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Geosymbolism of Colors in Kazakh and Turkish Toponyms: A Comparative Linguistic and Cultural Study

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ABSTRACT

This study analyzes the geosymbolism of color terms in Kazakh and Turkish toponyms. Colors, as universal cultural elements, play a significant role in shaping spatial perception and the mental map of the world. They not only describe the physical characteristics of landscapes but also convey symbolic meanings that reflect the cultural and worldview-specific features of different peoples. The study reveals that in both Kazakh and Turkish traditions, color elements in place names serve a dual function: they describe physical landscape features and carry symbolic meanings rooted in mythology and historical perceptions. For instance, black is commonly linked to the north, white to the west, red to the south, and blue to the east. These color-based names not only act as geographical markers but also reflect sacred and ethnocultural concepts. The findings highlight both shared patterns and distinctive differences in how color symbolism is applied by Kazakhs and Turks. Understanding these linguistic representations deepens our knowledge of how natural and cultural spaces are perceived through language. Additionally, the study sheds light on the broader connection between language and mental geography, offering new perspectives for further research in Turkology, linguistics, and cultural studies.

Keywords: Toponymy; Geosymbolism; Color Symbolism; Kazakh language; Turkish Language

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1. Introduction

In the anthropological studies of the modern Kazakh language, significant attention is given to the concept of color, with innovative research being conducted. We often perceive the reality around us through colors, and color terms serve as cultural codes for every nation. Language, which intertwines with the unique cultural heritage of humanity developed over centuries, stands as a precious treasure reflecting a nation's identity. Beyond being a tool for communication, every language plays a crucial and decisive role in representing the culture, civilization, social conditions, and worldview of its people^[1, 2]. The rich vocabulary of the Kazakh language functions as a medium to describe the nation's spiritual life, history, cultural essence, and linguistic representation of the world. In this context, the semantics and symbolism of colors in our language reveal the nation's aesthetic perception, profession, character, beliefs, customs, and traditions comprehensively^[3].

In the modern era, alongside advancements in science and technology, linguistics has also evolved, moving beyond a purely structural approach to encompass research on human consciousness, culture, psychology, and other interdisciplinary dimensions. Our perception of the world is shaped by vision, hearing, and cognition, and we convey our experiences - what we see, feel, and understand - through language. As a result, language constructs a unique worldview. Within this framework, color terminology holds a distinctive place. In Kazakh linguistics, the study of color lexicon has become a significant area of interest, with scholars examining its connection to human cognition, cultural identity, and national heritage. This has given rise to the field of "color studies", fostering pioneering research in this domain. Every nation possesses a vast cultural legacy shaped over centuries, encompassing its history, traditions, and customs, all of which are reflected in its linguistic expressions. It is impossible to imagine this cultural heritage, history, and tradition without colors. For example, historical terms such as *Kök Türik* (Blue Turks), *Ak Orda* (White Horde), and *Kök Orda* (Blue Horde) are tied to colors^[4]. In Kazakh culture, rituals such as raising a flag outside the house upon someone's death or tying a multicolored thread to a child's ankle upon taking their first steps are deeply intertwined with color symbolism. Even newly married women would embroider handkerchiefs with colored threads to convey their emotions

to their parents. For instance, red thread symbolized joy, happiness, and peace, while yellow thread reflected sorrow and longing for their parents. All these practices reveal the ethno-specific nature of Kazakh perceptions of color.

Several works by scholars such as Kaidarov, Akhtamberdiyeva, Ömirbekov, Serikbayeva, and Aitova have addressed the topic of colors^[5-7]. These studies discuss the semantics, structural features, symbolism, conceptual scope, and other aspects of color terms. For instance, the works of Kaidarov et al. and Serikbayeva provide information on the psychophysiological characteristics of color perception and its scientifically established principles^[5, 6]. These studies also examine the standard foundations of colorimetric measurements and the development of color terms in scientific research. Color terms are regarded as a linguistic wealth, analyzing the laws of color and shade nomination in language, their origin, and usage. The authors pay particular attention to the models and meanings of these terms and conduct an in-depth analysis. They also emphasize the metaphorical use of colors and shades, which, beyond their literal meanings, reflect the material and spiritual culture, customs, beliefs, and long historical experience of the Kazakh people. The studies highlight the Kazakhs' remarkable skill in identifying livestock by color, a trait that has become a part of public symbolism, and the historical significance of certain colors^[8].

With the evolution of Kazakh linguistics to new paradigms, such as the anthropocentric approach, research on color terms has gained renewed importance. The work by Aitova, for instance, explores the cognitive aspects of color terms^[7]. Serikbayeva has conducted an ethnolinguistic study of the terms *ak* (white) and *kara* (black)^[6]. In her research, she examined the ethnolinguistic nature of paired contrastive expressions associated with these colors and analyzed new words formed synthetically and analytically from *ak* and *kara*. She revealed their meanings and significance based on Kazakh customs, traditions, and worldview.

This research demonstrates that in Kazakh, as in other languages, color terms are not limited to their primary meanings but often acquire extended, culturally specific connotations^[9, 10].

However, the role of color terms in toponyms remains an unexplored aspect that requires further investigation from a new perspective. Additionally, the comparative study of to-

ponyms' characteristics represents a pertinent research issue. The distinctive feature and primary objective of this study is to examine the geosymbolic significance and cultural implications of color in the toponyms of the Kazakh and Turkish languages.

The symbolism of color in toponyms extends beyond a mere reference to geographic features; it serves as a lens through which the cultural, historical, and philosophical heritage of nations can be explored. In Turkic languages such as Kazakh and Turkish, colors hold significant meaning, not only describing the physical characteristics of a place but also conveying notions of purity, strength, energy, and even cardinal directions. Analyzing these toponyms offers valuable insights into the cultural and linguistic connections between the two peoples while highlighting the distinct features of each culture. This article aims to conduct a comparative analysis of the use of color terms in Kazakh and Turkish toponyms, examine their symbolic meanings, and explore how they reflect the worldview and cultural identity of these nations. The relevance of this study is underscored by the growing interest in ethnolinguistics and geolinguistics, along with the need for a deeper understanding of the cultural codes embedded in language. This research represents the first comprehensive study of color symbolism in Kazakh and Turkish toponymy from a geosymbolic perspective, which defines its novelty.

The findings of this study can contribute to further research in cognitive linguistics, ethnolinguistics, toponymy, and cultural studies. Moreover, they have practical significance for teaching Turkic languages and studying the historical and cultural heritage of Turkic peoples.

2. Theoretical and Conceptual Framework

This study adopts an interdisciplinary approach, integrating theories of semiotics, cognitive linguistics, and spatial cognition to analyze the symbolism of colors in Kazakh and Turkish toponyms.

