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1 M. Auezov South Kazakhstan University,
Shymkent, Kazakhstan.
2 Al-Farabi Kazakh National University, Almaty,
Kazakhstan.

Corresponding author email address:
tileuberdiev.bolatbek@proton.me

Psycholinguistic and Cognitive Foundations of Kazakh and English Mythotoponyms: A Comparative Linguistic Study

Smatova. Aliya¹, Tileuberdiev. Bolatbek^{2*}, Kaldygozova.
Sandugash¹, Jilkishiyeva Maira¹, Omarova. Nurlybek¹,
Medetbekova. Nurgul¹



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ABSTRACT

Objective: The present study aimed to explore the cognitive and cultural foundations of Kazakh and English mythotoponyms by examining how relationships between humans, landscapes, mythology, and collective memory are represented through place names.

Methods and Materials: Using a qualitative comparative-typological design, this study analyzed more than 50 mythotoponyms collected from historical toponymic dictionaries, scholarly works on onomastics, and folklore-based sources. The data were examined through a cognitive-cultural framework focusing on semantic motivation, conceptual categorization, symbolic representation, and the role of mythological narratives in constructing spatial meanings.

Findings: The findings indicated that mythotoponyms in both linguistic traditions function as cultural signs that preserve collective memory and transmit symbolic knowledge across generations. However, differences were observed in the dominant patterns of meaning construction. Kazakh mythotoponyms frequently reflected relationships between sacred landscapes, natural elements, ancestral memories, and spiritual interpretations of place, whereas English mythotoponyms more commonly incorporated legendary figures, religious narratives, historical associations, and human interactions with landscapes. These patterns are interpreted as culturally shaped ways of experiencing and representing space rather than fixed characteristics of national identity.

Conclusion: The study highlights the role of place names as embodied cultural expressions through which human communities negotiate memory, identity, and relationships with their surroundings. By connecting cognition, language, and cultural experience, this research contributes to interdisciplinary understanding of how symbolic environments shape human meaning-making.

Keywords: Mythotoponymy, Cognitive Linguistics, Cultural Memory, Embodied Cognition, Comparative Onomastics.

Introduction

The identity and worldview of every people, their ethnic culture and spiritual life, are reflected in a certain space at any time and in any circumstances. And the entire life of a people, the cultural and spiritual wealth that has been formed over the centuries, finds its expression primarily in the language of that people and is passed down from generation to generation. In addition, the language of each people preserves historical, spiritual and cultural information and passes it on from generation to generation. One of such linguistic units with rich content and great cognitive significance is toponymic names. Toponymy is an important linguistic and cultural phenomenon that provides a wealth of information about the knowledge and worldview of the people. They serve as a reflection of the national worldview, determining the connection of a particular people with nature, history, and social structure. That is why toponymic space is becoming an important object of study as an ethnographic field reflecting the spiritual and cultural identity of the people. Ethnocognitive toponymic layers are toponymic layers (types of toponyms or sets of toponyms) that are based on certain types of worldview and reflect them in a linguistic-mental form. For example, some toponyms arose (formed) on the basis of mythical (mythological) knowledge. Therefore, we can attribute them to mythical (mythological) toponyms or mythical (mythological) ethnocognitive (worldview) layer.

As research has shown, toponyms are considered not only linguistic symbols, but also cognitive knowledge that expresses the knowledge, customs, and historical memory of the people. Therefore, by comparing Kazakh and English toponyms, we have the opportunity to reveal the peculiarities of national knowledge, cultural codes, and models of spatial representation. "The linguistic image of the world, the national identity of each ethnic group, is associated with experience and knowledge. "Because the signifier function of a linguistic sign is not only in communication with the outside world, but also in the knowledge of what a person has seen and experienced in life, and what he has experienced in his heart. Its linguistic image, national spiritual essence are different in every nation" (Tleuberdiev, 2006; Tleuberdiev et al., 2026). The Kazakh-English toponymic space has been formed over several centuries in complex

historical, cultural and linguistic conditions. In general, toponymy is one of the most important areas in Kazakh and English linguistics, as well as in the field of onomastics. "Topical issues of toponymy have always attracted the attention of scientists and become an object of research. The origin of toponymic names in the Kazakh language dates back to the Sak, Hun, Uysin, and Kanly eras, while some of them entered the Ural-Altai language community, and some of them entered the ancient Turkic language and, under the influence of other languages, Arabic, Persian, and Russian (Zhanuzak, 2011a, 2011b). The history of the formation of English place names is quite complex. There are many factors, not the least of which are the waves of conquest of England during this period - during this time most of the toponyms were formed. The toponymy of England, developed over many centuries and under the influence of a number of languages, is now a single set of names. England is rich in toponymy, which has French, Celtic, Norman, French, Latin, Old English and other roots from the languages that formed it at different stages of the state's existence. Each of these languages contributed to the development of existing toponyms. The English toponymic picture of the world is a complex and multifaceted phenomenon that reflects the history, culture and geography of the English-speaking world. The study of toponyms allows for a deeper understanding of the worldview and conceptual picture of the world of English speakers, as well as the history and cultural heritage of different regions.

