

**UDC 81-2/80.1.02**

**IRSTI 16.01.24**

**<https://doi.org/10.48371/PHILS.2025.3.78.012>**

## **CROSS-CULTURAL LINGUISTIC MODELS OF TIME**

**\*Kulmanova Z.B.<sup>1</sup>**

**\*<sup>1</sup>Michigan State University, East Lansing, USA**

**Abstract.** Time is one of the most significant and complex categories in human cognition, and its linguistic representation plays a vital role in uncovering cultural specificities. This article explores the metaphorical conceptualization of time in Kazakh and English from an intercultural linguocognitive perspective. By comparing the conceptual structures and semantics of time in both languages. The study identifies both similarities and differences in their cultural-cognitive paradigms.

The research relies on linguistic data from both languages and employs linguocognitive and intercultural analysis methods. Metaphorical reports from text corpora are tested in a controlled way for cognitive as well as cultural validity. Time is merged with space in Kazakh, capturing natural phenomena and everyday practice routines, but in English, time is most typically understood through a linear mechanical mode, most commonly discussed as being an entity or money. These distinctions mirror the most significant cultural-cognitive features embedded in each language. The concepts of time and space vary in their interpretation depending on each nation's unique worldview. The research reveals the core metaphorical models of time in Kazakh and English and their semantic and pragmatic features. The book provides useful data on time as a cognitive aspect of language and culture, and is advisable to be used for implementation in translation studies and language education.

**Keywords:** time, concept, metaphorical conceptualization, cognitive linguistics, intercultural communication, national worldview, linguistic consciousness, comparative analysis

### **Introduction**

Language and culture are an integrated and interconnected unified system. The interwoven and interrelated linguistic and cultural meanings reveal their distinctive features in connection with humans, society, and nature, primarily through the content layer of lexical and phraseological units of the language [1, p. 314]. Time is probably the most abstract and the most complicated of all human concepts. Because of the fact that time is not visible and is imperceptible to the body, humans project time into different metaphors and meanings. Each cultural and linguistic community understands time in its own way, describing it through

distinct images and expressions. This makes cognitive linguistics a key discipline in studying the metaphorical and associative representations of time.

Cognitive linguistics views metaphor not merely as a rhetorical device, but as a fundamental mechanism through which the human mind comprehends abstract concepts. Prominent American scholars in the field of cognitive linguistics and metaphor theory have observed: “In our culture, time is described in terms of motion and space. We imagine time as a resource, something that can be lost, wasted, saved, spent, or exhausted” [2, p. 95]. This idea explains the cognitive basis of comparing time to human activity, movement, or material resources. Linguistic metaphors play a significant role in cross-cultural communication as reflections of national worldviews and mentalities. The analysis of time metaphors in the Kazakh and English languages highlights the cognitive attitudes toward time in each culture, underscoring the relevance of this study. This article explores the metaphorical conceptualization of time in both Kazakh and English in depth. The aim is to compare the cognitive and cultural features of metaphors, similes, and figurative expressions related to time in both languages and to identify their similarities and differences.

#### *Literature Review*

The way time is perceived through metaphor, linguistic imagery, and association has sparked interest across many languages. The concepts of time and space vary in their interpretation depending on each nation’s unique worldview. “Metaphor is not merely a linguistic expression; it is one of the core cognitive mechanisms that describe mental processes and an integral part of human thought”, as noted by scholars [2, p. 95]. American researchers, in defining metaphor, analyze cognitive models reflected in language through conceptual metaphors such as “*Time is money*”, “*Time is a moving object*”, “*Time as space*”, “*Time is a resource*”, and “*Time is a substance*”. In their studies, they also describe the method of understanding one conceptual domain in terms of another, which lies at the heart of metaphor interpretation.

Cognitive linguistics plays a crucial role in explaining the mental integration of time and space in human cognition. V. Evans, in his work, demonstrates through the “*Time as space*” model that our spatial understanding significantly influences the way temporal structures are formed. He emphasizes that the semantic structures of the time concept in language emerge from human interaction with the physical world [3]. Similarly, N. Clark, in his research on the development of the time concept in children’s cognitive growth, analyzes children’s speech from both syntactic and semantic perspectives [4]. The author is considered one of the early researchers to explore how the concept of time is formed and developed in human consciousness. The work views time not merely as a logical system but as a cognitively constructed structure.

Cross-cultural research enables the recognition of the time-bound characteristics of metaphors and a deeper comprehension of the view that different societies have of the world. Temporal manifestation of the notion of time is not just a language fact, but also a manifestation of cultural knowledge and experience in the past. In comparative intercultural analysis, L. Boroditsky's study of the English and Mandarin time conceptualization illustrates the impact of language on thought [5]. Time is thought of as traveling in a horizontal direction by English, but in a vertical direction by Mandarin. This study offers experimental evidence for the effect of language and culture on cognition.