2.1. The Semiotic Approach

Semiotics views toponyms as sign systems in which each element (including color components) serves a specific semiotic function. According to the concepts of Lotman et al.

and Barbier, color in toponyms is not merely a descriptive element but a cultural code that conveys information about a people's values, mythology, and worldview^[11, 12]. For example, in the toponyms Қапарай and Karadağ, the color black reflects not only the physical characteristics of the landscape (dark mountain rocks) but also cultural associations with the north, cold, and resilience.

2.2. Cognitive Linguistics and Spatial Cognition

Cognitive linguistics, based on the work of Lakoff and Johnson, explains how linguistic constructions reflect and shape our perception of the world^[13]. Color terms in toponyms function as metaphors that help simplify and systematize spatial perception. For instance, the use of ақ (white) to designate the west is linked to the association of the setting sun with white light, while көк (blue) is associated with the east and the morning sky. This conceptualization of directions through color metaphors is deeply rooted in the worldview of Turkic peoples.

2.3. The Theory of Dual Semantics in Toponyms

A central concept in this study is the dual semantics of toponyms, which suggests that place names carry both a literal meaning, referring to physical characteristics, and a symbolic meaning, reflecting cultural and mythological associations. For instance, Қапакұм translates literally as "Black Sands", denoting the dark color of the sand. However, in the traditional Turkic perception of space, it also symbolizes northern territories. This phenomenon is explained through the theory of polysemy and conceptual metaphors, where a single lexical element can carry multiple interrelated meanings depending on the context^[14].

3. Methods

3.1. Materials

The study is based on a wide range of toponyms from Kazakh and Turkish languages that include color components. Examples from the Kazakh language include Қапакұм, Сарыарқа, and Көкшетау, while in Turkish, similar toponyms include Kızıltepe, Göksu, and Kahverengi Dağ.

The primary sources for this research comprise historical manuscripts, etymological dictionaries, and scholarly studies on Turkic toponymy and color symbolism. Additionally, modern linguistic databases and geographic resources were utilized to collect and verify data on the usage and meanings of color terms in toponyms.

3.2. Procedure

The study was conducted in three main stages:

- a. Data Collection: Relevant toponyms were identified and compiled from historical texts, linguistic dictionaries, and previous research studies^[15]. Particular attention was paid to the inclusion of examples that highlight both physical and symbolic uses of color terms.
- b. Classification: The collected toponyms were categorized based on the colors they represent (қара, ақ, қызыл, көк) and their corresponding meanings in Kazakh and Turkish.
- c. Comparative Analysis: The symbolic meanings of colors and their associations with cardinal directions, natural features, and cultural significance were compared between the two languages^[16–18]. Special focus was given to identifying commonalities and distinctions in their geosymbolic interpretations.

3.3. Data Analysis

Based on the theoretical foundation outlined above, this study aims to identify the dual semantics of color toponyms in Kazakh and Turkish, considering their geosymbolic and cultural meanings. The semiotic approach allows toponyms to be viewed as signs of cultural memory, cognitive linguistics reveals metaphorical models, and spatial cognition helps understand the connections between linguistic constructions and the perception of geographical space.

The study employed a combination of qualitative and quantitative approaches to analyze the collected data:

- Lexical-Semantic Analysis: The semantic fields of color terms were examined to identify their primary and secondary meanings within toponyms.
- Cultural-Historical Contextualization: The symbolic associations of color terms were analyzed in relation to the cultural and historical heritage of Turkic peoples.
- Comparative Linguistic Analysis: Differences and simi-

larities in the use of color terms in Kazakh and Turkish toponyms were systematically compared to uncover patterns and regional variations.

This methodological framework ensured a comprehensive exploration of the geosymbolic nature of colors in Turkic toponymy and their cultural significance.

To strengthen the empirical base, a quantification method was applied-counting the frequency of toponyms with color components in different regions of Kazakhstan and Turkey. This helped assess the prevalence of specific color designations and their connection to geographical, cultural, and historical factors^[19, 20].

To provide a quantitative assessment, data were collected on the frequency of color toponyms in Kazakhstan and Turkey. The study covered color terms such as black (қара/kara), white (ақ/ak), red (қызыл/kızıl), blue (көк/gök), yellow (сары/sarı), and brown (қоңыр/kahverengi)^[21–23].

4. Result and Discussion

During the research, toponyms in the Kazakh and Turkish languages containing color components were analyzed to identify their symbolic meanings, roles in linguistic and cultural contexts, and similarities and differences. Particular attention was paid to dualistic and triadic models of color symbolism, which play a key role in shaping the cultural and geographical heritage of Turkic peoples^[24, 25].

Key Findings:

- a. Color designations in toponyms reflect not only natural characteristics (such as soil color, water, and rock formations) but also profound cultural codes tied to the worldview of Turkic peoples.
- b. Common features were identified in the use of basic colors such as white, black, red, yellow, and green in Kazakh and Turkish toponyms, alongside unique traits influenced by local features and historical development.

4.1. Black Color (Қара/Kara) in Kazakh and Turkish Toponyms

In Kazakh and Turkish customs and traditions, the word “қара” (black) signifies sacredness, while also being associated with grief and sorrow. The origin of this term can be linked to vision and the eye, as the eye is the primary organ

through which humans perceive the world. Many idiomatic expressions in the Kazakh language relate to the eye. For instance, Kazakhs say “көзімнің ағымен қарасындай” (as precious as the white and black of my eye) to refer to their most cherished and esteemed people. Similarly, “көзінің қарашығындай сақтай” (to protect as the pupil of one’s eye) refers to safeguarding a precious inherited object or legacy.

The meaning in Abai’s poem “Көзімнің қарасы” (The Black of My Eye) aligns with these symbolic associations. The reason for mentioning this is that Mahmud al-Kashgari’s dictionary defines “қарак” as “pupil of the eye” and “eye” in general, making “қарак” and “көз” synonyms in ancient Turkic. However, in modern Kazakh, “қарак” has narrowed to mean only the pupil of the eye (қарашық). Despite this, words derived from the ancient Turkic “қарак” are still used today, such as “көзі қаракты” (a knowledgeable or perceptive person) and “қарактай” (to observe or watch closely).

Numerous words in modern Kazakh originate from қарак, including қара (black), қарашы (a respectful form of address), қарғам (a term of endearment), қарығу (to become blind), and қар (snow)—all of which are etymologically linked to the eye.

The term “қара” as a color name is believed to have evolved from a concrete noun (“қарак” - pupil of the eye). However, the Kazakh word “қарғам” (my dear—a term of endearment) remains debated:

- Did it originate from the “қарак” (pupil of the eye) root, or
- Is it connected to the “қарға” (crow)—a bird that lives up to 300 years?

This is a controversial issue.

For example, the swan (аққу) does not inhabit just any lake and is considered a selective, noble, and proud bird, making it a symbol of purity and beauty in Kazakh culture. Conversely, the crow (қарға) is associated with longevity, as reflected in the Kazakh idiom “қарға тамырлы” (crow-rooted), which implies deep ancestral lineage. This expression originates from the crow’s long lifespan.

