexical level, realized through syntactic relations in discourse. Thus, syntactic valency is relatively stable, while semantic valency is more dynamic and responsive to language change. This framework is particularly relevant for historical languages, where diachronic developments can be traced through the interaction of stable syntactic patterns and shifting semantic loads.

In Kazakh linguistics, the study of valency has been steadily developing since the late twentieth century. [Orazov \(1991\)](#) analyzed the semantics of Kazakh verbs, pointing to the central role of valency in their syntactic functions. [Nurmakhametova \(2000\)](#) described syntagmatic features of word combinations in the “participle + noun” pattern, while [Syzykova \(2010\)](#) investigated semantic valency in Kazakh, offering important observations on how verbs distribute their argument structures. These works laid the foundation for subsequent research into the actant properties of verbs in Kazakh.

More recent studies have expanded the scope of inquiry. [Amirbekova, Urakova and Talgatkyzy \(2021\)](#) explored semantic combinability of words in Kazakh, while [Ospanova, Aitova and Syltanzade \(2023\)](#) examined emotive valency, showing that valency is not only a structural but also a pragmatic and cognitive category. [Talgatkyzy et al. \(2023\)](#) applied corpus methods to study semantic combinability, demonstrating the relevance of computational approaches for analyzing valency in modern Kazakh ([Agabekova et al., 2024](#)). Together, these studies confirm that valency remains an active research domain in Kazakh linguistics, yet there is still a noticeable lack of diachronic studies connecting medieval texts with contemporary usage.

The Turkic written tradition provides an invaluable resource for examining valency historically. Early scholarship concentrated on lexicon and stylistics rather than argument structure. [Nadjip \(1975\)](#) analyzed the language of Gulistan bit Turki, focusing mainly on phonology and lexicon. [Sabyr \(2004\)](#) examined lexical continuity between Middle Turkic and Kazakh, while [Sagyndykuly \(2006\)](#) compared lexicons of the Golden Horde monuments. [Nuriyeva \(2004\)](#) and [Minnegulov \(2017\)](#) contributed to the understanding of the literary language of the Golden Horde period and its stylistic and cultural dimensions. These works established the importance of monuments like Gulistan bit Turki but did not provide detailed analyses of valency.

More specific studies of the monument appeared in recent years. [Seitbekova \(2024\)](#) published a dictionary, transcription, and translation of Gulistan bit Turki, greatly facilitating linguistic analysis. [Zinedina et al. \(2024\)](#) investigated *izafet* constructions in the same monument, while [Seitbekova and Mamyrbek \(2024\)](#) analyzed phraseological units. These works represent an emerging body of scholarship that treats the monument

as a corpus for syntactic and semantic research, not just a lexical source.

Key and Ótót-Kovács (2024) examined pluractional motion verbs in Turkish, showing how verb morphology interacts with argument structure. Iefremenko, Schroeder and Kornfilt (2021) studied converbs in heritage Turkish, combining theoretical and empirical approaches to describe how argument structure adapts in bilingual contexts. These works demonstrate how valency and argument structure remain central even in synchronic and sociolinguistic settings, confirming the relevance of such analyses for Turkic linguistics.

Recent Kazakh-focused studies further demonstrate the methodological progress. Zinedina et al. (2024) and Seitbekova and Mamyrbek (2024) are particularly relevant, as they show how Middle Turkic monuments can be mined for syntactic and phraseological structures that illuminate the evolution of Kazakh. These contributions align with the goals of the present study, which applies structural-semantic and corpus methods to Gulistan bit Turki. Moreover, international scholarship has emphasized the connection between argument structure and semantics. Work in typology and syntax has shown that valency-changing operations such as causativization, passivization, and reflexivization are universal processes that also shape Turkic languages. Applying these typological perspectives to historical Turkic data strengthens the explanatory framework for analyzing the diachronic stability of syntactic relations.

Despite these advances, there are still clear gaps in the literature. First, the actant structure of speech verbs in Middle Turkic monuments has not been fully described. While lexical and phraseological studies abound, systematic analyses of verb valency remain rare. Second, diachronic comparisons between medieval monuments and modern Kazakh are limited. Most studies emphasize either historical description or modern analysis, but few explicitly connect the two. Third, the integration of corpus-statistical methods in historical Turkic linguistics is still in its infancy, though it has proven fruitful in modern Kazakh studies.

