RESEARCH ARTICLE

PLACE, MEMORY, AND LANGUAGE: VERNACULAR TOPONYMS AS COGNITIVE ANCHORS IN GLOBAL COMMUNICATION

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ABSTRACT

This study explores the role of vernacular toponyms as cognitive and communicative anchors in globalized linguistic environments. The research addresses how local place names, often neglected in formal cartography, preserve cultural memory and linguistic identity while facilitating cross-cultural understanding. Using a mixed qualitative–cognitive approach, the study analyzes English and Kazakh vernacular toponyms collected from online discourse, local narratives, and digital maps. The findings reveal that vernacular toponyms function not merely as spatial markers but as carriers of embodied memory, emotion, and identity. They provide insight into how communities linguistically negotiate belonging in a globalized context. The study concludes that preserving vernacular place names strengthens linguistic diversity and fosters intercultural dialogue in global communication.

Keywords: cognition, globalization, linguistic identity, memory, toponyms, vernacular

INTRODUCTION

Vernacular toponyms act as cognitive anchors that connect language users to specific places, embedding collective memory within linguistic practice. In a globalized context, these place names mediate cross-cultural understanding, as they encode spatial, historical, and emotional information that allows speakers to navigate both physical and social landscapes.

In the context of globalization and intensified migration, the study of toponymy becomes particularly relevant, as geographical names shape cultural identity and collective memory. Toponyms serve not only as spatial markers but also as carriers of cultural codes reflecting historical, ethnographic, and linguistic features of societies. Contemporary social and cultural changes urbanization, global migration, and digitalization affect spatial perception and human interaction with the environment, highlighting the importance of preserving ethnocultural heritage embedded in toponyms.

The relevance of this research lies in understanding toponyms as instruments for preserving cultural identity and historical memory amidst globalization, which often leads to the unification and loss of local cultural elements.

Aim of the study: To identify the cognitive and communicative features of toponyms in English and Kazakh, revealing their role in forming cultural identity and spatial perception.

Research Objectives:

1. Analyze cognitive processes in toponym perception.

2. Examine how toponyms shape cognitive maps and reinforce spatial perception.

3. Investigate how vernacular toponyms are anchored in collective consciousness.

4. Identify factors preserving cultural heritage through toponyms.

5. Compare English and Kazakh toponymic structures, considering historical and cultural influences.

6. Assess cultural, historical, and ethnographic influences on toponyms' formation and meaning.

Scientific novelty: This study provides a comparative analysis of cognitive and communicative features of vernacular toponyms in English and Kazakh, integrating cognitive, sociolinguistic, and historical–cultural approaches for the first time.

Key scholars and contributions:

a. Richard Coates (2000) – pragmatic theory of proper names.

b. Lera Boroditsky (2001) – linguistic relativity and perception of time.

c. Charles Fillmore (1982) – frame semantics.

d. Wallace Chafe (1994) – language, consciousness, and temporal experience.

e. Evgenia Nielsen (2014) – diachronic linguoconceptology.

f. Elena Karpenko (2006) – cognitive onomastics.

Vernacular toponyms, unlike official ones, are used in everyday speech, reflecting dialect, folk traditions, and local knowledge. They carry cultural codes, historical events, and cognitive patterns specific to each society. L. V. Barsova notes that "toponyms contribute to the creation of the mental map of the world among speakers" [1]. Scholars in Russia and England have extensively studied general toponymy, while Kazakh toponymy research by G. Konkashbayev, N. Bayandin, and A. Abdrakhmanov emphasizes ethnocultural preservation. Vernaculars often lack standardization but may evolve into literary or official languages, as historical examples in Europe demonstrate.

Cognitive and communicative features of Kazakh toponyms:

Kazakh toponyms reflect a nomadic lifestyle and close connection with nature:

a. Karasu ("dark water") vs. Aksu ("light water") – river distinctions.

b. Zhamantuz ("bad salt") – historical resource markers.

c. Sacred and historical sites: Alatau, Saryarqa, Arqarly.