Researcher Aitova argues that “қарғам” as a term of endearment is not related to the crow but instead derives from the word for “eye”^[7]. The scholar analyzes “қарық” by dividing it into “қар” + “-ық”, where “қар” originally meant “eye”, and notes that ғаш, ғай were ancient Turkic words for “bird.” However, the researcher has not fully substantiated or proven the complete morphological breakdown

of “қарғам” as a term of endearment.

The black color holds significant importance in Turkic culture and language, including toponymy. As emphasized by Kononov, black in toponyms carries profound symbolic meaning linked to both the natural characteristics of locations and spiritual and social symbolism. Below are the key aspects of black color in toponyms based on its analysis:

Symbolism of Black Color

(1). Natural Features:

Black often describes areas with dark soils, rocks, or vegetation. For example:

- Қаратай (Kazakhstan) – “Black Mountain,” referencing the dark color of its rocks or vegetation.
- Караада (Turkey) – “Black Island,” linked to dark forests or volcanic rock.

(2). Power and Resilience:

Black symbolizes strength and resilience. According to Kononov, in Turkic traditions, black often represented protection and durability:

- Қарахан – “Black Khan,” denoting a powerful ruler.
- Карашахар – A historical center; its name emphasizes significance and stability^[9].

(3). Direction of Light:

In ancient Turkic traditions, black symbolized the north, reflected in geographic names:

- Қарасы – “Black River,” also indicating depth and darkness.

(4). Mythology and Spirit of Place:

Black is associated with mystery, darkness, and sometimes danger or inaccessibility:

- Қараорман – “Black Forest,” indicating dense, dark woods tied to mythical dangers.
- Қаракөл – “Black Lake,” often referencing deep, dark waters.

Features of Black in Kazakh and Turkish Toponyms

(1). Kazakh Language:

- Black in Kazakh toponyms frequently describes massive mountains and dark waters:
- Қараой – “Dark Place,” possibly associated with a swampy area.

- Қаражап – “Dark Cliff,” indicating a rocky area.

(2). Turkish Language:

- Black in Turkish toponyms is used for places with dark natural characteristics:
- Karakaya – “Black Rock,” referring to volcanic or basalt rocks.
- Karaburun – “Black Cape,” indicating dark-colored stones on the coast.

Social and Cultural Role of Black Color

(1). Symbol of Power and Authority:

Black denoted power, grandeur, and status in Turkic traditions, reflected in the names of cities and settlements:

- Қарахан – The Kara-Khanid Empire, symbolizing the stability and strength of the state.

(2). Opposition of Black and White:

In Turkic culture, black is often opposed to white, creating a balance between light and dark, good and evil:

- Қаратау (“Black Mountain”) and Ақтай (“White Mountain”) – toponyms emphasizing contrast and symbolic equilibrium.

(3). Traditional Meanings:

Black could also signify sacredness or historical importance, marking areas tied to significant events or figures (Table 1).

Table 1. Examples of Black in Toponym.

Toponym (Kazakh)	Meaning	Toponym (Turkish)	Meaning
Қаратау	Black Mountain	Karadağ	Black Mountain
Қарасу	Black River	Karasu	Black River
Қараорман	Black Forest	Karaburun	Black Cape
Қаражап	Dark Cliff	Karakaya	Black Rock

The black color in Kazakh and Turkish toponyms performs a significant function, reflecting both natural and cultural features of locations. It symbolizes power, resilience, mystery, and darkness, as well as carrying sacred and historical connotations. Analyzing black in toponymy provides a deeper understanding of the cultural and historical heritage of Turkic peoples.

4.2. White Color (Ақ, Ak/Beyaz) in Kazakh and Turkish Toponyms

In Turkish, two words are used to denote the color white: “beyaz” and “ak”.

- “Beyaz” is a loanword from Arabic and is the most commonly used term for white in a literal sense.
- “Ak” is a native Turkic word that, in addition to meaning white, carries figurative meanings such as “pure” or “innocent.”
- For example, in “Akdeniz” (White Sea), the Turkish name for the Mediterranean Sea, “ak” symbolizes clarity rather than just color.

Gabithanuly et al. and Zhanuzak associate the origin of the word “ak” (white) with the “ай” (moon) cosmonym,

suggesting that its phonetic evolution may have followed the scheme $ajas > aja > ay$ ^[26, 27]. As evidence, they refer to the frequently used phrase “ай йүзлүк” in Turkic languages, analyzing its meaning. The hypothesis that the name “ай” (moon) is linked to the adjective “ак” (white) is well-founded. When examining the usage and semantic function of words in language, it indeed appears that “ай” was originally a word describing an object’s color or attribute. This is further supported by the Kazakh words “айдын” (vast, clear water surface) and “айқын” (clear, evident), both derived from the root word “ай”.

Some scholars, such as Menges and Räsänen, consider this word to be a loanword from Chinese. However, Kaidarov et al. disagree with this viewpoint and provide the following argument:

“The range of elements borrowed from the Chinese language into Turkic languages is limited to certain regions. However, the word ‘ak’ is present in all Turkic languages”^[5].

Thus, the exact origin of the term “ak” remains uncertain, which strongly indicates its ancient nature. In this regard, we support the opinion of Gabithanuly et al. and Zhanuzak, who argue that the word “ай” originally denoted

the color white and that the modern adjective “ақ” later developed from this term^[26, 27].

White symbolizes purity, sanctity, and light universally. In Kazakh and Turkish cultures, it holds a significant place, which is reflected in the toponymy of these languages. White in geographical names represents natural features, sacredness, and historical importance. Below is an analysis of the semantics of white in toponyms of both languages, its symbolic meaning, and its cultural context.

Symbolism of White Color

(1). Purity and Sanctity:

- White is associated with moral purity, spirituality, and sacred objects.
- In Kazakh culture, the word “ақ” denotes honesty, righteousness, or sanctity:
- Ақ мешіт (“White Mosque”) – symbolizes spirituality and religious significance.
- In Turkish culture, the word “beyaz” also signifies purity and nobility:
- Beyazıt (“White İzzet”) – a historical district in Istanbul tied to spiritual traditions.

(2). Light and Brightness:

- White symbolizes light, clarity, and truth.
- For example:
- Ақтөбе (Kazakh) – “White Hill,” indicates an elevated area well-lit by sunlight.
- Aksaray (Turkish) – “White Palace,” symbolizes radiance and prominence.

(3). Natural Features:

- White in toponyms often represents chalky or light-colored mountain formations and clean water:
- Ақтай (Kazakh) and Akdağ (Turkish) – “White Mountain,” referring to the white color of the rock formations.
- Ақкөл (Kazakh) and Akşehir (Turkish) – “White Lake” or “White City,” reflecting the purity of water or urban architecture.