In his work, G. Radden proposes a typology of time metaphors and identifies several types [6]. For instance, in expressions such as "*Moving Ego*" (e.g., We are approaching the deadline), "*Moving Time*" (e.g., Time is flying by), and "*Stationary Time*" (e.g., The exam is ahead of us), he explores the linguistic representation of time, its scenario-based features, and the semantic field of the concept. These models conceptually distinguish between time moving relative to the person and the person moving relative to time.

In Kazakh linguistics, some of the first systematic studies on the metaphorical representation of the time concept can be found in the works of Zh. Mankeeva [7], B. Kasym [8], and N. Uali [9]. Zh. Mankeyeva explores the connection between metaphors in the Kazakh language and national worldview, analyzing the conceptual meaning of figurative expressions used to describe time. For instance, expressions like "*saǵymdai búldyrap*" (shimmering like a mirage), "*kósken uaqyt*" (time that has moved on), and "*qas pen kózdiń arasında*" (in the blink of an eye) illustrate the dynamic and elusive nature of time.

B. Kasym (2010) examines how time, as a historical and social category, is reflected in the Kazakh language, approaching it from a cognitive-cultural perspective. A. Şalqarbek addresses the mental character of fixed expressions and idiomatic expressions, underlining the function of metaphors in representing the national worldview [10, p. 250].

The analysis of the literature demonstrates that metaphorical understanding of time has universal characteristics and culture-specific features. Cognitive linguistics provides useful techniques in order to explain variations in them, revealing their cognitive origins, and building their semantic networks. This article's comparative, linguo-cognitive analysis of time and space conceptualizations in Kazakh and English highlights its relevance and offers a new perspective on the intercultural connections between the two linguistic worldviews.

### **Materials and methods**

To identify the cognitive and cultural features of time-related metaphors in Kazakh and English, a set of comparative-cognitive methods was employed. The research material from the Kazakh language was drawn from texts registered

in the National Corpus of the Kazakh Language (KTNC) developed by the Akhmet Baitursynuly Institute of Linguistics, as well as fixed expressions found in literary works and scholarly studies, particularly those of Zh. Mankeeva, N. Uali, B. Kasym, E. Zhanpeisov, G. Qaliyev, Sh. Sarybaev, and B. Momynova. In addition to that, additional information was gleaned from S. Amanzholov's, A. Amanzholov's (works that include historical semantics and national-cultural aspects), and O. Smagululy's books. Information in English was gained from the British National Corpus (BNC) and example conceptual metaphors in works by Lakoff & Johnson (1980), Evans (2004), Boroditsky (2001), and Radden (2004), among others.

Several key methods were employed in the analysis of metaphors. First, the comparative method was used to identify similarities and differences between time metaphors in the two languages. Cognitive analysis was conducted based on the theory of conceptual metaphor, allowing for the identification of spatial and abstract elements within the semantic structure of the time concept. In addition, content analysis was applied to examine the frequency of metaphorical expressions, their contextual functions, and pragmatic roles. Semantic field analysis revealed that the concept of time is conceptualized through domains such as "*movement*", "*direction*", "*value*", and "*exhaustible resource*". The study is qualitative, descriptive in character, and cognitively and culturally sensitive.

## Results and discussion

Time and space are the very essence of human consciousness, and their linguistic expression is a multifaceted process based on the lifestyle and worldview of any ethnos [11, p. 345]. The image of time and space of the Kazakh has evolved from everyday life and nomadic experience. In the Kazakh language, these concepts are inseparable and appear as a unified cognitive structure, clearly reflected in linguistic expressions and fixed phrases. In this regard, A. Wierzbicka notes that time and space are conceptualized differently across languages, shaped by cultural worldview, and each language possesses its unique conceptual framework [12, p. 58]. In Kazakh culture, time is closely associated with concrete actions in daily life. For instance, expressions such as "*süt pisirim uaqyt*" (the time it takes to boil milk – 10–15 minutes), "*et pisirim uaqyt*" (the time it takes to cook meat – 2–3 hours), and "*bie sawym uaqyt*" (the time between two milkings of a mare – approximately 1.5 hours) reflect how time intervals are measured based on specific domestic and agricultural activities.

At the core of Kazakh time measurement lies a culturally rooted cognitive chain: "*Time* → *Daily activity* → *Perception of duration* → *Cultural consciousness*". A.K. Kобеeva highlights in her research that metaphors in the Kazakh language are deeply connected to the people's way of life, emphasizing the special role of time units based on pastoral activities [13]. Through such

metaphors, the abstract concept of time becomes concrete and imaginable. These linguistic structures can be seen as culturally adapted equivalents of the metaphorical models proposed by Lakoff and Johnson, such as *“Time is a resource”* and *“Time is a substance”*.