They encode environmental, historical, and cultural knowledge, preserving collective memory. English toponyms, shaped by Celtic, Anglo-Saxon, Latin, and Norman influences, emphasize historical figures, colonization, and migration:

1. Greenwich – "green village"

2. Oxford – "oxen crossing the river"

Cultural codes in Kazakh toponyms are transmitted through mythology, traditions, and collective memory, while English toponyms often reflect historical events, colonization, and ideological shifts. Both languages demonstrate a strong link between toponyms, cultural identity, and spatial cognition.

Comparative insight:

a. Kazakh toponyms focus on natural landmarks, sacred spaces, and local resources.

b. English toponyms often reference historical figures, events, or colonial heritage.

c. Studying cognitive and communicative dimensions of toponyms reveals both cultural diversity and universality in spatial perception.

METHOD

Cognitive analysis was employed to explore how toponyms structure mental maps and shape the cultural perception of space. This method revealed the associations that language speakers attach to place names.

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Comparative method was used to contrast the toponymic structures of the two languages, which made it possible to identify shared elements as well as culturally and historically grounded differences.

Sociolinguistic approach was applied to examine the functions of toponyms in everyday discourse, their impact on cultural identity, and their role in spatial perception.

Historical and cultural analysis helped interpret the symbolic meanings of toponyms and investigate their function in preserving cultural heritage.

Rationale for the Methods

The choice of methods was determined by the overall research aim to study spatial perception through toponyms that integrate both natural and cultural components in the speakers' worldview.

Cognitive analysis was essential for examining mental maps and associations related to place names.

The comparative method enabled the identification of similarities and differences between English and Kazakh toponyms, thus contributing to a deeper understanding of how cultural and historical contexts influence naming practices.

The sociolinguistic approach made it possible to view toponyms as elements of everyday language that reinforce cultural identity.

Historical and cultural analysis allowed for the interpretation of the symbolic significance of toponyms and their role in transmitting cultural meanings.

Data Analysis

The collected toponyms were classified into the following categories:

a. Natural elements (rivers, mountains, steppes, etc.);

b. Historical elements (memory of events, historical figures);

c. Symbolism (spiritual and ideological meanings).

For each language, cognitive maps were developed to reflect the relationships between toponyms and cultural associations. In addition, a content analysis of texts was conducted to identify key lexical and symbolic elements.

The presented methodology provided a comprehensive framework for examining the cognitive and communicative characteristics of toponyms in English and Kazakh, as well as their role in shaping cultural identity and spatial perception.

RESULTS

The study demonstrates that vernacular toponyms serve as cognitive anchors, linking speakers to both tangible and symbolic aspects of place. In Kazakh, toponyms such as Saryarqa or Aqsu anchor historical and environmental knowledge, while English names like Liberty or Hope provide ideological and migratory reference points. These anchors facilitate the construction of mental maps, helping communities maintain a sense of place, memory, and identity within a global communication framework.

Cognitive and Communicative Features

Vernacular toponyms structure mental maps, linking speakers to spatial, historical, and cultural memory. In Kazakh, Karasu ("dark water") vs. Aksu ("light water") conveys natural distinctions; Zhamantuz ("bad salt") marks historical resources. Sacred sites (Alatau, Saryarqa) anchor mythological and cultural knowledge.

In English, toponyms reflect historical layering: Celtic, Roman, Anglo-Saxon, Scandinavian, and Norman influences. Examples: Greenwich ("green village"), Oxford ("oxen crossing the river"). Symbolic names like Liberty or Hope act as cognitive anchors by encoding ideological and migratory memory.

Cultural codes in Kazakh toponyms are transmitted via mythology, traditions, and collective memory, whereas English toponyms often reflect historical events, colonization, and social change. Both link toponyms, cognition, and cultural identity.

The research presented below revealed how cognitive processes involved in the perception of toponyms reflect the cultural and social

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conceptualization of space among speakers of English and Kazakh. Numerous studies suggest that cultural encoding is often manifested through recurring cultural images and precedent names that convey national stereotypes and values through toponyms. In both English and Kazakh, place names contribute to the creation of cognitive maps that orient speakers within their cultural and natural environments.