(4). Historical and Cultural Significance:

- White is associated with historical events or sacred landmarks.
- Examples include:
- Ақ Орда (Kazakh) – “White Horde,” a symbol of power and a political center.

- Akkale (Turkish) – “White Fortress,” highlighting the historical importance of a fortified settlement.

White in Kazakh Toponyms

(1). Examples of Toponyms:

- Ақтөбе – “White Hill,” often tied to chalky or light-colored formations.
- Ақсу – “White Water,” symbolizes the clarity and transparency of rivers.
- Аққұдық – “White Well,” refers to clean drinking water.

(2). Cultural Symbolism:

- White in Kazakh toponyms emphasizes not only natural features but also cultural codes:
- Purity of water or soil.
- Connection to religious and sacred landmarks, such as mosques or holy sites.

White in Turkish Toponyms

(1). Examples of Toponyms:

- Aksaray – “White Palace,” symbolizes political and cultural significance.
- Akşehir – “White City,” refers to light-colored architecture or clean water.
- Akkuyu – “White Well,” indicates clean drinking water.

(2). Cultural Symbolism:

- White in Turkish toponymy is linked to ideas of nobility, prominence, and cultural heritage:
- Frequently appears in the names of cities, fortresses, and natural landmarks.

Commonalities and Differences

(1). Commonalities:

- In both languages, white is associated with clean water, light-colored formations, and sacredness.
- It is used to denote significant places tied to history and religion.

(2). Differences:

- Kazakh toponymy often associates white with natural landmarks (mountains, rivers, lakes), while Turkish toponymy focuses more on architecture and fortified structures (palaces, fortresses).
- Kazakh toponyms emphasize spiritual symbolism, whereas Turkish toponyms highlight cultural heritage (**Table 2**).

Table 2. Examples of White in Toponyms.

Toponym (Kazakh)	Meaning	Toponym (Turkish)	Meaning
Ақтау	White Mountain	Akdağ	White Mountain
Ақсу	White River	Akarsu	White Water
Ақорда	White Horde	Aksaray	White Palace
Аққұдық	White Well	Akkuyu	White Well

White in Kazakh and Turkish toponymy serves an important symbolic function. It is associated with purity, sanctity, light, and the historical significance of locations. In both languages, white reflects not only natural features but also the cultural heritage of Turkic peoples. However, there are distinct emphases: Kazakh toponymy leans towards natural landmarks, while Turkish toponymy highlights architecture and historical centers. Studying the symbolism of white in toponymy provides deeper insights into the worldview and cultural codes of Turkic peoples.

4.3. Red Color (Қызыл, Kızıl) in Kazakh and Turkish Toponyms

Scholars have long debated the roots of the words “қызыл” (qızıl, red) and “жасыл” (jasıl, green) in Kazakh and other Turkic languages, suggesting that they originate from the roots “қыз” (qız, red/blush) and “жас” (jas, young/fresh).

The primary linguistic argument supporting this claim is that both words follow the -ыл/-іл (-il/-il) suffix model, which, although not used independently today, can be identified when the root is isolated.

The well-known toponymist Qoyshybaev associates “қызыл” (qızıl, red) with the verb “қысыл” (qısıl, to be constricted). He references the Қызылауыз (Qızılauyz) gorge in the Dzungarian and Ile Alatau mountain ranges, where “ауыз” (auyz) means “narrow passage” (узкие ворота). However, according to many scholars, the root of ‘қызыл’ is ‘қыз,’ which has historically functioned both as a verb and an adjective.

To prove that “қыз” was used adjectivally, scholars compare it with other color-related verbs:

- “қызар” (qizar, to redden) follows the same pattern as
- “бозар” (bozar, to become pale),
- “көгер” (köger, to turn blue/green),
- “ағар” (ağar, to whiten).

Since the root must be either a noun or an adjective, the

original root “қыз” in “қызыл” lost its independent usage but remains present in modern Kazakh. This same root also gave rise to the word “қыз” (girl), likely because of its connection to blushing, vitality, and a youthful rosy complexion.

Additionally, Mahmud al-Kashgari recorded another meaning of “қыз” in his dictionary:

- Bū at qız aldım – I bought this horse at a high price.

Here, “қыз” is used to mean “red” and “valuable”.

Researchers argue that by adding the -ыл (-il) suffix to “қыз,” the word historically transformed into an adjective expressing a relational quality. Over time, in modern Turkic languages, it fully developed into a qualitative adjective denoting color.

Red holds special significance in Turkic culture and toponymy. According to Kononov, red symbolizes energy, strength, and wealth, and is also connected to the natural characteristics of locations and the cultural traditions of Turkic peoples. Below is an analysis of how red is represented in toponyms and its meanings.

Symbolism of Red Color

(1). Natural Features

Red in toponyms often relates to natural characteristics such as the color of soil, rocks, or vegetation.

- Қызылқұм (Kazakhstan, Uzbekistan) – “Red Sands,” named for the reddish hue of the desert.
- Kızıldağ (Turkey) – “Red Mountain,” refers to a mountain with reddish rocks, likely due to iron content.

(2). Symbol of Life and Energy

Red symbolizes vitality, warmth, and movement.

- Қызылсу – “Red River,” possibly named for reddish water or riverbanks.
- Kızılırmak (Turkey) – “Red River,” the longest river in Turkey, named for the red sediments it carries.

(3). Historical and Cultural Symbolism

Red is often associated with significant historical events or important places.

- ҚЫЗЫЛЖАР (Kazakhstan) – “Red Cliff,” linked either to the color of the rocks or the historical importance of the area.
- Kızıltepe (Turkey) – “Red Hill,” reflecting either natural features or the strategic significance of the site.

(4). Association with Fertility and Abundance

In some toponyms, red symbolizes the richness of the land or natural resources.

- ҚЫЗЫЛОРДА (Kazakhstan) – “Red Capital,” named for its historical significance and the fertility of surrounding lands.

Red in Kazakh and Turkish Toponyms

(1). Kazakh Language

In Kazakh toponymy, red emphasizes geographical features:

- ҚЫЗЫЛҚҰМ – “Red Sands” a desert with reddish soil.
- ҚЫЗЫЛЖАР – “Red Cliff” a location with red-tinged rocks.

(2). Turkish Language

In Turkish toponymy, red also highlights natural features and cultural significance:

- Kızılova – “Red Plain,” named for its reddish soil.
- Kızılhisar – “Red Fortress,” symbolizes protection and historical importance (**Table 3**).

Social and Cultural Role of Red

(1). Symbol of Strength and Heroism

In Turkic culture, red is associated with bravery, power, and heroism, reflected in names tied to historical battles or events.

- ҚЫЗЫЛЖАР – A place associated with military valor.
- Kızıltepe – Possibly a site of a battle or an important historical fortress.