Metaphors are also widely used in English to represent the concept of time, but they reflect a culture that is markedly different from that of the Kazakh language. For instance, the concept *“Time is money”* frames time as an economic resource. Expressions such as *“spend time”*, *“waste time”*, *“save time”*, and *“invest time”* demonstrate that English commonly conceptualizes time as a material entity. This reflects a cognitive model rooted in capitalist society: *“Time → Material resource → Planned / Spent / Saved → Measured in terms of profit and loss”*. Time is seen as a source of productivity and income. Consequently, in English, the quantifiable, measurable, and manageable nature of time takes precedence. Moreover, as Z. Kövecses notes, expressions like *“time flies”* and *“the hours dragged on”* illustrate time as a moving object, aligning with the *“Time is a moving object”* model [14]. Kövecses emphasizes that linguistic metaphors are culturally contextual, yet the *“time as motion”* model appears to share a common cognitive basis across many languages.

In Kazakh, the swift passage of time is metaphorically conveyed as well. Phrases such as *“qas-qaǵym sät”* (a fleeting moment), *“kózdi ashyp-zhumǵansha”* (in the blink of an eye), and *“aýyz zhyǵansha”* (before one could close their mouth) not only depict the rapid flow of time but also conceptualize it through comparison with biological actions. In the Kazakh worldview, this creates a chain of cognitive associations: *“Time → Biological reaction → Extremely fast/brief interval → Emotionally evaluative quality”*. This is an anthropocentric concept. Time is quantified in terms of the body of man and is founded upon kinesthetic and visual experience. It is a culturally situated model in which time is experienced and preferentially judged, with richness of imagery and affective nuance.

Semantic and cognitive equivalents do exist between Kazakh and English use such as *“in the blink of an eye”* or *“in a heartbeat”*. In describing space, the Kazakh language and culture also employ measurements closely tied to time. For example, expressions such as *“at shaptyrym zher”* (a horse’s gallop away), *“kúndik zhol”* (a day’s journey), and *“aishylyq alys zhol”* (a distance of a month’s travel) do not merely describe space. These equivalents also imply the time required to traverse that space.

In the Kazakh worldview, cognition follows the chain: *“Space → Movement (mode of transport – horse or on foot) → Time → Cultural experience”*. This illustrates a culturally grounded version of metaphorical models such as *“Time is distance”* and *“Space is time”*. In this context, H. Zhou and X. Luo explore the interconnection between spatial and temporal representations in language, framing them within cognitive linguistics and linking them to cultural-historical experience [15].

Similar models can also be found in English, with expressions such as “a long day”, “a short journey”, and “we’re getting close to the deadline” establishing metaphorical links between time and space. While the figurative expressions in Kazakh are richly poetic and deeply rooted in traditional lifestyle, in English, these phrases tend to reflect more colloquial and pragmatic language use.

The division of time units in the Kazakh language based on natural light and biological rhythms reflects the people’s deep cognitive attunement to their environment. Expressions such as “*eleñ-alañ*”, “*qulaniek*”, “*qulqyn sári*”, “*sáske*”, “*tal tús*”, “*shaqpai tús*”, “*qas qaraya*”, “*apaq-sapaq*”, and “*beuqaqt*” describe very subtle periods. These phrases indicate the aspect that the Kazakhs live and feel time in accordance with today’s movement of the sun and the contrast between light and darkness. According to the old Kazakh understanding, time is not only a quantitative measure using the clock. Instead, it is a qualitative process that happens through a line of particular activities or natural processes. These constructions are neither a residue of pre-clock thinking about time nor an expression of a linguo-cognitive theory of time thinking. Moreover, these constructions have social, cultural, and symbolic meaning. For instance, “*beuqaqt*” is something that deranges the normal day sequence, with the tendency to be agitated or threatening times. These Kazakh terms are more specific and detailed than English words “*dawn*”, “*sunrise*”, “*high noon*”, “*twilight*”, “*dusk*”, and “*midnight*”.

Measuring systems of time and space among Kazakh people are linguistic-cultural indicators shaped over centuries within the influence of their way of life, economic activity, and contact with nature. This system reflects the cognitive worldview of the ethnic group. Linguistic data indicate that in Kazakh cognition, abstractions of time and space are often expressed metaphorically and comparatively. For example, units of length and distance are based on human body parts, animal movement, and the reach of sound: “*bir eli*” (one forearm’s length), “*bir süyem*” (one palm’s width), “*bir qarys*” (one span), “*quryq bou*” (length of a lasso), “*atshaptyrym zher*” (a horse’s gallop away), “*aigai zheter zher*” (a place where a shout can reach), “*qozy kósh zher*” (the distance a lamb moves with the flock). These measures prioritize practical equivalence over numerical precision in spatial perception.