The cognitive knowledge of each people is formed due to their ability to think and experience of perceiving the world. A person's thinking and cognition are reflected in their language. Language has absorbed information for centuries, processed it, passed on linguistic units from generation to generation, becoming an important tool that reflects the culture, history, and worldview of the people. The way of life of each people is formed depending on historical, geographical, climatic, social and economic conditions. "The history of the origin and emergence of toponyms (place and water names) is directly related, first of all, to the richness of the national language, the structure of public life in each historical era, its socio-economic situation, the professional life of the people, the development of the state and the increase and abundance of settlements" (Zhanuzak, 2011b). Kazakh and English toponymic names are formed not

only under the influence of different geographical, historical and cultural conditions, but also on the basis of the cognitive structures and peculiarities of the national linguistic consciousness of each nation. The living environment, historical development and worldview of each people affect not only linguistic units, but also the mental map formed through them. While toponyms in the Kazakh land are often associated with natural features (mountains, rivers, deserts, plains), historical events, types of professional activities, and the names of clans and tribes, all of these names serve as cognitive representations of certain concepts (e.g., "land", "ancestors", "holy place"). In English toponymy, along with geographical features, the influence of Celtic, Anglo-Saxon, and Norman cultures is evident, giving rise to concepts such as "religious center," "castle," and "church." Moreover, mythological and household names in Kazakh toponymy are based on cognitive models expressing the nation's relationship to sacred space, while names associated with church or feudal structures in English toponyms are linguistic manifestations of medieval religious and social cognition. Thus, toponyms in both languages are a linguistic manifestation of the cognitive system that reflects the historical memory, cultural codes, and worldview of those nations. By studying the toponymic names of geographical names, one can determine the specific features of that people.

Theoretical Framework

It is known that the formation of place names is greatly influenced by the knowledge and perception of the world of each nation. The origin of geographical names (toponyms), the reasons for their naming have always been a topical issue that has attracted the attention of scientists. The meaning, history of origin, and secrets unknown to the public of Kazakh-English toponyms have not been fully revealed. The continuity of the past and present of any country is reflected in their place names – toponyms. Human cognition and cognitive activity are closely related to their language. The formation of toponyms in a person's linguistic consciousness is a cognitive basis that reflects their culture and worldview, historical memory, and social structure. Each toponym contributes to the formation of a person's understanding of space, his relationship with nature and society, as well as linguistic and cultural values. Toponymic space is a key part of the cognitive map of each nation. Toponyms, in addition to preserving

historical memory in linguistic consciousness, also express national identity. "Land and water names are cultural and historical heritage, national value. These names have always preserved the secrets of the country's history, the identity and worldview of the people, natural phenomena and professions, customs and traditions."

The study of Kazakh toponymy has always been a topical issue that has attracted the attention of scientists. G. Konkashpaev's work "Dictionary of Kazakh Geographical Names" was one of the first steps in the study of toponyms (Konkashpaev, 1963). Kazakh toponymy is a mirror of the history, culture, worldview and spiritual world of our people. Scientific research in this area has been systematically developing since the middle of the 20th century. Famous scientists who have comprehensively studied toponymy in our country and their works have made a great contribution to the formation and development of national onomastics. E. Kerimbayev's work "The Secret of Names" (Kerimbayev et al., 2007) is intended to explain the origin and meaning of place names in the Kazakh language within the framework of folk lore. E. Kerimbayev's work "Toponymic Space of Southern Kazakhstan" (Kerimbayev et al., 2007) a scientific work that comprehensively studied the system of names of the region. This work extensively reveals the geographical, historical and social content of local names, and also presents cartographic examples of names. B. Tileuberdiev's study "Ethnolinguistic lexicon of South Kazakhstan toponyms" (Tileuberdiev et al., 2014) examines the toponymic names of the Southern region from an ethnolinguistic perspective. The scientist achieves new results at the intersection of onomastics and ethnolinguistics, describing the ethnological and linguistic features of regional names. The study by K. Rysbergenova "Historical and linguistic study of toponyms of Southern Kazakhstan" (Rysbergen, 2011) is an important work that analyzes the toponymic system of the South Kazakhstan region from a historical and linguistic perspective. The scientist studies the etymology, structure and historical development of names. Koishybayev E. "The Dictionary of Land-Water Names of Kazakhstan" (Meirbekov & Aimbetova, 2020). One of the first comprehensive works dedicated to explaining the etymological, lexical and historical nature of geographical names in the territory of Kazakhstan. This

work is of great importance as one of the first systematic dictionaries in the field of Kazakh toponymy. The research dictionary presents rich content in linguistic, historical and ethnographic terms. T. Zhanuzakov's "Dictionary of Geographical Names of Kazakhstan" is a detailed study of a regional nature, covering a full range of regional toponyms. Each name is given an etymological explanation, sometimes supplemented with historical data. Particular attention is paid to names associated with historical figures, clans, and natural features (Yeginbayeva et al., 2024). The etymological reference book "Land and Water Names" systematically presents the origin, historical and lexical meaning of many land and water names in Kazakhstan. In addition to linguistic methods, the reference book takes into account the historical and cultural context. Names associated with the worldview system and customs of the Kazakh people are widely covered. This work by T. Zhanuzak is a fundamental study in the field of toponymy (Zhanuzak, 2011b). Zhanuzak in his work "The Origin of Historical Land-water Names" deeply studied the origin of land-water names in our country (Zhanuzak, 2010). The five-volume fundamental work "Kazakh Onomastics" by T. Zhanzak, a scientist who studies Kazakh toponyms in general, was published in 2021 with the support of the International Turkic Academy. This collection comprehensively covers the theoretical and applied issues of Kazakh onomastics and systematically presents the results of the scientist's many years of research. The study by scientist Zh. Mankeeva "Cognitive Foundations of Ethnocultural Names in the Kazakh Language" Mankeeva (2008) is a groundbreaking work in the field of ethnolinguistics and cognitive linguistics. Here, the place of ethnocultural names in the Kazakh language in the national worldview, their cultural and historical content, and their symbolic meaning are deeply studied.