(2). Contrast with Other Colors

In Turkic toponymy, contrasts between red and other colors often highlight a balance of natural or cultural symbols:

- ҚЫЗЫЛТАУ (“Red Mountain”) and АҚТАУ (“White Mountain”) – contrast red (life, energy) with white (purity, sanctity).
- Kızılırmak (“Red River”) and Yeşilirmak (“Green River”) – red (movement, energy) and green (calmness, nature).

Table 3. Examples of Red in Toponyms.

Toponym (Kazakh)	Meaning	Toponym (Turkish)	Meaning
ҚЫЗЫЛҚҰМ	Red Sands	Kızıltepe	Red Hill
ҚЫЗЫЛЖАР	Красный утёс	Kızıldağ	Red Mountain
ҚЫЗЫЛСУ	Red River	Kızılırmak	Red River
ҚЫЗЫЛОРДА	Red Capital	Kızılova	Red Plain

Red in Kazakh and Turkish toponymy plays a significant role, reflecting natural features, historical events, and cultural traditions. Its use in place names highlights strength, energy, heroism, and the significance of a location. Analyzing red in toponyms provides a deeper understanding of the rich symbolism and worldview of Turkic peoples.

4.4. Blue Color (Kөk, Gök) in Kazakh and Turkish Toponyms

According to scholars, the word “көк” (blue) is a syncretic root. Academic Ä. Qaidar states: Just as it is natural for early humans to have named the celestial dome ‘kök’ (blue) based on its color, it is also possible that they generalized this color term for all blue objects on Earth by comparing

them to the sky.

This raises an unresolved linguistic question:

- Did the phenomenon-based meaning (referring to the sky) emerge first?
- Or did the descriptive (color-based) meaning come first?

To this day, scholars have not reached a definitive conclusion.

Researcher Aitova offers her perspective on this issue: “Among Turkic-speaking peoples, in Kazakh, the word ‘көк’ is used in an intensified form as ‘көкпеңбек’^[7]. This essentially means ‘kök and kök’ - that is, as blue as the sky itself. The repetition of the word intensifies and enhances its shade-related meaning”.

This observation suggests that color adjectives in

Kazakh evolved through repetition, strengthening their descriptive function over time.

Blue holds a special place in Turkic culture, symbolizing the sky, water, freedom, and infinity. Its symbolism is deeply rooted in the traditions and worldview of Turkic peoples, which is reflected in toponyms. This section explores the significance of blue in Kazakh and Turkish toponyms, its cultural context, and its usage.

Symbolism of Blue Color

(1). Connection with the Sky and Infinity:

- In Turkic culture, blue represents the sky and divine connection:
- In Kazakh, the word көк means “sky,” as reflected in toponyms such as Көкшетау (“Blue Mountain”).
- In Turkish, gök also means “sky.” For instance, Gökçeada (“Blue Island”) embodies this symbolism.

(2). Water and Its Purity:

- Blue is often used to describe rivers, lakes, and other water bodies, highlighting their clarity and depth:
- Көксы (Kazakh) – “Blue River,” reflects the purity of the water.
- Göksu (Turkish) – “Blue Water,” has a similar meaning.

(3). Symbol of Freedom and Peace:

- For Turkic peoples, blue is associated with peace, tranquility, and freedom. This symbolism is evident in the names of mountains and other natural features that evoke a sense of vastness and grandeur:
- Көктай (Kazakh) and Göktaş (Turkish) – blue signifies freedom and connection with nature.

(4). Historical and Mythological Significance:

- Blue is linked to ancient Turkic states, such as Көк Түрік (Heavenly Turks), emphasizing the divine origin of power and unity with nature.

Blue in Kazakh Toponyms

(1). Examples of Toponyms:

- Көкшетау – “Blue Mountain,” symbolizes the divine and celestial.
- Көксы – “Blue River,” emphasizes the clarity of the water.
- Көктөбе – “Blue Hill,” associated with elevation and the sky.

(2). Cultural Context:

- In Kazakh culture, blue represents not only natural phenomena but also spirituality:
- In the steppe, blue is often associated with the horizon, boundless sky, and peace.

Blue in Turkish Toponyms

(1). Examples of Toponyms:

- Göksu – “Blue Water,” a river name reflecting its purity.
- Gökçeada – “Blue Island,” signifies the combination of water and sky.
- Göktaş – A district in Istanbul, emphasizing historical ties to ancient Turkic traditions.

(2). Cultural Context:

- In Turkish culture, blue is also connected to peace and nature, often used for naming water bodies and elevations.

Commonalities and Differences

(1). Commonalities:

- In both languages, blue is associated with the sky, water, and their symbolic purity.
- It is used to denote natural features such as mountains, rivers, and lakes.

(2). Differences:

- In Kazakh toponymy, blue is more frequently linked to mountains and elevations, reflecting the symbolism of the sky and vastness.
- In Turkish toponymy, blue is more common in the names of water bodies and islands, emphasizing the connection to the sea (**Table 4**).

Table 4. Examples of Blue in Toponyms

Toponym (Kazakh)	Meaning	Toponym (Turkish)	Meaning
Көкшетау	Blue Mountain	Gökçeada	Blue Island
Көксы	Blue River	Göksu	Blue Water
Көктөбе	Blue Hill	Göktaş	Heavenly Turk

Blue in Kazakh and Turkish toponymy reflects the natural and cultural characteristics of Turkic peoples. It symbolizes the sky, water, infinity, and connection with nature. In Kazakh culture, blue is often associated with elevations that represent the sky, while in Turkish culture, it highlights the connection with water bodies and the sea. This color plays a significant role in shaping national identity and cultural heritage.

4.5. Yellow Color (Сары, Sarı) in Kazakh and Turkish Toponyms

In the Kazakh and Turkish languages, as well as in other Turkic languages, the word “сары” (sary, yellow) is primarily used as an adjective denoting color. However, similar to other color terms previously analyzed, its exact etymology remains uncertain. Besides its primary color meaning, “сары” has various figurative meanings.

Notably, in place names, “сары” often appears in the form “cap”. Qoyshybaev states that when used in toponyms, the word “cap” conveys meanings such as “clear, vast, fundamental, or principal.

Additionally, Syzdykova analyzes the phrase “сары алтын” (pure gold), where “сары” means “unmixed, pure”. In contrast, she notes that in the phrase “сары уайым” (deep sorrow), “сары” does not denote color but originates from Persian, where “cap” means “worry”. She argues that the phrase “сары уайым” is a pleonastic expression, where the Persian “cap” (sorrow) and the Kazakh “уайым” (worry) were combined into a redundant phrase, similar to other hybrid expressions such as “бала-шаға” (children), or “бекер-босқа” (in vain).

However, researcher Laulanbekova refutes this interpretation, arguing that “сары” in “сары уайым” does not indicate color and is not a pleonastic phrase^[8]. Instead, she suggests that in Turkic languages, “cap(ы)” also means “genuine” or “true”. This aligns with Qoyshybaev’s view that “сары” can mean “clear, evident, principal.” Based on this reasoning, she concludes that:

- “сары уайым” means “true, deep sorrow”, and
- “сарыла күту” means “to wait with genuine patience.”