Spatial cognition is thus not purely rational but a cognitive process intertwined with cultural and linguistic experience. In other words,

*Space → Measured by the body (span, palm)*

*Space → Measured by movement (on horseback, on foot)*

*Space → Measured by sound (the distance a shout can travel)*

↓

*Practical, vivid, culturally meaningful measures related to daily life.*



Such expressions represent a body-centered cognitive model of spatial evaluation, associated with the “*Space is body*” metaphor.

Similar to Kazakh, English also has instances where measurements of space and length are based on concrete metric systems. For example, units such as “*inch*,” “*foot*,” “*yard*,” and “*mile*” originally derived from human body parts (e.g., *foot*, *hand*) but have since distanced themselves from their figurative meanings to become standardized, systematic units of measurement. This illustrates the cognitive impact of a conventional metric system. In other words, in English culture, space denotes a precise quantity measured by exact numbers, whereas in Kazakh, space is a relative and context-dependent concept.

Volume measurements in the Kazakh language are also figurative and grounded in everyday life: expressions such as “*ot oryndai*” (the size of a hearth), “*oimaqtai*” (like a dumpling), “*túmedei*” (like a button), “*jeroşaqtai*” (like a small pot), “*şańyraqtai*” (like a yurt’s roof), and “*túeniń shónshiginiń auzindai*” (like the mouth of a camel’s nostril) exemplify this. Figuratively, the concept of volume is based more on human perception and imagination than on precise measurement. For instance, “*túmedei*” denotes something very small, while “*şańyraqtai*” conveys largeness or spaciousness in a relative sense.

Words like these are typical of the cultural heritage of Kazakhs, like yurt, hearth, dress, and domestic utensils—things that people come across in everyday life. They not only have an instrumental purpose but also act as cognitive tools. The combination of figurativeness, everyday grounding, and relative cognition forms the linguo-cognitive peculiarity of volume measurements in Kazakh.

*Volume → Image of a household object (dumpling, button, hearth, yurt roof)*

↓

*Imagining volume through comparison with a familiar object*

↓

*Qualitative, figurative, culturally contextual measurement.*

Volume measurements in Kazakh are conveyed not as numerical values but through sensory and cognitive experience. Ethnolinguistic and cognitive features of spatial and volumetric understanding are characterized by vivid, image-based measures. These expressions demonstrate the close connection between the Kazakh language and its indigenous culture and lifestyle. They are metaphorically based, producing relative, rather than fixed, spatial images.

In English, such forms as “*thimble-sized*”, “*palm-sized*”, “*kitchen-sized*”, “*mouse hole*”, and “*barn-sized*” are not very common and mainly appear in poetry, but never in official or technical language. Relative and phraseological units characteristic of Kazakh contribute to the pragmatic function of the metaphor in speech. The community’s close relationship with nature and their

economic activities through metaphorical structures in the language that express their perception of time. For example, expressions such as *“bie sawym”* (mare milking time), *“süt pisirim”* (milk boiling time), *“et pisirim”* (meat cooking time), *“shay qaynatym”* (tea boiling time), *“qas-qagym”* (a fleeting moment), and *“kózdi ashyp-zhumǵansha”* (in the blink of an eye) measure time not by precise minutes but by the duration of specific actions. This reflects the *“Time is an action”* conceptual model.

These expressions are closely connected to daily human activities. For instance, *“bie sawym waqyt”* corresponds roughly to 30 minutes, while *“qas-qagym”* refers to a duration shorter than a second. Such time measurements are linked not only to economic practices but also to ecological and social contexts, representing the conceptualization of time within a cultural calendar framework.

Time measurements in English are mostly based on the chronometric system, the words like *“minute”*, *“hour”*, *“day”*, *“week”*, *“month”*, and *“year”*. Metaphorical terms like *“in the blink of an eye”*, *“in a heartbeat”*, *“in no time”*, and *“a split second”* are employed to express time metaphorically. These idioms, however, are mostly in everyday speech and are more discontinuous and less systemic than well-coordinated figurative time measurements in Kazakh.

Kazakh cognition of time and space is notably different. Morphologically, Kazakh measurement expressions are typically formed analytically, as in *“et pisirim waqyt”* (meat cooking time), *“bir eli”* (one forearm’s length), and *“qol sozym zher”* (arm’s reach). Here, a noun combines with a modifier to create a new semantic unit. There are parallel expressions in English that occur chiefly as fixed expressions like *“a stone’s throw”*, *“a hair’s breadth”*, *“a mile away”*, or idioms like *“time flies”* and *“the clock is ticking”*. However, these tend to function expressively rather than serve as alternatives to standardized units of measurement.