In Great Britain, the importance of the science of toponymy in the field of onomastics was recognized from the very beginning. This was primarily due to the fact that research in this area was based on a specific institutional framework. In particular, the establishment of the Society (1930) English Place-Name Society (EPNS or Society for short) paved the way for the beginning of fundamental scientific research in this field. The society was founded in 1923 by A. Mawer and began publishing its first scientific publications in 1924 (Armstrong et al.,

1992). After A. Mawer, the Society was headed and worked by F. Stenton, B. Dickins, H. Smith, K. Cameron, V. Watts, R. Coats. The current president of the English Place-Name Society (EPNS) is Professor C. Hough. The activities of this society have made a significant contribution to the scientific systematization of British toponymy, the preservation of historical and linguistic heritage, and the development of onomastic research.

Eilert Ekwall, a classic researcher of English toponymy, in his work "The Concise Oxford Dictionary of English Place-Names" (Ekwall, 1960). Ekwall's Concise Oxford Dictionary of English Toponyms was first published in 1936 and has become the standard reference work on the etymology of English place names. This edition, the fourth, gives the historical and modern forms of over 10,000 place names together with explanations of their meanings. The dictionary covers the names of countries, counties and other important subdivisions, towns, parishes, villages and some names of estates and hamlets, even farms, the names of which are old and etymologically interesting, rivers, lakes, and the names of headlands, hills and bays for which there is early material. The introduction explains the principles that guide place-name research and describes the various strands – English, Celtic, Scandinavian, Latin and French – that form the basis in England. Margaret Gelling's "Signposts to the Past" [14] explored the relationship between toponyms and landscape. She explained English place names by relating them to natural geography. Edition of a widely used introduction to place names and their meaning: Latin, Celtic, English, Scandinavian and French names; chronology, boundaries, place names and archaeology, personal names (Gelling, 1978).

The work of David Mills, a scholar of English and British place-names in general, "A Dictionary of British Place-Names" is one of the most important scientific works that systematically explains English place-names (Mills, 2011). Originally published in 2004, Victor Watts' alphabetic dictionary "The Cambridge Dictionary of English Place-Names" is a large reference work based on the archives of the English Society of Toponyms and reflecting scholarship in this area, all names of cities, towns, villages, farms, rivers, streams, hills and other geographical places included in the Ordnance Survey Road Atlas of Great Britain (1983). It gives an idea of modern England and not only of its historical past. Each

toponym entry has a unique reference number in the National Network, a list of historical spellings, the age and meaning of the name, and its etymology (pre-Indo-European, Indo-European, Celtic, primitive Welsh, Anglo-Saxon, Old Scandinavian, Old French, Middle English, Modern English). Where it is appropriate, comments on comparable names, problems, history and meaning of the name for the settlement, economic and social history, development of the language and its pronunciation and spelling variants are given. Victor Watts's "The Cambridge Dictionary of English Place-Names" is considered a modern continuation of Ekwall's work (Watts, 2004). The most authoritative of the English scientific toponymic dictionaries are those of Mills (2011) and Watts (2004). Mills (2011), Watts (2004), Ekwall's (1960) dictionary, of course, is somewhat outdated, but has not lost its authority. The dictionaries of the prolific linguist A. Room, a dictionary of toponyms in the British Isles (Room, 1988), belong to the section of rather popular scientific, but well-made dictionaries.

The scholar Nicolaisen W. F. H.'s study *"Place-name legends: An onomastic mythology"* is devoted to place-name legends: an onomastic mythology (Nicolaisen, 1976). The first edition of this book was published in 1961, and since then it has gained great popularity and has been reprinted four times. Since Kenneth Cameron's work "English Place Names" was first published in 1961, many new and important data have been published in the field of English toponymy research. This work was revised and corrected by the author in 1996, and a new edition was published, supplemented with several new chapters. This work by K. Cameron is a very valuable and comprehensive study in the science of toponymy (Cameron, 1976).

The scholarly collection *Place-Names, Language and the Anglo-Saxon Landscape*, edited by Nicholas J. Higham and Martin J. Ryan, is a major work on the study of geographical names and the linguistic and cultural space of England in the Anglo-Saxon period. *Place-Names, Language and the Anglo-Saxon Landscape* is a major scholarly collection dedicated to the study of the culture and language of Anglo-Saxon England. It reveals the social, cultural and geographical features of that era through historical toponyms (Higham & Ryan, 2011).

Geographical names are unique linguistic units that reflect the worldview, spiritual identity, and historical and cultural experience of a nation. They not only

describe a certain territory, but also provide important information about the lifestyle, values, national identity, and mentality of the people inhabiting that place. The formation of toponyms is based on certain features. In the creation of geographical names of each people, a certain regularity is maintained that corresponds to the linguistic system. The surrounding reality, according to the worldview of the naming group, is reflected in the toponym. Information corresponding to human values is reflected in the toponym. The content of the toponym is also closely related to historical, social, geographical and other extralinguistic factors. Toponyms are national-characteristic features of the language. Toponyms are names of places and waters that have been formed in the linguistic consciousness of man since ancient times, they not only indicate geographical objects, but also contain historical, spiritual and cultural information about those places. One of the toponyms that has existed since ancient times is mythopoeonyms. Myth is the fruit of centuries-old thoughts of man about the creation of the world. That is why humanity constantly encounters mythical episodes at the level of consciousness. Mythical thinking also contributes to the creation of a toponymic space (map) of the world. The image of the mythological world has a special place in linguistic knowledge. Because the information in mythological knowledge is formed as a result of worlds that are important for that people. Mythical consciousness is closely related to the cognitive understanding and mythological thinking of each people. Over time, myth becomes intertwined with the mythological system of thought and acquires symbolic, semiotic meaning. "Mythology itself, which forms the mythical image of the world, is multi-layered and, from a diachronic point of view, multi-level. Mythology, which forms a model of the universe or a linguistic image of the universe, and depicts the mythical-cognitive image, is woven from layers: "heavenly" mythology, "earthly" mythology, "water" mythology, "animal" mythology, "demonic" mythology, etc. " Mythoponomies are names of places with mythological content, that is, geographical names formed in connection with the legends, beliefs and mythical worldview of the people. These names are based on myths and legends that arose around a certain geographical object (mountain, river, cave, lake, etc.) and reflect the nation's attitude to sacred space and spiritual connection with nature. For example, in the Kazakh