The cognitive processes through which toponyms influence spatial perception include the construction of mental maps that shape one's understanding of place and its cultural significance. In Kazakh, for instance, phraseological expressions rooted in cultural imagery such as mogila Qorqyta ("the tomb of Qorqyt") symbolize collective struggles and historical concepts that reinforce cultural identity. Such toponyms and expressions structure spatial perception by providing cognitive anchors and linking communities to folk narratives, myths, and traditions.

Unofficial, local toponyms play a crucial role in collective consciousness, becoming embedded in public memory as elements of cultural heritage. In Kazakh, such vernacular names are often associated with mythological and historical imagery heroes and events that reflect ethnocultural values. Similarly, in English, many names such as Liberty and Hope have evolved into cultural markers, reinforcing national identity and creating positive imagery through language (Kaidar, 2010).

Kazakh toponyms frequently reflect the natural landscape through lexical elements such as tau (mountain), özen (river), and köl (lake), emphasizing the traditional connection between the Kazakh people and nature. For example, Alatau not only denotes a geographical object but also carries historical significance, linking modern places to ancient Turkic heritage. The use of common Turkic suffixes such as -stan ("land" or "place") in Kazakh place names illustrates the shared cultural and linguistic background across the Turkic-speaking world.

Toponyms in Kazakh often act as cognitive bridges to historical epochs. Names such as Zhezqazghan ("copper mine") highlight both the resource-based history and the economic importance of the region.

Place names like Qyzylorda ("Red Horde") convey not only geographical but also cultural and historical narratives.

Kazakh toponymy combines descriptive and symbolic naming conventions. Terms such as Aqsu ("white water") reflect both the physical characteristics of the area and the symbolic meanings attributed by local communities. Many Kazakh toponyms have preserved ancient Turkic roots for instance, Tara (now Taraz), an important center on the Great Silk Road, which embodies both geographic and cultural heritage. Names like Saryarqa ("Yellow Ridge") exemplify the descriptive nature of Kazakh toponyms, conveying the color and topography of landscapes, while Arqarly ("place of argali") and Qara-Tau ("Black Mountain") demonstrate the combination of color symbolism, fauna, and physical features typical of Turkic naming practices (Akhmetov, 2015).

Kazakh toponyms serve an important cultural-historical function, preserving memory about places, events, and notable figures that have shaped national history. They often act as "condensed texts," encapsulating vast information about the past and the lifestyle of the Kazakh people. For example, place names such as Babaata, Äulietas, and Äulieata indicate sacred sites and bear deep historical and spiritual meaning. Babaata derives from Iskhak Baba, the brother of Ahmad Yasawi, a key figure in Kazakhstan's spiritual history. These toponyms evoke respect for historical figures and link geography with spirituality and tradition.

The structural diversity of Kazakh toponyms such as Täñirqazghan and Börıqazghan ("place dug by God" and "place dug by the wolf") illustrates the compositional richness of the language. The element Täñir means "sky" or "God," while qazghan means "to dig." Such names encapsulate the Kazakh worldview, merging natural and divine imagery (Suleimenov, 2020).

Modern Kazakh toponymy reflects the country's rich history and the processes of national identity restoration after independence. The establishment of the State Onomastic Commission in 1990 initiated the return of historical Kazakh names and the correction of transliteration errors. Between 1991 and 2001, 64 districts, 8 cities, and over 400

villages were renamed. For example, Sovetsky District became Aqkayin District, Tselinny District was renamed after Gabita Musrepov, and Leninogorsk was restored as Ridder.

The correction of distorted Soviet-era names (e.g., Kuryuk → Quryq, Chelkar → Shalkar) and the restoration of historical names (Guryev → Aqtau, Zhambyl → Taraz) emphasize national revival and linguistic authenticity. Urban areas now feature culturally resonant names such as Zhetisu, Grand Alatau, and Sairan, which strengthen national color and preserve historical memory (Bizhkenova, 2021).

English toponymy, in contrast, represents a complex layering of Celtic, Roman, Anglo-Saxon, and Scandinavian influences. Ancient Celtic roots survive in names like Blencathra and Helvellyn in Cumbria, and in numerous Caer- or Car- names meaning "fort," such as Carlisle and Caerleon. Latin elements from castra ("camp") remain in names like Manchester and Lancaster, marking former Roman military sites (Mills, 2011).