In Kazakh, phraseological measurement expressions are often based on somatisms (human body parts), animal references, and numerals. Examples include *“túeniń túiagy túsetin zher”* (a place where a camel’s hoof lands), *“qozy kósh zher”* (a lamb’s walking distance), *“qasqaldaqtyń qanyndaı”* (as rare as the blood of a grebe), as well as *“zheti qarańgy tün”* (seven dark nights), *“qyryq kün”* (forty days), and *“bir tutam”* (a handful). These expressions reflect the folkloric, symbolic, and artistic nature of the traditional Kazakh system of measurement. Phraseological measurement categories:

*Somatisms* → *“bir tutam”* (a handful), *“tize búktim”* (I kneeled down)

*Animals* → *“túeniń túiagy”* (camel’s hoof), *“qozy kósh”* (lamb’s journey)

*Numerals* → *“zheti qarańgy tün”* (seven dark nights), *“qyryq kün”* (forty days)

↓

*Folkloric + Symbolic + Figurative characteristics.*



The notions in this chain are not abstract but concrete in sensory experience, rich imagery, and cultural symbolism. They transfer the Kazakh view, sense of space and time, and the ethnic people's consciousness. English, by contrast, does possess the identical expressions essentially on the idiomatic level, such as "*a hair's breadth*", "*six feet under*", or "*once in a blue moon*". Such idioms do not impinge to any notable extent on the general system of measurement and are stylistic or expressive, not functional.

The study revealed that the metaphorical conceptualization of time in both Kazakh and English is based on several core cognitive models. These models rely on humans' associative and denotative abilities in understanding the world. Each model is characterized by distinct semantic fields, which were analyzed through concrete linguistic data.

When examining the actual linguistic usage of metaphors through corpus-based evidence, expressions such as "*attai zulap ótti*" (passed by like a horse), "*zmyrağan zhyldar*" (the years that flew by), and "*waqytty iirip otır*" (twisting time) are frequently found in the Baitursynov University Corpus of Kazakh Language. In comparison, the British National Corpus (BNC) contains widely used metaphorical constructions such as "*Time flies when you're having fun*", "*We are running out of time*", and "*The future lies ahead*", which reflect the prevalence of time-related metaphorical models in English.

Drawing on the corpus-based material, we observe a range of metaphorical expressions that reflect how time is conceptualized as a moving entity. This model frames time as a fast, fleeting, and uncontrollable phenomenon—something that escapes human grasp. In Kazakh, expressions such as "*uaqyt zulap öte şyqty*" (time sped by), "*zhyldar syrğyp ötti*" (the years slipped away), "*künder közdi aşıp-zhumğansha öte şyqty*" (the days passed in the blink of an eye), "*attai zulap ötti*" (rushed like a galloping horse), "*uaqyt zulap barady*" (time is racing), "*qas-qağym sätte*" (in the blink of an eye), and "*ömir – özen, ötedi de ketedi*" (life is a river—it flows and is gone) are commonly used. In English, comparable expressions such as "*time flies*", "*years slipped away*", "*the days passed in the blink of an eye*", "*the time ahead of us*", and "*we are approaching the deadline*" illustrate the same conceptual metaphor of time as a rapidly moving force.

This metaphor is intrinsically linked to the image of directional motion in physical space being projected onto the domain of time. In Kazakh as well, the connection between time and movement is deeply embedded in linguistic expression. While both Kazakh and English rely on spatial models to conceptualize time, their metaphorical realizations reveal significant cultural differences. In Kazakh, speed and transience are often portrayed through images tied to nature, flowing water, and nomadic life. In contrast, English tends to emphasize inner tempo, urgency, and psychological perception. These differences underscore how cultural worldview shapes the cognitive framing of abstract concepts such as time.

The space of time is present in Kazakh and in English. English presumes the future ahead and the past behind, as can be seen from the prevalence of sentences like “*The past is behind us*”, “*Look forward to the future*”, and “*The road ahead is long*”. These sentences do not allow for doubt and put time concepts into spatial location. Similarly, in Kazakh, the following spatial metaphors are found: “*Ötken kün ötti, özen bop aǵyp ketti*” (the day that has gone away, running like a river), “*Bolaşaq aldymyzda, jarqyn kün*” (the future ahead, a good day), and “*Zamana kóshinen qalma*” (don’t lag behind the procession of time). Yet within Kazakhstan, the employment of space imagery is more traditionally involved in the ebb and flow of existence and natural movement, drawing a picture of the world where time is not merely going straight but a part of the larger, circular, and organic trajectory.