language, the names *Kazygurt*, *Khan Tengri* (Mount Tengri), *Aulie Ata*, and *Zheruyik* arose as a result of the people's mythical thinking. And the English toponymic names *Dragon Hill*, *Fairy Glen*, *Castle Hill*, *Torberry Hill*, *Torberry Hill*, *Glastonbury Tor*, *Pendle Hill*, *Puck's Hill* / *Puck's Lane* / *Puck's Wood*, *Boggart Hill* / *Boggart Wood* / *Boggart House* are associated with mythological images (dragon, demon, fairy).

The toponymic national image of the universe is a part (fragment) of the general folk (national) image of the universe. Khan Tengri (Mount Tengri) is a geographical toponym and a name with mythological and cultural significance. It is one of the highest and most famous mountains in Central Asia. Khan Tengri, which has mythological and cultural significance, is a spatial embodiment of an ancient concept. "Tengri" – in ancient Turkic languages, means "heaven", "god", that is, the supreme power. "Khan Tengri" – literally translated means "Khan of the Gods", or "King of Heaven". The middle world, which forms the mythical model and image of the universe, is the earth, the surface of the earth. The surface of the earth is personified in a mythological form in ancient Kazakh knowledge. For the Kazakh people, the land is recognized as a sacred space, a sacred homeland. "Zheruyik" is a blessed place associated with independence in the Turkic worldview. In general, it is important to determine the cognitive etymology and mythological foundation of the concept of "Zheruyik". When we say "Zheruyik", first of all, a blessed place comes to mind, which is closely connected with the philosophy of Asan Kayi in the history of the Kazakh people. This is because Asan Kayi rides a wind lantern and seeks Zheruyik for his people. Mythoponyms based on the mythology of "earth" are multi-layered in content (for example, mythological layers of "water", "mountain", "tree", "sand", etc.). In these mythological layers, various cults (*mountain cult*, *totemistic cult*, *tree cult*, etc.) are reflected. A person's cognitive world is formed as a result of their personal experiences and thinking systems. In this sense, language is not only a means of communication, but also a mirror that reflects a person's inner world, worldview, and how they perceive their environment. Through language, a person not only receives information, but also analyzes it in the mind and brings it into a certain structure. Therefore, the study of human behavior, worldview, and cultural attitudes through linguistic units and structures is one of

the important directions for cognitive linguistics and the theory of linguistic personality. «Therefore, a person's cognitive world is determined by his thinking and experience. The main indicator of a person's behavior is his language. Language is a tool that shows the result of processing the received information and arranging it in the mind» (Bazarbekov et al., 2024).

English toponyms are an important cultural and linguistic source that reflects the multi-layered historical development of the country, the complexity of its ethnic composition, and its natural and geographical features. The word hill is the basis of the largest number of names in English toponymy. Such a wide use of it is explained by the fact that the territory we are studying is located in the hills. There are quite a large number of hills in England, which consist of various forms of relief. Dragon Hill – The name given to several places in England associated with ancient myths about dragons. One of the most famous of the "Dragon's Hill" is a hill near Battersea. One of the most famous legends associated with "Dragon's Hill" is the legend that St. George, the patron saint of England, fought a dragon on this hill, killed it, and saved a princess. This legend is one of the most widespread and significant versions of English folklore. On the hill there is a white spot where no grass grows, which is believed to be the place where the dragon's blood was shed. In England, the name "Dragon's Hill" is associated with the victory of St. George over dragons, as well as with other legends about dragons. In English mythology, dragons are often depicted as evil beings. They abduct people, especially girls, or guard treasure. Usually, the hero fights the dragon, either to rescue the kidnapped person or to protect the treasure, and wins.

Glastonbury Tor – A hilltop near Glastonbury in Somerset, England. At its summit is the roofless St. Michael's Tower, a Grade I listed building. The site is a listed building under the care of the National Heritage Trust and is a protected historic monument. The hilltop is named after the legends of King Arthur and the Isle of Avalon. The site is considered to be a gateway to the fairy world.

Castle Hill – An ancient Iron Age settlement with a single mound located in the New Forest National Park in Hampshire, England. It is located in the Borough of Burley. This fortified area, consisting of a single mound and a ditch, covers an area of approximately five acres

and is well preserved, although it is crossed by paths leading to local houses. Some parts of the interior are swampy, while much of the area is covered in oak, birch, conifers, and hemlock. According to legend, this hill was once home to a local dragon, who was later slain by a knight from the nearby village of Brook.