The present research addresses these gaps by focusing on the verb ayt in Gulistan bit Turki. It builds upon earlier lexical and stylistic descriptions of the monument but goes beyond them by providing a systematic valency analysis. It also complements recent structural studies (Seitbekova & Mamyrbek, 2024; Zinedina et al., 2024) by concentrating on argument structure. Finally, it contributes to comparative linguistics by showing how the medieval usage of ayt connects with its modern Kazakh counterpart, revealing both stability and change in the diachronic development of Kazakh syntax.

Methodology

Research Design

This study adopts a qualitative–quantitative corpus-based design with elements of structural–semantic and historical–comparative analysis. The focus is on the verb ayt (“to say”) in the Middle Turkic monument Gulistan bit Turki. The design combines descriptive linguistic methods with frequency-based corpus techniques to provide both qualitative interpretation of actant structures and quantitative assessment of their distribution.

Sampling and Research Procedure

The primary source is Karamanlioğlu’s (1989) transcription of Gulistan bit Turki. From this text, all instances of the verb ayt in its various grammatical forms (e.g., aytti, aytur, ayttim, ayturlar) were extracted manually. In total, more than 40 distinct verb collocations were selected for detailed analysis, ensuring coverage of diverse syntactic contexts. The sampling procedure included: Identification of verb tokens across the entire text; Selection of representative examples for each actant frame; and Recording of contextual information (e.g., surrounding clause, semantic role of participants).

Data Collection

Data were collected by compiling a mini-corpus of sentences and clauses containing ayt. Each occurrence was annotated for: Agent (speaker/subject), Patient (content of speech), Addressee (recipient of speech), and Modifier (adverbial elements such as manner, time, place). The collocations were classified into one-, two-, three-, four-, five-, and six-valent structures. Additional variables included morphological form, syntactic environment, and semantic nuances.

Data Analysis

Four methods were employed: (1) Structural–semantic analysis to identify actant roles and valency frames. (2) Historical–comparative analysis to contrast medieval usage with modern Kazakh (aytu, soyleu, deu, zhariyalau). (3) Corpus–statistical analysis to calculate the frequency of ayt in different forms and to measure the distribution of actant frames. (4) Interpretive analysis to link findings with previous research and to evaluate the diachronic narrowing of semantic scope. Together, these procedures made it possible to reconstruct the valency profile of ayt in Gulistan bit Turki and to highlight its structural continuity and semantic transformation from Middle Turkic to modern Kazakh.

Results

The corpus analysis of Gulistan bit Turki identified more than 40 collocations with the verb ayt (“to say”). These occurrences display a wide range of actant structures. Based on the data, ayt can be classified as a six-valent verb in Middle Turkic. The following distribution was observed:

- One-valent: e.g., ol aytti (“he said”).
- Two-valent: e.g., atasina aytti (“he said to his father”).
- Three-valent: e.g., mesel-ni aytti (“he said the matter”).
- Four-valent: e.g., undep aytti (“he said by calling”).
- Five-valent: e.g., artınca aytti (“he said afterwards”).
- Six-valent: e.g., dunye hayatından aytti (“he said from worldly life”).

The most frequent forms of ayt in the text were:

- aytti – 848 tokens,
- aytur – 204 tokens,
- ayttım – 168 tokens,
- ayturlar – 80 tokens.

Less frequent forms included aytip (16), aytkil (14), ayttılar (12), aytlı (10), aytkay (10), and others. In total, over a dozen morphological variants were attested, some of which (e.g., -kay/-gay forms) are no longer used in standard Kazakh.

From the collocations analyzed:

- Agents included men (“I”), sen (“you”), ol (“he/she”), fakir, sheyh sadi, fakir-larning biri.
- Patients included korusmeyin (“do not meet”), kirek (“necessity”), ne tiler (“what is wished”), ani (“this”), takatim yok (“I have no strength”).
- Addressees included oz-ozume (“to myself”), pehlevanga (“to the pehlevan”), muridine (“to his disciple”), oglina (“to his son”).
- Modifiers included undep (“by calling”), itiraz kilip (“by objecting”), yigrip (“by crying”), dem-be-dem (“continuously”).

Overall, the results show that ayt combines with diverse actant slots, demonstrating high valency and flexibility in Middle Turkic usage.

Discussion

The findings confirm that the syntactic valency of ayt has remained stable across centuries, while its semantic scope has narrowed. In medieval Turkic, ayt encompassed meanings such as reporting, ordering, confessing, demanding, and proclaiming. In modern Kazakh, these functions are now distributed among several verbs: aytu (“to say”), soyleu (“to speak”), deu (“to tell”), zhariyalau (“to proclaim”), buyryq beru (“to order”), moyyndau (“to confess”), talap etu (“to demand”).