Furthermore, historian Köktändi supports the interpretation that “сары” carries the meaning of “true” or “pure.” He analyzes its root as “ca/co,” suggesting that the “ca” root

originally meant “steppe”.

Some historians argue that the “Sary Uyghurs” (Yellow Uyghurs) were referred to as such because “sary” originally meant “ancient” or “authentic Uyghur”. According to this theory, “sary uyghur” actually means “pure, steppe-dwelling Uyghur.”

Additionally, Köktändi explains that the word “pa” (ra) once meant “pure, true,” while “co” (so) meant “steppe”—a meaning preserved in words such as “салқар” (salqar, vast) and “сақара” (saqara, steppe).

The word “сайын”, which on its own became unclear in meaning, later merged with “дала” (dala, steppe) to form the now commonly used phrase “сайын дала” (endless steppe), a calque (loan translation) that preserved the original sense of “vast steppe”.

Yellow holds an important place in Turkic culture, symbolizing wealth, warmth, fertility, and sunlight. In the toponymy of the Kazakh and Turkish languages, it reflects natural features, historical significance, and cultural associations. This article explores the symbolism of yellow in toponyms, its meanings, and the reasons for its use.

Symbolism of Yellow Color

(1). Sun and Warmth:

- Yellow is associated with sunlight and warmth in Turkic culture, reflected in names connected to open spaces, steppes, or sands:
- Сарыарқа (Kazakh) – “Golden Steppe,” symbolizing vast sunlit landscapes.
- Sarıyer (Turkish) – “Yellow Edge,” referring to sunny landscapes.

(2). Wealth and Abundance:

- Yellow often symbolizes fertility and the richness of the land:
- Сарыөзен (Kazakh) – “Yellow River,” associated with fertile lands nearby.
- Sarısu (Turkish) – “Yellow Water,” symbolizes agricultural regions.

(3). Autumn and Transience:

- Yellow can reflect seasonal changes in nature, symbolizing calmness and nostalgia:
- Сарыжаз (Kazakh) – “Yellow Summer,” associated with the fading and changing of seasons.

(4). Natural Features:

- Names with yellow often indicate sands, sunny landscapes, or the color of rock formations:
- Сарықұм (Kazakh) and Sarıkum (Turkish) – refer to sands or light-colored rocks.

Yellow in Kazakh Toponyms

(1). Examples of Toponyms:

- Сарыарқа – “Golden Steppe,” reflects expansive sunlit plains.
- Сарыөзен – “Yellow River,” linked to a fertile valley.
- Сарықұм – “Yellow Sands,” refers to sandy areas.

(2). Cultural Context:

- In Kazakh culture, yellow symbolizes the sun, warmth, and wealth:
- Сары дала – an image of a steppe bathed in sunlight.

Yellow in Turkish Toponyms

(1). Examples of Toponyms:

- Sarıyer – “Yellow Edge,” refers to an agricultural region.

- Sarısu – “Yellow Water,” denotes rivers surrounded by fertile lands.
- Sarıkum – “Yellow Sands,” related to the color of sands.

(2). Cultural Context:

- In Turkish culture, yellow is often associated with warmth and prosperity:
- Used to describe areas with sunny landscapes and sandy terrains.

Commonalities and Differences

(1). Commonalities:

- In both languages, yellow symbolizes warmth, sunlight, and fertility.
- It is used to name steppes, sands, and rivers.

(2). Differences:

- In Kazakh toponymy, yellow more often reflects natural features such as steppes and rivers.
- In Turkish toponymy, it is more frequently associated with agricultural regions and sandy areas (**Table 5**).

Table 5. Examples of Yellow in Toponyms

Toponym (Kazakh)	Meaning	Toponym (Turkish)	Meaning
Сарыарқа	Golden Steppe	Sarıyer	Yellow Edge
Сарыөзен	Yellow River	Sarısu	Yellow River
Сарықұм	Yellow Sands	Sarıkum	Yellow Sands

Yellow in Kazakh and Turkish toponymy reflects the natural and cultural characteristics of territories. It is associated with warmth, sunlight, wealth, and fertility. In Kazakh culture, yellow emphasizes the natural features of steppes and rivers, while in Turkish culture, it is more commonly used to describe agricultural regions. Studying the role of yellow in toponymy helps deepen our understanding of the worldview of Turkic peoples and their connection to nature.

4.6. Brown Color (Қоңыр, Kahverengi) in Kazakh and Turkish Toponyms

Pallo suggests that the etymological origin of the word “қоңыр” (qoñyr, brown) is linked to the word “қоң”, which was an ancient term for a raven. This connection is supported by the Kyrgyz language, where the phrase “қоң қарға” (qoñ qarğa) is still used to refer to a black carrion crow.

However, scholars view Pallo’s hypothesis with skepticism and propose an alternative theory, suggesting that the morpheme “қоң” is more genetically related to words including:

- “қоңыз” (qonuz, beetle),
- “қоңырсы” (qoñyrsy, to turn black from smoke),
- “көң” (köñ, dung, manure).

A more plausible linguistic connection is proposed:

- “қоңыр” may have originally described the color of burnt manure, charred fabric, or similar materials. For brown, Turkish uses the word “kahverengi”, which is a compound word consisting of: 1) “kahve” (coffee), and 2) “rengi” (color). Thus, “kahverengi” literally means “coffee-colored,” referring to the shade of coffee.

Brown in Turkic culture is associated with the earth,

stability, modesty, and tradition. In toponymy, it is often used to describe areas with characteristic soil or vegetation color and to convey symbolic meanings. This article explores the use of brown in Kazakh and Turkish toponyms, its cultural associations, and its natural features.

Symbolism of Brown Color

(1). Connection with Earth and Nature:

- Brown symbolizes the earth and natural elements:
- In Kazakh, қоңыр is associated with warmth, stability, and closeness to nature.
- In Turkish, kahverengi is used to describe areas with brown soil or vegetation.

(2). Tradition and Modesty:

- In Kazakh culture, brown reflects tranquility, tradition, and domestic comfort:
- Қоңыртөбе – “Brown Hill,” often refers to small elevations.
- In Turkish culture, brown signifies naturalness and simplicity:
- Kahverengi Dağ – “Brown Mountain,” emphasizes natural landscape features.

(3). Association with Rural Life:

- Brown frequently appears in place names associated with pastures, agriculture, or rural landscapes.

Brown in Kazakh Toponyms

(1). Examples of Toponyms:

- Қоңыртөбе – “Brown Hill,” denotes a small hill with dark soil or vegetation.
- Қоңырой – “Brown Lowland,” reflects the natural landscape.
- Қоңырқұм – “Brown Sands,” indicates the color of the

sands.

(2). Cultural Context:

- In Kazakh culture, brown often symbolizes tradition and harmony with nature:
- The term қоңыр also conveys warmth, coziness, and emotional depth.