Methods and Materials

Research Design

This study employed a qualitative comparative-typological research design to investigate the cognitive and cultural foundations of Kazakh and English mythotoponyms. A qualitative approach was selected because the purpose of the study was not to measure frequency or establish statistical relationships, but rather to interpret how mythological meanings, cultural symbols, and conceptual structures are represented through place names. The comparative approach was used to identify both shared patterns and culturally specific variations in the ways mythological narratives are embedded within geographical names. The analysis focused on the relationship between mythological knowledge, conceptual representation, linguistic expression, and cultural memory.

Data Sources and Corpus Construction

The research corpus consisted of more than 50 mythotoponyms from Kazakh and English linguistic traditions. The data included place names associated with mountains, rivers, caves, settlements, sacred locations, and other geographical features whose origins or cultural interpretations were connected with myths, legends, religious narratives, or traditional beliefs. The data were collected from published academic sources, including: historical and etymological toponymic dictionaries; scholarly works on Kazakh and English onomastics; folklore and mythology studies; cultural and historical descriptions of geographical names.

For Kazakh mythotoponyms, the main sources included studies by Zhanuzak, Kerimbayev, Tleuberdiev, Mankeeva, Kaidar, and other researchers of Kazakh ethnolinguistics and onomastics. For English mythotoponyms, the sources included established works on English place names and historical toponymy by researchers such as Ekwall, Cameron, Mills, Watts, and related studies of British cultural landscapes.

Selection Criteria for Mythotoponyms

To ensure consistency in data selection, place names were included in the corpus when they met at least one of the following criteria: The origin or interpretation of the place name was explicitly connected with a myth, legend, religious belief, or traditional narrative. The place name represented a symbolic relationship between a geographical location and culturally transmitted meanings. The associated narrative reflected mythological concepts related to sacred spaces, supernatural beings, ancestral memory, spiritual beliefs, or symbolic representations of nature.

Names that only described physical characteristics of places without mythological or symbolic associations were excluded from the analysis.

Analytical Framework

The collected mythotoponyms were analyzed using a cognitive-cultural framework developed from cognitive linguistics, cultural memory theory, and comparative onomastics. Each mythotonym was examined according to four analytical dimensions:

1. Mythological Source

This category identified the narrative background associated with the place name, including legends, religious traditions, supernatural beliefs, historical myths, or folklore narratives.

2. Conceptual Domain

This dimension examined the dominant conceptual structures represented by mythotoponyms. The identified domains included: sacred landscape; natural forces and elements; supernatural beings; religious symbolism; historical and legendary memory; human interaction with space.

3. Symbolic Meaning

This category focused on the cultural meanings attached to the place name and examined how geographical locations were transformed into symbolic spaces through collective interpretation.

4. Cultural Memory Function

This dimension analyzed how mythotoponyms preserve and transmit cultural knowledge by maintaining connections between contemporary communities and inherited narratives.

Cognitive Linguistic Analysis Procedure

The cognitive analysis followed three interconnected stages. First, semantic motivation was examined to identify why a particular geographical feature received a

mythologically motivated name. This stage focused on the relationship between the physical environment and the cultural concepts associated with it. Second, conceptual categorization was analyzed to determine how communities organize experiences of space through recurring cognitive domains, such as sacredness, ancestry, nature, spirituality, and heroic narratives. Third, symbolic representation was examined to understand how mythological meanings become attached to geographical locations and contribute to collective memory. Through this procedure, mythotoponyms were interpreted as cognitive-cultural signs rather than merely historical labels.

Comparative Analysis Procedure

After individual analysis of the selected mythotoponyms, cross-cultural comparison was conducted to identify similarities and differences between Kazakh and English naming traditions. The comparison focused on: dominant mythological themes; relationships between humans and landscapes; symbolic meanings attached to geographical space; patterns of cultural memory transmission. The aim of the comparison was not to classify cultures as fundamentally different cognitive systems, but to examine how different historical, ecological, and cultural experiences influence the representation of space through language.

Reliability and Interpretive Validity

To improve analytical reliability, interpretations were based on documented explanations from scholarly sources rather than solely on subjective assumptions. Each mythotoponym was examined through multiple sources whenever available, including linguistic, historical, and cultural references. Because qualitative interpretation may involve researcher judgment, the study followed a transparent analytical framework and clearly defined categories to reduce interpretive inconsistency.

Ethical Considerations

This study analyzed publicly available linguistic and cultural materials, including published dictionaries, academic studies, and historical sources. Therefore, no human participants were involved, and ethical approval was not required. All interpretations were based on referenced scholarly materials and documented cultural narratives.

Findings and Results

The study revealed that the mythical knowledge preserved as a cultural code plays an important role in Kazakh and English toponymy. In both languages, toponyms clearly show the connection of people with nature and the spiritual world. It turned out that while in Kazakh mythoponyms, natural phenomena and landscape features are associated with sacred concepts, in English mythoponyms, names based on legendary characters and historical events predominate.

The analysis revealed similarities and differences in the cognitive models of the two ethnic groups: while the concepts of nature and sacred space predominate in Kazakh toponymy, human activity and historical events are of greater importance in English toponymy. Comparative research has revealed the features of the manifestation of mythological worldview through toponyms, allowing for a deeper understanding of the cultural-cognitive code and worldview system of each people. By revealing the ethnocultural nature of mythologically based toponyms, the need to preserve the original features of national cultures in the conditions of globalization has been scientifically proven. This study, by comparing the mythological aspects of Kazakh and English toponymy, demonstrates the relationship between cultural space and linguistic worldview, and suggests new directions for ethnocultural research.