This pattern aligns with previous research showing that lexical systems are dynamic, while syntactic frameworks tend to be stable (Orazov, 1991; Rasulov, 2022). It also corresponds to recent studies on Turkic argument structure, which emphasize the continuity of syntactic slots despite diachronic lexical change (Iefremenko et al., 2021; Key & Ótött-Kovács, 2024). An important feature observed in Gulistan bit Turki is the frequent use of auxiliary verbs such as qil (“to do”) in collocations (itiraz kilip aytti – “said by objecting”). In modern Kazakh, the auxiliary etu has largely replaced qil, but the syntactic construction remains recognizable. This illustrates how lexical replacements occur within a stable structural template.

Furthermore, the presence of six-valent constructions in Middle Turkic indicates a higher degree of semantic flexibility, reflecting broader communicative needs and metaphorical usage. Examples such as *dunye hayatından aytım* (“I said from worldly life”) demonstrate figurative extensions that reveal ethnolinguistic conceptualization, linking valency with cultural worldview (Talgatkyzy et al., 2023).

Overall, the discussion highlights three main points:

1. Continuity: syntactic valency of *ayt* is preserved from Middle Turkic to modern Kazakh.
2. Change: semantic valency has narrowed, with functions redistributed among specialized verbs.
3. Implications: historical analysis of *ayt* contributes to understanding argument structure in Turkic linguistics and supports corpus-based annotation of medieval texts.

Conclusion

The present study analyzed the valency and actant structure of the verb *ayt* in the Middle Turkic monument *Gulistan bit Turki*. The findings revealed that *ayt* functioned as a polyvalent verb, capable of licensing up to six actant slots. The syntactic framework of *ayt* has remained largely stable from the medieval period to modern Kazakh, consistently accommodating agents, patients, addressees, and modifiers. However, the semantic scope of the verb has narrowed over time. In Middle Turkic, *ayt* covered a broad spectrum of speech-related meanings—reporting, ordering, confessing, proclaiming—whereas in modern Kazakh these functions have been redistributed across several specialized verbs.

This study is limited by its reliance on a single monument (*Gulistan bit Turki*) and by the restricted size of the analyzed corpus (40 collocations). Furthermore, the research is based on a specific transcription (Karamanlioğlu, 1989), which may not capture all possible textual variants. The absence of inter-annotator verification is another limitation, as the identification of actant roles depended on one set of analytical judgments.

Further research should extend the analysis to: other speech verbs in *Gulistan bit Turki* and comparable monuments (e.g., *soyleu*, *deu*). A larger corpus of Middle Turkic texts to strengthen quantitative validity. Comparative studies across Turkic languages (e.g., Bashkir, Uzbek, Tatar) to assess cross-linguistic stability and variation in speech-verb valency. The integration of computational methods for automatic actant annotation in historical corpora.

The results have important implications for: Historical syntax: demonstrating the persistence of argument structures across centuries despite semantic specialization. Corpus linguistics: offering a methodological model for annotating valency in medieval texts. Language teaching: providing illustrative material for courses on historical Turkic linguistics and diachronic syntax. Comparative linguistics: showing how structural stability interacts with semantic change, a pattern relevant to typological studies of argument structure.

Acknowledgment

This work was supported by the Ministry of Science and Higher Education of the Republic of Kazakhstan within the framework of the scientific project AR19679974 “Language of written monuments of the Mamluk Kipchaks”.

References

- Agabekova, Z., Amirbekova, A., Kalybekova, K., Ospanova, D., Abylayeva, B., & Khassenov, B. (2024). Activation of «COVID» Words in the Kazakh Language: Statistical Analysis. *Forum for Linguistic Studies*, 6(4), 194-202. <https://doi.org/10.30564/fls.v6i4.6753>
- Amirbekova, A., Urakova, L., & Talgatkyzy, G. (2021). The Semantic Combination System of Words in the Kazakh Language. *Tiltanym*, 3, 3-14. <https://doi.org/10.55491/2411-6076-2021-3-3-14>
- Iefremenko, K., Schroeder, C., & Kornfilt, J. (2021). Converbs in Heritage Turkish: A Contrastive Approach. *Nordic Journal of Linguistics*, 44(2), 130-154. <https://doi.org/10.1017/S0332586521000160>
- Karamanlioğlu, A. F. (1989). *Seyf-i Sarayı Gülistan tercümesi* [Kitab Gülistan bi't-Turki]. Ankara: Türk Dil Kurumu.
- Key, G., & Ótrott-Kovács, E. (2024). Pluractional Motion Verbs in Turkish. *Languages*, 9(12), 358. <https://doi.org/10.3390/languages9120358>