The metaphorical idea of **Time as a Precious Commodity** is an expression of the prevalence of contemporary economic, technological, and rational thinking. It is inscribed into the lingua franca of idiomatic expressions such as “*time is money*”, “*don’t waste time*”, “*invest your time wisely*”, “*spending time*”, and “*saving time*”. These examples are an expression of a tendency in the culture to conceive of time as a scarce, quantifiable resource, which is the heart of the conceptual metaphor “*time is a valuable commodity*”. In Kazakh, similar ideas are conveyed more implicitly through expressions such as “*uaqyt qádirin bilgen ozadı*” (who values time will get ahead), “*otti dáuren*” (the good times have passed), and “*sáǵat sanauly*” (time is numbered), which encourage a more philosophical reflection on the nature and value of time. This difference discloses a profound worldview contrast between linguistic cultures: in Kazakh culture, time is conceived as a natural one-directional process, whereas in the Western mind, it is seen as an exploitable and manipulable resource.

The metaphorical idea of **Time as a Container** provides a background for events to be located in a given time frame. In Kazakh, expressions such as “*bir kün ishinde*” (within a day), “*jyl boyy*” (throughout the year), “*túnnıń soǵyna deiin*” (by the end of the night), as well as phrases like “*kúnnıń ayaǵynda*” (at the end of the day), “*qyrkúiekke deiin*” (by September), and “*bir apta sheginde*” (within a week), enable the perception of time as a bounded space or container. Therefore, the most frequent sentences that we come across in English are, for example, within a day, during the year, at the end of the night, during a week, and during the summer. Here, time is specified as something that contains or has events. English, through having other prepositions like *in*, *within*, *during*, and *throughout*, gives specification of the spatial and bounded nature of time. Similarly, a string of auxiliary words in Kazakh – “*ishinde*” (inside/comprising), “*boyy*” (throughout), “*sheginde*” (within), and “*soǵyna deiin*” (up to the end)—serve the same cognitive and grammatical role.

From a cognitive perspective, these structures allow time to be imagined as a physical space, helping to organize daily human activities.

Table 1. National-Linguistic Features of the Concepts of Time and Space  
Note: Based on the collected data

Aspect	Kazakh	English
Nature of metaphor	Natural-cyclical	Linear, mechanical
Source of metaphor	Nature, animals, and body parts	Machine, money, movement
Counting method	Finger joints, livestock cycles	Hour, minute, second
Relation to space	Time = Space (movement, distance)	Time $\neq$ Space (abstract flow)
Purposefulness	Adapted to everyday life	Planning, productivity, efficiency

The table above summarizes the cognitive models of the concept of time in Kazakh and English based on metaphorical comparisons. Each model reflects specific cultural perceptions and interpretations of time. In Kazakh, time is often described through metaphors linked to nature, daily life, and physical activity, whereas in English, it is represented through abstractions such as space, direction of movement, and money. These differences reveal the cognitive images shaped by each culture's worldview and historical way of life.

### Conclusion

In this study, we explored how time is expressed through figurative language in both Kazakh and English, comparing their conceptual frameworks and semantic fields from a cognitive perspective. The analysis revealed that in both languages, time is understood through spatial, dynamic, and value-based dimensions. However, Kazakh reflects time and space measurement through vivid, culturally rich phraseological expressions deeply rooted in everyday life, nature, and traditional practices. This is compared to English, which has a more technical and standardized framework and is sometimes technical in nature. These contrast emphatically in the way in which language and culture effectively influence divergent ways of conceiving and representing the idea of time.

Kazakh culture's time and space measurement systems are an intersection of worldview, daily life, cultural norms, and thought patterns. The measurement systems reflect the deep sensitivity of the Kazakh people to nature as well as their special appreciation of time and space shaped in the main by a pastoral way of life. Moreover, the Kazakh notion of time has a close organic relation to everyday life, work, natural cycles, and astronomy.

In general, the Kazakh linguistic-cognitive model of space and time measurements is based on nature, biological cycles, and economic utilitarian requirements. The models are metaphorical, comparative, and image-rich. English models are economically, technologically, and abstractly built. The similarities and differences between the two languages mirror each culture's distinct way of understanding the world and expose their respective historical and cultural backgrounds.

### **Conflict of interest, acknowledgements, and funding**

The author ensures no conflict of interest in this study. The study was conducted without any kind of outside funding or money. It was strictly on the author's initiative and for academic interest. The author also thanks colleagues and referees for their outstanding remarks and useful suggestions in preparing this work.