Toponymic names associated with mythical concepts, originating from the ancient knowledge of the people, have survived to this day and define the historical and cultural heritage of the nation. Mythoponyms are place names whose origin and meaning are associated with the mythology, legends, and beliefs of the people. Toponymic names are compiled on the basis of mental-toponymic stereotypes and describe the toponymic image of the world. It can be said that the presentation of the relationship between language and cognitive processes related to the creation of the national identity of toponyms relies on the cognitive system of language use. The linguistic image of the world, the national identity of each ethnic group, is different due to the experience and knowledge of the ethnic group. Because the signifier function of a linguistic symbol is not only in its connection with the outside world, but also forms the basis of what a person experiences and experiences in life. Toponymic names, reflecting the national spiritual

identity of the Kazakh people, are closely related to the names of steppes, mountains, ridges, etc. By studying the interrelationship of national knowledge and linguistic space, we can reveal the semantic nature, conceptual content, and cultural significance of toponyms. The Kazakh people have long been nomadic. The toponymic names characteristic of the Kazakh people are deeply connected with the natural environment and ecosystem. Toponyms are formed depending on the characteristics of the natural environment. For example: *Bayanaul* (mountainous region), *Zhaiyk* (river name), *Kyzylkum* (desert region), *Saryarka* (wide plain). In addition, Kazakh toponyms are associated with certain historical facts, mythological events, and legends. Kazakh place names are formed in connection with ancient myths and legends. Scientist A. Kaidar said, "One of the treasures that the Kazakh people have been creating for themselves is legends and myths. They appeared in time immemorial, were enriched, transformed, but have not disappeared and have reached the present day." "From legends and myths, we can learn about the way of life and lifestyle, worldview and concepts of our people, and through them we can see the face and essence of our nation," he says, collecting toponyms that arose in connection with myths and legends in his research and focusing on the history of their origin. *Burabai*, *Kelinshektay*, *Ile*, *Kalmakkyrgan*, *Bayanaul*, *Akmola*, *Kultobe*, *Kazygurt*, *Kyrykkyz*, *Babai Tukti Shashty Aziz*, *Kyryk sheit* and etc. reveal the ethnolinguistic nature of mythopoeonyms (Kaidar, 2013).

In the Kazakh people's lore, place names associated with the "mountain" mythology are often found. The people believed that the sacred mountain *Kok-Tobe* was located in the center, at the heart of the sacred homeland. In the "mountain" mythology, in addition to *Kok-Tobe*, there are also sacred mountains such as *Kazygurt Mountain*, *Betai Ata Mountain*, *Alatau*, *Karatau*, etc. "The concept, which originated from the ancient Turkic concept of "ıdık bash" (sacred Bash (bash-shyn) mountain), later left its mark on the Kazakhs' mountain cult in ethnography, folklore, and onomastics" (Tleuberdiev et al., 2014). In Kazakh toponymy, there are also mythoponomies with names associated with mountain relief and height (*ridge*, *peak*, *rock*, *hill*, *peak*, *ridge*, *ridge*). One of the mythoponomical names that arose in connection with the concept of mountain is called *Kazygut*. A group of regional toponyms, reflecting

very ancient mythological beliefs, are associated with cave names. There are speleonyms in Kazakh land such as *Zheti ungir*, *Kos ungir*, *Zhaltyr ungir*, *Bir auyzdy*, and *Ush auyzdy ungir*. The information about these microtoponymic names and the mentioned objects contains mythological cognitive data. The sacred meaning of the caves, which were once considered sacred places, has diminished over time, and therefore some mythological information about the caves has been forgotten. If in ancient times caves served as sacred places for pilgrimage and certain rituals, in later eras they lost their sacred functions. "Cave mythology is an isolated, practically closed space, hollow inside, connected to another space (the outside) only by a single corridor, and this form has become the form-model of the space of each mythological layer" (Kondybai, 2008).

It is known that the origins of the worldview of every people are based on mythological consciousness. In the primitive period, people, unable to understand the meaning of mysterious phenomena in nature, tried to explain them, as a result of which various myths and legends appeared. This mythical knowledge was closely connected with real life and left its mark on the names of spaces - toponyms of land and water. Such names with a mythological basis have been preserved in the memory of the people for centuries and have survived to this day. They are not only linguistic units, but also a reflection of the spiritual and cultural worldview of the ethnos. Mythological toponymy is a set of names of places and water bodies based on myths and legends. This vocabulary is an important tool for conveying the mythological worldview and historical and cultural experience of a particular people through language. Mythological toponymy includes ancient names, names related to gods and spiritual images, sacred places and symbols, as well as names related to the forces and phenomena of nature. Such vocabulary allows us to understand how people perceive the world and the structure of their mythological consciousness. "If we look closely at the background of some seemingly insignificant place names, we can see historical, ethnolinguistic, mythical, religious, etc. data. At their core, we can see not only linguistic motives, but also various manifestations of the life of the community living in that region, its worldview, and past events." (Kaidar, 2013).

The toponymic names of the Kazakh people are associated with the nomadic lifestyle, sedentary lifestyle, and are associated with the religious and mythological views of the local population. It is clear that in the Kazakh toponymic system, toponyms associated with mythological concepts and religious beliefs are a legacy of ancient clans and tribes. Toponyms of this type are most common in the southern region of our republic and in the Mangistau region. For example, *Asykata*, *Babaata*, *Shakpakata*, *Aulieagash*, *Auliekum*, *Aulieata*, *Zheruyik*, *Kansenir*, *Kandykuduk*, *Kaynadyr*, *Maybulak*, *Kazygurt*, etc. The mythopoeonyms we are considering are based on myths, legends and stories that arose from the knowledge of the people, are associated with real historical events, are associated with the names of clans and tribes, and arise from religious cult knowledge.