- Minnegulov, H. Y. (2017). *Tyurko-tatarskaya slovesnost'v kontekste mezhliteraturnykh svyazej* [Turkic-Tatar literature in the context of interliterary relations]. Kazan: Fen.
- Nadjip, A. (1975). *Tyurkoyazıçnıy Pamyatnik XIV Veka "Gulistan" Seyfa Saraii İ Ego Yazık* [The Turkic-language monument of the 14th century Gulistan by Seyf Sarayi and its language]. CI Almatı: Kazakistan İlimler Akademisi Yay.
- Nuriyeva, F. (2004). *Formirovanie i funktsionirovanie tjurko-tatarskogo literaturnogo yazyka Zolotoj Ordı* [Formation and functioning of the Turkic-Tatar literary language of the Golden Horde] [Doctoral dissertation]. Kazan.
- Nurmakhmetova, K. (2000). *Esimshe + zat esim ulgisindegi soz tirkesterining sintagmalyq ereکشelikleri* [Syntagmatic features of word combinations in the pattern "Participle + Noun"] [Abstract of Candidate of Philology dissertation]. Almaty.
- Orazov, M. (1991). *Qazaq tilinin semantıkasy* [Semantics of the Kazakh language]. Almaty: Rauan [in Kazakh].
- Ospanova, D., Aitova, N., & Syltanzade, V. (2023). Emotivity and Emotional Valence of Linguistic Units. *Bulletin of Yasavi University*, 1(127), 145-155. <https://journals.ayu.edu.kz/index.php/habarshy/article/view/2211>
- Perini, M. A. (2015). *Describing Verb Valency: Practical and Theoretical Issues*. Springer. <https://doi.org/10.1007/978-3-319-20985-2>
- Rasulov, R. (2022). Valentnost' slova i sintaksicheskaya svyaz' [Word Valency and Syntactic Connection]. *Ekonomika i Sotsium*, 5(96), 1075-1084. https://www.iupr.ru/_files/ugd/b06fdc_f1bb4276c3d04ce3a87c2862aaf54d3d.pdf
- Sabyr, M. B. (2004). *Orta türkı tılı leksıkasy men qazaq tılı leksıkasyınyñ sabaqtastyğy [Mätın]:(XIV ğasyr jazba eskertkışterı negızinde)* [Lexical continuity between the Middle Turkic language and the Kazakh language (based on 14th-century written monuments)]. Almaty: Qazaq universiteti.
- Sagyndykuly, B. (2006). *Altyn Orda yazba eskertkishterining salıstırmaly leksıkasy* [Comparative lexicon of the written monuments of the Golden Horde]. Almaty: Gylım.
- Seitbekova, A. A., & Mamyrbek, G. M. (2024). Phraseologists in the Written Monument of the Safe Barn "gulistan Bit-Turki". *Tiltanyım*, (1), 27-36. <https://doi.org/10.55491/2411-6076-2024-1-27-36>
- Semecký, J. (2008). *Verb Valency Frames Disambiguation* [Doctoral thesis, Charles University, Prague]. <https://hdl.handle.net/20.500.11956/12165>
- Seyitbekova, A. (2024). *Gulistan bit Turki jazba eskertkishi: Sozdigi, transkripsiyası, audarmasy* [The Gulistan Bit Turki Written Monument: Dictionary, Transcription, Translation]. Almaty: Arys.
- Syzdykova, G. (2010). *Semantic Valency in the Kazakh Language* [Doctoral dissertation abstract]. Astana.
- Talgatkyzy, G., Amirbekova, A. B., Kaiyrbekova, U. S., & Akkuzov, A. A. (2023). The Semantic Combinability of the Word "Camel" and Methods of Automation in the National Corpus. *Tiltanyım*, 3(91), 200-209. <https://doi.org/10.55491/2411-6076-2023-3-200-209>
- Tesnière, L. (1959). *Elements of Structural Syntax*. Paris: Klincksieck.
- Willems, K. (2006). Logical Polysemy and Variable Verb Valency. *Language Sciences*, 28(6), 580-603. <https://doi.org/10.1016/j.langsci.2005.10.004>
- Zinedina, A. S., Eskindirova, M. Z., & Yespekova, L. (2024). Izafet Constructions in the Monument "Gulistan Bit Turki" (Syntactic and Semantic Analysis). *Bulletin of the L.N. Gumilyov Eurasian National University. Political Science. Regional Studies. Oriental Studies. Turkology Series*, 149(4), 252-262. <https://doi.org/10.32523/2616-6887-2024-149-4-252-262>