### **REFERENCES**

- [1] Khabiyeva A.A., Uali N.M. Qazaq turakty soz tireksterinin мәдени-танымдық mazmұny [Cultural and educational content kazakh stable expressions] // «Abylai han atyndaǵy QazHqjäneĀTU Habarşysy» jurnalы, «Filologia ǵylymdary» seriesy. – 2025. – Tom 76. – №3. – B. 311-324. [in Kaz.]
- [2] Lakoff G., Johnson M. Metaphors we live by. – Chicago: University of Chicago Press, 1980. – 242 p.
- [3] Evans V. The structure of time: Language, meaning and temporal cognition. – Amsterdam: John Benjamins, 2004. – 406 p.
- [4] Clark H. H. Space, time, semantics, and the child // Moore T. E. (ed.). Cognitive development and the acquisition of language. – New York: Academic Press, 1973. – P. 27–63.
- [5] Boroditsky L. Does language shape thought? Mandarin and English speakers' conceptions of time // Cognitive Psychology. – 2001. – Vol. 43, № 1. – P. 1–22. DOI: <https://doi.org/10.1006/cogp.2001.0748>
- [6] Radden G. The metaphor TIME AS SPACE across languages // Languages in Contrast. – 2004. – Vol. 4, № 2. – P. 275–292.
- [7] Mankeeva Zh. Kazakh tilindegi baıyrǵy túbirlerdi zhańǵyrtı [Revitalization of archaic roots in the Kazakh language]. – Almaty: “Memlekettik tildi damytu ortalyǵy” ZhSHS, 2010. – 212 b. [in Kaz.]
- [8] Kasym B. Kazakh tilindegi kúrdeli sózder: úázhdeme zhane atalym [Compound words in the Kazakh language: motivation and nomination]. – Almaty, 2001. – 119 b. [in Kaz.]
- [9] Uali N., Kydyrbaev O. Kazakh tili. Sóz madenieti [Kazakh language. Speech culture]. – Almaty: Mektep, 2006. – 264 b. [in Kaz.]
- [10] Şalqarbek Ā., Jauynşieva J.B., Qońyrbaeva G.Q., Utegulova Z.N.

Tanymdyq közqaras aiasyndaғы frazeologialyq birlіkterdіñ әlemdіk beinesі [The world picture of phraseological units within the framework of a cognitive approach] // «Abylai han atyndaғы QazHqjäneÄTU Habarşysy» jurnaly, «Filologia ğylymdary» seriesy. – 2023. – Tom 70. – No3. – B. 247-264. [in Kaz.]

[11] Bender A., Beller S. Mapping spatial frames of reference onto time: A review of theoretical accounts and empirical findings // *Cognition*. – 2014. – Vol. 132, № 3. – P. 342–382. – DOI: <https://doi.org/10.1016/j.cognition.2014.03.016>

[12] Vezhbitskaya A. Language, culture, and meaning. – Moscow: Nauka, 1996. – 384 p.

[13] Kobeeva A. K. Uaqyttyñ tildik metaforasy: kazakh tilindegi uaqyt ólshemderi [Linguistic metaphors of time: temporal measures in the Kazakh language] // *Kazakh til bilimindegi zhaña baғыttar*. – 2020. – T. 3, № 1. – B. 45–53. [in Kaz.]

[14] Kövecses Z. Metaphor: A practical introduction. 2nd ed. – Oxford: Oxford University Press, 2010. – 398 p.

[15] Zhou H., Luo X. Embodied-Cognitive Linguistics: Integrating Marxist perspectives on contemporary Cognitive Linguistics theory // *Frontiers in Psychology*. – 2024. – Vol. 15, Article 1475196. DOI: <https://doi.org/10.3389/fpsyg.2024.1475196>

## УАҚЫТТЫҢ МӘДЕНИЕТАРАЛЫҚ ЛИНГВИСТИКАЛЫҚ МОДЕЛЬДЕРІ

\*Кульманова З.Б.<sup>1</sup>

<sup>\*1</sup>Мичиган мемлекеттік университеті, Ист-Лансинг, АҚШ

**Аңдатпа.** Уақыт – адамзат танымындағы ең күрделі әрі маңызды ұғымдардың бірі. Оның тілдік бейнеленуі тек когнитивтік емес, сонымен қатар мәдени ерекшеліктерді танытудың маңызды құралы болып табылады. Осы мақалада уақыт ұғымының қазақ және ағылшын тілдеріндегі уақыт концептуализациясы мәдениетаралық лингвокогнитивтік тұрғыдан салыстырмалы түрде қарастырылады.

Зерттеудің басты мақсаты – екі түрлі тілдік-мәдени жүйеде уақыт ұғымының концептуалдық құрылымы мен семантикалық ерекшеліктерін салыстыра отырып, олардың мәдени-танымдық парадигмаларын, ұқсастықтары мен айырмашылықтарын анықтау. Бұл мақсатқа жету үшін қазақ және ағылшын тілдеріндегі тілдік деректер іріктеліп алынып, лингвокогнитивтік және мәдениетаралық талдау әдістері қолданылды. Мәтіндік материалдар негізінде алынған метафоралық үлгілер жүйелі түрде сарапталып, олардың когнитивтік және мәдени мәні талданды. Қазақ тіліндегі метафоралар уақыт пен кеңістік ұғымдарының өзара тығыз байланысын бейнелей отырып, табиғат құбылыстары мен дәстүрлі