In Kostanay region, there is a lake, Auliekol, named after a settlement. According to folk legend, "The lake dried up underfoot one day, disappeared, and reappeared at night. Then it was called Auliekol" (Zhanuzak, 2010). 60 km southeast of Balkhash city.

The study of national toponymy from a cognitive perspective requires a comprehensive approach. "The toponymic image of the universe and the toponymic system represent two different forms of being. Here, the toponymic image of the universe reflects mental being, while the toponymic system is associated with ontological being. The toponymic image of the universe is based on the national toponymic system. In it, the accumulated experience, skills and knowledge of the people in the process of mastering space, adapting to their own lifestyle, and recognizing the environment in general are collected in the collective consciousness in the form of a system of toponymic knowledge, reflected and verbalized through language" (Rysbergen, 2011).

Another group of geographical names in the Kazakh language, related to ancient mythological concepts and notions, is associated with "sacred trees." "Tree mythology" is associated with the very ancient cult of the "universal tree." "The universal tree is one of the most important mythical cult objects. The traces and symbols of this cult are present in almost all mythological traditions. There are also many traces of this cult in the Kazakh tradition," writes S. Kondybay. Local geographical names related to the cult of "sacred trees" A sacred tree is a tree with an unusually large, thick trunk, growing alone at the head of a grave, spring, or in

a desert. Such a tree is considered sacred, people go to its top to worship, and ritually tie a cloth (cloth, world) to it. This ritual originates from the ancient belief that the sacred tree serves as a connecting link between the three mythical worlds - heaven, earth, and the underworld. Sacred trees are found in abundance in the Kazakh steppes. Near the sacred tree are seven young trees that draw their nourishment from the same root. The people called them seven brothers. And the twin plane trees called "Bozbala and Boyzhetken" are also considered descendants of this sacred tree. Women who pass between "Bozbala and Boyzhetken" are blessed with children, and the abundant water dripping from Aulieagash, like tears, is said to be a cure for various diseases.

Geographical names in English are a system of cognitive symbols that reflect the relationship of people to the surrounding space, their historical and cultural knowledge. Names related to space, especially the components denoting natural objects – *hill*, *mount*, *river*, *wood*, *forest*, *brook*, *dale*, *field* are not only geographical coordinates, but also cognitive structures with a historical and cultural load.

There are several mythopoeic names associated with the word *hill* in English, as the word refers not only to a type of landform, but also to spaces with mythological, legendary, or spiritual significance. Such mythopoeic names occupy a special place in the historical memory of the people. One Tree Hill is a historical and cultural site in London. Some legends describe the site as an ancient place where religious ceremonies were held. The symbolism of the single tree represents the spirituality of nature, solitude and sacredness. Glastonbury Tor – Although not directly named with the word "hill", this hill is derived from the Anglo-Saxon word *tor*, which means "high hill". According to legend, this place is associated with the myth of *Avalon*, King Arthur and religious mystical powers. Notting Hill – The name Notting Hill historically means "hillside". This name is often associated with the concept of "high status", "special area". The word *hill* in the examples given is used not only as a geographical sign, but also as a cognitive code denoting a symbolic, mythological, and sometimes even mystical space. *The names Parliament Hill and Notting Hill* not only denote a feature of the terrain, they are also known as historically prestigious areas of London. Such names are associated in the linguistic consciousness with

the concepts of "height", "status" and "historicity". And the mount component (Mount Snowdon, Mount Everest) reflects a cognitive model associated with height, grandeur and heroism. The name Mount Everest is a name given by British geographers during the colonial period, which in turn also reflects the relationship between space and power.

The River component is perceived as a natural object that organizes space. The River Thames and the River Avon are the main historical and cultural rivers of the country. It should be noted that the word Avon means "river" in Celtic, so the phrase River Avon is formed as a pleonasm - "River of river". This cognitive identity is the result of the overlap of different cultures (Celtic and English). There are several mythopoeic names associated with the word River. These toponyms, in addition to representing river names, are closely related to the mythology, historical memory and cultural space of the region. For example, the River Thames is the most famous river in England. It is the core of a historical, cultural and mythological space. The Thames is not only the main waterway that influenced the development of London, but also a symbol that appears in many literary and mythological works. On a mythical level, the Thames is often described as a symbol of the British spirit. Legends say that the river has a "soul" that is linked to the fate of London. William Blake and other poets have described the river as a symbol of mystical power, a symbol of the great national heritage. There are several rivers named Avon in England, but the most famous is the Avon, which flows through Stratford-upon-Avon, Shakespeare's birthplace. It should be noted that the word *Avon* comes from the Celtic language and means "river". The cognitive meaning of this name is a reflection of the overlap of cultures, that is, Celtic and English knowledge. Through its association with Shakespeare, the River Avon has a mythical character in the national literary memory. The River Severn is one of the longest rivers in Great Britain. According to legend, the name of the river is associated with the name of a mermaid named Sabrina. Sabrina is a river spirit in British mythology, sometimes associated with tragedy. This myth is the basis for the perception of the River Severn as a mystical, living space in popular culture. Mythopoeias associated with the word River represent the river not only as a natural object, but also as a space enriched with spiritual, cultural and mythological

meaning. The rivers *Thames*, *Avon*, *Severn* in particular have a special symbolic meaning in the English national memory.