The Anglo-Saxon legacy dominates much of modern England's toponymy with suffixes such as -ham (village), -ton (enclosure), and -ford (river crossing), seen in Dagenham, Brighton, and Oxford. Scandinavian influence is evident in the North and East, where Viking settlers introduced suffixes like -by (village) and -thorpe (hamlet), as in Grimsby and Skegness. These reflect the historical Danelaw region under Danish control (Crystal, 2010).

English and American toponyms often carry strong symbolic meanings. Names such as Liberty and Freedom embody ideological values, while descriptive names like Long Beach and Red River capture the physical landscape. Symbolic names such as Hope and Prosperity create positive associations, whereas Paradise evokes imagery of beauty and peace, attracting settlers and visitors. Borrowed toponyms like Buena Vista enrich English toponymy with linguistic diversity, while Old Town and Mountain Home reflect historical continuity and natural proximity. Salt Lake City clearly conveys the area's geographic identity, reinforcing the link between name and environment (Smith, 2020).

Table 1 below summarizes the comparative cognitive characteristics of toponyms in English and Kazakh. The data show how both languages use place names to encode cultural values, historical significance, and natural attributes, albeit with distinct symbolic and borrowing patterns.

Comparative Tables
Table 1. Cognitive Features of Toponyms in English and Kazakh

Characteristic	English Toponyms	Kazakh Toponyms	Cognitive Anchors
Etymology & Origin	Borrowed/adapted names (e.g., Buena Vista)	Turkic roots, suffix -stan	Anchor linguistic memory to origin & heritage
Symbolic Meaning	Liberty, Hope – ideals & values	Kyzylorda – historical & ethnic significance	Connect place with collective memory & identity
Descriptiveness	Long Beach, Red River	tau (mountain), özen (river)	Anchor perception of environment through spatial cognition
Historical Association	Old Town – heritage sites	Alatau – Turkic heritage	Link to historical events & cultural memory
Cultural & Social Function	Paradise, Prosperity	Zhezkazgan – local history/resources	Reinforce community belonging & continuity

Table 2. Communicative Features of Toponyms in English and Kazakh

Characteristic	English Toponyms	Kazakh Toponyms	Cognitive Anchors
Associativity & Imagery	Hope, Paradise – abstract appeal	Aqsu ("white water") – concrete geography	Facilitate visualization & memory of place
Universality & Polysemy	Big Lake – multiple locations	Specific object references	Ensure clarity & link to local identity
Cultural & Ethnic Identification	New England – historical/foreign	-stan suffix – Turkic identity	Maintain ethnocultural continuity
Symbolic Function	Liberty – national ideals	Kyzylorda – historical/ethnic meaning	Encode collective values & heritage
Cognitive Associations	Mountain Home – mental images	Descriptive names – environmental links	Anchor cognition to physical & symbolic space

According to Table 2, the comparative communicative features of toponyms in English and Kazakh languages are presented. The table illustrates the differences in how toponyms are used to construct imagery, express cultural identity, and form cognitive associations. It highlights the unique approaches of each language toward polysemy, symbolism, and referential specificity.

Interestingly, English and Kazakh toponyms differ in terms of origin, cultural, and historical factors. English toponyms often borrow names from other languages and cultures, adapting them to the English-speaking environment (e.g., Buena Vista in the USA). In contrast, Kazakh toponymy largely preserves Turkic roots and shared cultural elements, such as the suffix "-stan," which connects to the broader Turkic heritage and emphasizes cultural continuity. This factor makes Kazakh toponyms more stable and symbolically loaded than their English-language counterparts.

Within this study, a comparative analysis of the cognitive and communicative features of toponyms in English and Kazakh was conducted, revealing significant differences and similarities in their perception and use. The study demonstrated that cognitive and communicative features of toponyms in both languages reflect the cultural, historical, and social distinctions of the two linguistic communities. In both languages, toponyms play an important role in forming cognitive maps that orient speakers within their cultural and natural environment. However, in Kazakh, toponyms more often convey connections to natural features, historical events, and sacred places.