Brown in Turkish Toponyms

(1). Examples of Toponyms:

- Kahverengi Dağ – “Brown Mountain,” highlights the color of the terrain or vegetation.
- Kahverengi Köy – “Brown Village,” associated with agricultural areas.
- Kahverengi Çay – “Brown River,” reflects the water’s color due to sediment or the riverbed.

(2). Cultural Context:

- In Turkish culture, brown is often used to describe areas connected with nature and agriculture:
- Names emphasize the natural characteristics of the region.

Commonalities and Differences

(1). Commonalities:

- In both languages, brown is used to describe areas with soil or vegetation of a corresponding color.
- It symbolizes a connection to nature, stability, and tranquility.

(2). Differences:

- In Kazakh toponymy, brown is more often associated with pastures and traditional motifs.
- In Turkish toponymy, it reflects rural and mountainous areas (**Table 6**).

Table 6. Examples of Brown in Toponyms

Toponym (Kazakh)	Meaning	Toponym (Turkish)	Meaning
Қоңыртөбе	Brown Hill	Kahverengi Dağ	Brown Mountain
Қоңырқұм	Brown Sands	Kahverengi Çay	Brown River
Қоңырой	Brown Lowland	Kahverengi Köy	Brown Village

Brown in Kazakh and Turkish toponymy highlights the natural features of territories, such as soil, sands, or vegetation. In Kazakh culture, it symbolizes warmth, tradition, and

harmony with nature. In Turkish culture, brown emphasizes rural and natural landscapes. Studying brown in toponymy provides deeper insights into the natural and cultural charac-

teristics and symbolism of Turkic peoples.

4.7. The Geosymbolic Nature of Color Names

The concept of the “four corners of the world” is reflected in the culture, traditions, mythology, and language of all peoples. Podosinov, who studied the peculiarities of classifying the four cardinal directions among the peoples of Eurasia, writes:

“The division of the world into four parts, quarters, quadrants, or segments is widely documented in many cultures of Eurasia. The number ‘four’ in spatial terms signified the entirety of space, the entire world, the universe”^[15].

Similarly, Lévy-Bruhl notes that for the indigenous peoples of North America, the number four held sacred significance:

“For almost all Native Americans, the number four and its multiples had a sacred meaning as they specifically referred to the four cardinal directions and the winds blowing from them. The Greek cross was often used as the symbol for the number four”^[16].

In ancient Turkic traditions, the earth was considered square-shaped. The Kül Tegin inscriptions describe spatial orientation as follows: *ılgerü* (east), *kurygaru* (west), *berg-erü* (south), and *yırgaru* (north). In the 10th–11th-century manuscript *Irk Bitig*, the phrase “gathered from the four corners” is used. Turkologist Klyashtorny explains:

“The four cardinal directions are implied. The concept of ‘corner’ as a ‘direction’ is tied to geometric symbolism shaped under the influence of Chinese cultural traditions^[14]. According to this tradition, the geometric representation of the earth is a square formed by four lines (*yin*), each limited by two corners (*yin*), symbolizing the bounded multiplicity of the earth. In contrast, the sky is represented as a circle formed by a single line (*yang*), symbolizing the infinity and unity of the sky. *Yang* embodies masculine strength, while *yin* represents feminine energy”.

However, attributing the concept of the “four corners of the world” to a single culture is overly narrow. The idea is richly reflected in the linguistic, ethnographic, and folkloric heritage of Turkic peoples. Particularly, Turkic peoples skillfully utilized color symbolism to define the four cardinal directions^[17–20].

Black (Қара, Kara) and the North

- In Turkic languages, the word *қаpa* (*kara*) frequently signifies the north. Kononov notes that hydronyms, oronyms, and toponyms containing *қаpa* indicate northern directions^[17]. Examples include:
- *Қараорда* – “Black Horde” or “Northern Horde.”
- *Қарақұм* – “Black Sands,” referring to northern regions.
- In Kazakh, the term *қаpa жел* (“black wind”) describes cold winds from the north.
- Selim Hilmi Özkan^[21] highlights similar patterns in Turkish toponymy. For example:
- *Karaçay* – “Black Stream” or “Stream in the North.”
- *Karataş* – “Black Rock” or “Rock in the North”^[18].

White (Ақ, Ak) and the West

- The word *ақ* (white) appears frequently in toponyms, symbolizing the west in Turkic geosymbolism.
- Examples include:
- *Ақ теңіз* (*Ak Deniz*, “White Sea”) – the Mediterranean Sea, referred to as the “Western Sea.”
- *Сапыарқа* – where “*сапы*” historically meant “white” in some dialects, symbolizing vast steppes to the west.

Red (Қызыл, Kızıl) and the South

- According to Von Gabain, red symbolized the south in Turkic traditions^[21].
- Examples:
- *Қызылтау* – “Red Mountain,” located in southern regions.
- *Kızıltepe* – “Red Hill,” interpreted as both a southern and reddish hill.

Blue (Көк, Gök) and the East

- Blue is associated with the east, symbolizing the sky and new beginnings.
- Examples:
- *Көк орда* – “Blue Horde,” referring to eastern territories^[22].
- *Göktürk* – “Sky Turks,” emphasizing Eastern origins.

Dual Meanings in Toponyms

In many Turkic toponyms, colors carry dual meanings, combining natural and directional symbolism. For instance:

- *Қарақұм* – “Black Sands” can mean either “dark-colored sands” or “northern sands.”
- *Kızıltepe* – “Red Hill” can mean either “reddish hill” or

“southern hill.”

This duality reflects the cultural depth and linguistic flexibility of Turkic toponyms, allowing them to encapsulate both geographic and symbolic significance^[24].

The geosymbolic nature of colors in Turkic toponymy demonstrates a profound connection between the natural environment, cultural traditions, and worldview. The use of black, white, red, and blue in place names illustrates how Turkic peoples integrated spatial orientation and symbolic meanings into their linguistic and cultural systems^[23–25]. This rich tradition not only enhances our understanding of Turkic heritage but also highlights the universal human inclination to infuse meaning into geographic spaces.

4.8. Interpretation of the Quantitative Analysis

The quantitative analysis supports the qualitative findings, demonstrating that color toponyms reflect not only

physical landscape characteristics but also deeper cultural associations. The predominance of black and white is linked to their role in navigation and the traditional worldview, where cardinal directions are marked with specific colors. The high frequency of red in Turkey may be explained by its symbolism of power and energy, along with historical events embedded in toponyms.

The analysis revealed that toponyms with color components are widely used in both Kazakhstan and Turkey. The most common terms include black and white, associated with their traditional function in marking cardinal directions and significant natural landmarks.

The results of the quantitative analysis (**Figure 1** and **Table 7**) confirm the cultural importance of these colors. The predominance of black is linked to its association with the north and resilience, while white symbolizes purity and the western direction.