тұрмыс салтына негізделген бейнелерді ұсынады. Мысалы, уақыттың айналымдылығы, маусымдық сипаттары және табиғатпен үндестігі жиі байқалады. Ал ағылшын тіліндегі метафоралар көбінесе уақытты сызықтық құрылымда, сандық және механикалық модельде бейнелейді. Бұл тілде уақыт жиі «ақша», «ресурс» немесе «жол» ретінде сипатталады, бұл оның утилитарлық және экономикалық тұрғыдан бағаланатынын көрсетеді. Аталған айырмашылықтар екі тілдің мәдени-танымдық ерекшеліктері мен когнитивтік парадигмаларын айқын бейнелейді. Бұл зерттеу екі мәдениет арасындағы уақытты қабылдаудың ерекшеліктерін тереңірек түсінуге жол ашып, тілдік және мәдениаралық құзыреттілікті арттыруға ықпал етеді. Мақалада ұсынылған тұжырымдар мәдениетаралық білім беру бағдарламаларында, әсіресе шет тілін оқыту процесінде пайдалы болуы мүмкін. Сонымен қатар, зерттеу нәтижелері аударматану, мәдениетаралық коммуникация және когнитивтік лингвистика салаларында қолдануға әлеуетті.

**Тірек сөздер:** уақыт, концепт, метафоралық концептуализация, когнитивтік лингвистика, мәдениетаралық коммуникация, ұлттық дүниетаным, тілдік сана, салыстырмалы талдау

## КРОСС-КУЛЬТУРНЫЕ ЛИНГВИСТИЧЕСКИЕ МОДЕЛИ ВРЕМЕНИ

\*Кульманова З. Б.<sup>1</sup>

<sup>\*1</sup>Мичиганский государственный университет, Ист-Лансинг, США

**Аннотация.** Время является одной из самых сложных и значимых категорий в человеческом познании. Его языковое отражение представляет собой не только когнитивный, но и важный культурный механизм. В данной статье концептуализация времени в казахском и английском языках рассматривается в сравнительном аспекте с точки зрения межкультурного лингвокогнитивного анализа.

Цель исследования – выявить концептуальную структуру и семантические особенности представления времени в двух различных языково-культурных системах, а также определить сходства и различия их культурно-когнитивных парадигм. Для достижения этой цели были отобраны языковые данные казахского и английского языков, использованы методы лингвокогнитивного и межкультурного анализа. Метафорические модели, извлечённые из текстового материала, подверглись системному анализу с акцентом на их когнитивную и культурную значимость. Метафоры в казахском языке демонстрируют тесную взаимосвязь понятий времени и пространства, опираясь на природные явления и традиционный образ жизни. Например, в языке часто прослеживаются представления



о цикличности времени, его сезонных характеристиках и гармонии с природой. В английском языке метафоры, как правило, отражают линейную структуру времени и его восприятие в количественных и механических моделях. В этом языке время часто описывается как «деньги», «ресурс» или «дорога», что указывает на его утилитарное и экономическое осмысление. Эти различия ярко отражают культурно-когнитивные особенности двух языков. Настоящее исследование способствует более глубокому пониманию восприятия времени в различных культурах и развитию языковой и межкультурной компетентности. Выводы, представленные в статье, могут быть полезны в межкультурных образовательных программах, особенно в процессе преподавания иностранных языков. Кроме того, результаты исследования имеют практическую ценность для таких областей, как переводоведение, межкультурная коммуникация и когнитивная лингвистика.

**Ключевые слова:** концепт, время, метафорическая концептуализация, когнитивная лингвистика, межкультурная коммуникация, национальное мировоззрение, языковое сознание, сравнительный анализ

*Мақала түсті / Статья поступила / Received: 23.06.2025.*

*Жариялауға қабылданды / Принята к публикации / Accepted: 25.09.2025.*

#### ***Information about the author:***

Kulmanova Zulfiya Bekbulatovna – PhD, Postdoctoral Research Fellow, Michigan State University, East Lansing, the USA, e-mail: kulmanov@msu.edu, <https://orcid.org/0000-0001-8791-032X>

#### ***Автор туралы мәлімет:***

Кульманова Зульфия Бекбулатовна – PhD, постдокторантура зерттеушісі, Мичиганский государственный университет, Ист-Лансинг, США, e-mail: kulmanov@msu.edu, <https://orcid.org/0000-0001-8791-032X>

#### ***Информация об авторе:***

Кульманова Зульфия Бекбулатовна – PhD, научный сотрудник постдокторантуры, Мичиган мемлекеттік университеті, Ист-Лансинг, АҚШ, e-mail: kulmanov@msu.edu, <https://orcid.org/0000-0001-8791-032X>