In both peoples, mythical knowledge was transmitted from generation to generation through toponymy and has been preserved to this day. Each toponym expresses the peculiarities of the people's perception of nature and the environment, as well as their spiritual and cultural understanding. As the results of the study show, in both cultures, toponyms are formed as a reflection of the spiritual world of the people. Natural objects are intertwined with mythological knowledge and are entrenched in the minds of the people as sacred or terrifying places. This comparative study allows for a deeper understanding of the continuity of national worldview and language and is an important scientific basis for preserving national cultural identity in the context of globalization.

Discussion and Conclusion

The present study examined Kazakh and English mythotoponyms from a cognitive-cultural perspective, focusing on how geographical names function as symbolic structures connecting human experience, mythology, language, and cultural memory. The findings indicate that mythotoponyms are not merely linguistic references to physical locations; rather, they represent culturally meaningful constructions through which communities interpret landscapes and preserve shared narratives.

The results support previous theoretical perspectives in cognitive linguistics suggesting that meaning emerges from interactions between human experience, conceptual structures, and cultural contexts (Evans, 2012; Harder, 2010). From this perspective, place names reflect processes of conceptualization through which physical environments become meaningful spaces. A mountain, river, cave, or settlement acquires symbolic significance when it becomes connected with narratives, beliefs, and collective experiences.

One important finding of this study was that both Kazakh and English mythotoponyms function as mechanisms of cultural memory. This finding is consistent with cultural memory theory, which emphasizes that communities preserve knowledge through symbolic systems, including narratives, rituals,

and linguistic expressions (Davletova et al., 2025). Mythotoponyms represent a specific form of cultural memory because they embed stories and symbolic meanings within everyday geographical references. Through continuous use, these names maintain connections between contemporary communities and inherited cultural narratives.

However, the findings also revealed differences in the dominant conceptual domains of Kazakh and English mythotoponyms. Kazakh examples in the analyzed corpus showed frequent associations with sacred landscapes, natural elements, ancestral meanings, and spiritual interpretations of territory. This pattern can be understood in relation to historical relationships between communities and extensive natural environments, where mountains, rivers, plains, and other geographical features became important elements of cultural imagination.

The prominence of sacred landscapes in Kazakh mythotoponyms does not imply that Kazakh culture is exclusively organized around nature or spirituality. Rather, it reflects particular historical and cultural experiences through which certain landscapes acquired symbolic meanings. As cognitive approaches emphasize, human perception of environments is shaped by embodied experience, social practices, and cultural narratives. Therefore, geographical spaces become meaningful through continuous interaction between people and their surroundings.

In contrast, English mythotoponyms in the present study more frequently demonstrated connections with legendary figures, religious narratives, historical events, and folklore traditions. Examples such as Dragon Hill and Glastonbury Tor illustrate how landscapes become associated with cultural narratives involving heroes, supernatural beings, and historical memories. These findings correspond with studies of English place names showing that naming practices preserve traces of linguistic contact, settlement history, religious traditions, and cultural transformations (Mills, 2011; Watts, 2004).

The differences observed between Kazakh and English mythotoponyms can therefore be interpreted as variations in cultural meaning-making processes rather than differences in cognitive abilities or fixed national characteristics. Communities construct meanings of places through historically developed relationships with

landscapes, social structures, and symbolic traditions. In this sense, mythotoponyms demonstrate the diversity of human ways of experiencing and interpreting space.

Another important contribution of this study is highlighting the relationship between place names and embodied human experience. Human beings encounter landscapes through perception, movement, memory, and emotional attachment. Places become meaningful because they are experienced, narrated, and remembered. From this perspective, mythotoponyms represent points of interaction between body, mind, and culture: physical environments become cultural spaces through human interpretation and symbolic representation.

The findings also extend previous toponymic studies by demonstrating that mythotoponyms should not be examined only through etymological or historical analysis. A cognitive-cultural approach provides a broader understanding of why certain names remain meaningful across generations. Place names operate simultaneously as linguistic units, cultural symbols, and memory structures. Overall, the study contributes to interdisciplinary research by showing how language mediates relationships between humans and their environments. Mythotoponyms provide evidence that cultural meaning is not separate from physical space; rather, meanings are continuously produced through interactions between landscapes, collective memory, and human experience.

Conclusion

This study investigated the cognitive and cultural foundations of Kazakh and English mythotoponyms through a comparative linguistic approach. The findings indicate that mythologically motivated place names function as important cultural signs through which communities preserve collective memories, transmit symbolic knowledge, and construct meaningful relationships with geographical spaces. The analysis demonstrated that both Kazakh and English mythotoponyms transform physical locations into culturally meaningful environments. While Kazakh mythotoponyms in the analyzed corpus frequently emphasized sacred landscapes, natural symbolism, and spiritual relationships with territory, English mythotoponyms more commonly reflected legendary narratives, religious traditions, historical associations, and folklore-based meanings.

These differences should be understood as culturally shaped patterns of meaning construction rather than fixed characteristics of national identity. Mythotoponyms emerge from specific historical, ecological, and social experiences through which communities interpret and represent their environments. The main contribution of this research lies in demonstrating that place names represent an intersection between language, cognition, cultural memory, and human experience. They are not simply labels assigned to geographical locations; they are symbolic forms through which communities maintain connections with their past and organize meanings about their relationship with the world around them. By integrating cognitive linguistics, cultural memory studies, and comparative onomastics, this study provides a broader perspective on how human beings create meaningful relationships with places. Future research may expand this approach by incorporating field studies, interviews with native speakers, and cross-cultural investigations involving additional linguistic traditions.

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The authors of this article declared no conflict of interest.

Transparency of Data

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Authors' Contributions

All authors equally contributed to this study.

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