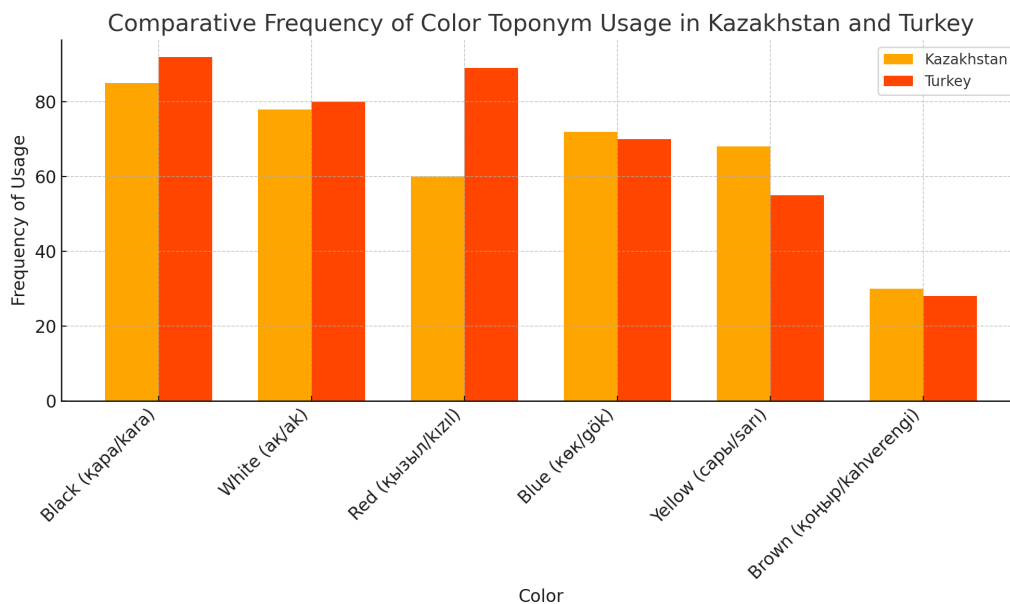


Figure 1. Comparative Frequency of Color Toponyms in Kazakhstan and Turkey.

Table 7. Frequency of Color Toponyms in Kazakhstan and Turkey.

Color	Kazakhstan	Turkey
Black (қаpa/kara)	85	92
White (ақ/ak)	78	80
Red (қызыл/kızıl)	60	88
Blue (көк/gök)	72	70
Yellow (сары/sarı)	68	55
Brown (қоңыр/kahverengi)	30	28

Summary of Findings:

- Black and white are the most frequently used colors in toponyms in both languages.
- Red appears more often in Turkey, reflecting cultural and historical significance.
- Yellow is more commonly used in Kazakhstan to describe steppe landscapes.

4.9. Contribution to Turkology and Cultural Studies

This study reveals deep cultural codes preserved in the language and geographical names of Kazakhs and Turks. The use of color designations in toponyms demonstrates the close connection between language and the collective memory of a people. This opens new perspectives for studying cultural interactions and migration processes in the Turkic world.

- The predominance of specific colors in certain regions helps reconstruct historical trade routes and the borders of ancient states (Aq Orda, Karahan).
- The comparison of toponyms highlights shared cultural layers and regional differences, which is crucial for the typological analysis of Turkic languages.

The dual semantics of toponyms supports the hypothesis that language reflects not only physical reality but also cognitive models of world perception. Color terms function as conceptual metaphors, simplifying spatial orientation and linking geographical objects to cultural representations.

- Color as a semiotic sign demonstrates the synthesis of sensory perception (visual characteristics of the landscape) and cultural interpretation (associations with cardinal directions and moral qualities).
- The presence of similar color codes in Kazakh and Turkish toponyms indicates universal cognitive mechanisms and shared cultural origins.

Color toponyms can be considered tools for spatial navigation. The traditional Turkic use of colors to denote cardinal directions shows how language serves as a means of simplifying spatial perception. This opens opportunities for applying the research findings in modern cartographic and geographic information systems (GIS).

- Understanding the historical use of color terms can help

develop more intuitive navigation systems for contemporary users in Central Asia and Turkey.

- The study highlights the role of language as a mediator between physical space and the cognitive map of its speakers.

The findings of this study can be useful in various fields:

- Education: Integration into linguocultural and geography courses to illustrate the relationship between language and culture.
- Tourism and Regional Studies: Using knowledge about toponymic symbolism to develop cultural and educational tourism routes.
- Information Technology: Adapting geosymbolism principles to enhance user experience in mapping applications.

5. Conclusion

This study aimed to explore the geosymbolism of color toponyms in Kazakh and Turkish to better understand their cultural, cognitive, and linguistic aspects. The analysis demonstrated that color components in toponyms not only describe physical landscape features but also carry deep cultural codes linked to traditional worldviews and spatial perception.

Key Findings:

(1). Color Toponyms as Cultural Markers:

- Black and white dominate in both languages, reflecting their traditional association with cardinal directions and key geographic landmarks.
- Red is more common in Turkey due to its historical and cultural significance, while yellow in Kazakhstan frequently denotes steppe landscapes.

(2). Dual Semantics of Toponyms:

- Most color toponyms have both a literal meaning (describing natural characteristics) and a symbolic meaning (cultural and cognitive associations).
- This confirms that language is not just a means of designation but also a reflection of collective experience and spatial perception.

(3). Comparison of Cultural and Linguistic Traditions:

- Similarities in color use indicate shared cultural roots

among Turkic peoples.

- Regional differences highlight the influence of natural conditions and historical-cultural development on toponym formation.

(4). Practical Significance and Application Perspectives:

- The findings can be applied in linguistic and cultural studies, educational programs, tourism, and cartographic system development.
- Understanding toponymic symbolism contributes to the preservation of cultural heritage and enhances intercultural dialogue.

Novelty and Contribution of the Study:

- This research is the first to comprehensively combine lexico-semantic, historical-cultural, and quantitative analyses of color toponyms in Kazakh and Turkish.
- Introducing the concept of dual semantics in the context of color toponyms expands the theoretical foundation of cognitive linguistics and semiotics.
- The study highlights the role of color as a crucial cultural and cognitive marker in language.

Directions for Future Research:

- Studying color toponyms in other Turkic languages to create a broader comparative framework.
- Analyzing the evolution of color toponyms in the context of urbanization and globalization.
- Applying the research findings in cross-cultural communication projects and educational initiatives.

Author Contributions

Conceptualization, N.A. and G.M.; methodology, G.H.; software, N.A.; validation, N.A., G.M. and G.H.; formal analysis, N.A.; investigation, N.A.; resources, N.A.; data curation, N.A.; writing—original draft preparation, G.M.; writing—review and editing, N.A.; visualization, G.H. All authors have read and agreed to the published version of the manuscript.

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Conflicts of Interest

The authors declare no conflict of interest.

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