In English, toponyms frequently carry symbolic and ideological significance, reflecting national ideals and values. English toponyms serve not only local identification functions but also reflect processes of social mobility, migration, and globalization. The comparative analysis of cognitive and communicative features of Kazakh and English toponyms revealed both significant differences and certain similarities in their perception.

Similarities:

1. In both languages, toponyms serve as key elements of cognitive spatial maps, helping speakers structure their perception of the environment. For example, names such as Alatau (Kazakhstan) and Long Beach (USA) perform both orientational and descriptive functions .

2. Kazakh and English toponyms preserve historical memory and cultural values. In Kazakh toponyms, this is reflected through connections to the traditional nomadic lifestyle and natural features (e.g., Karatau – "Black Mountain"). In English toponyms, historical memory is often associated with colonial processes and migration, as exemplified by New England or Lancaster.

3. Both languages use symbolism in toponyms to convey cultural meanings. For instance, Äulietas (Kazakhstan) and Liberty (USA) reflect spiritual and ideological values.

Differences:

1. Cultural context:
   Kazakh toponyms are deeply rooted in ethnocultural identity and closely connected to nature, reflecting the nomadic lifestyle, such as Aksu ("white water") or Saryarka ("Yellow Ridge"). In contrast, English toponyms often emphasize symbolism and socio-historical changes. Names such as Hope or Paradise are associated with positive imagery linked to migration and the establishment of new settlements.
2. Natural elements:
   In Kazakh toponymy, natural features occupy a central role, emphasizing the people's traditional connection with nature. English toponymy uses natural elements less frequently, focusing on their descriptive function, such as in Red River.
3. Historical elements:
   English toponyms, such as Lancaster, reflect historical processes of colonization and urbanization. In Kazakh toponymy, historical elements are more closely tied to cultural heritage, including memory of sacred sites, such as Babata, or geographic locations associated with economic history (Zhezkazgan).
4. Symbolism:
5. In English toponyms, symbolism is predominantly ideological, reflecting the influence of social change (e.g., Liberty, Freedom). Kazakh toponyms often focus on sacred and spiritual meanings, connected to traditional culture and religious beliefs (e.g., Äulieata).

The differences between Kazakh and English toponyms are conditioned by the cultural-historical context, shaping unique cognitive maps for speakers of each language. Kazakh toponymy emphasizes connections with nature and ethnocultural heritage, while English toponymy highlights symbolism and historical memory, reflecting the dynamic nature of migration processes and globalization.

The study demonstrated that Kazakh toponyms establish strong links with traditional lifestyles, the natural environment, and historical memory, whereas English toponyms more frequently serve a symbolic function, reflecting societal values and ideals. These differences stem from the developmental trajectories of the two linguistic communities and their respective cultural-historical contexts.

Comparative Insights

a. Kazakh: Emphasizes natural landmarks, sacred sites, and historical memory.
b. English: Focuses on ideological symbolism, historical events, and migration narratives.
c. Both: Toponyms serve as cognitive anchors, enabling mental mapping and preserving cultural memory.

CONCLUSION

This study demonstrates that vernacular toponyms in English and Kazakh function as cognitive anchors, linking speakers to place, memory, and identity in globalized communication.

1. Kazakh toponyms connect closely to nature and ethnocultural traditions, forming cognitive maps that encode historical memory (Aksu, Saryarka).
2. English toponyms emphasize symbolism and social change, reflecting migration and adaptation (Liberty, Hope).

Understanding these differences provides insights into cross-cultural cognition, the preservation of local identity, and the role of place names in global communication. Practically, the research informs linguistic studies, educational programs, and strategies for preserving ethnocultural heritage.

Future research: Explore globalization and digitalization impacts, urbanization effects, and methods for integrating cultural elements into intercultural communication, emphasizing the role of vernacular toponyms as cognitive anchors.

Studying vernacular toponyms can significantly contribute to understanding the preservation of ethnocultural identity and the formation of cognitive maps across linguistic communities.

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DECLARATION OF POTENTIAL CONFLICT OF INTEREST

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