








ARTICLE

Concept in Kazakh Linguoculture: An Experimental-Associative Study

Zaure Sovetova^{1*} , Aidana Baltabayeva² , Beken Sagyndykuly^{3*} , Balkadisha Nurkeyeva⁴ ,
Anar Smailova² , Santore Gaipova⁵ , Sharipa Yermekbayeva⁵ , Bolat Khassenov² 

¹ Department of languages, Almaty University of Power Engineering and Telecommunications named after Gumarbek Daukeyev, Almaty 050013, Kazakhstan

² Kazakh Language Department, Buketov Karaganda University, Karaganda 100028, Kazakhstan

³ Higher School of Humanities, NCAS «Pavlodar pedagogical University named after Alkey Margulan», Pavlodar 140000, Kazakhstan

⁴ Faculty of Economics, Management and Entrepreneurship, Karaganda University Kazpotrebsoyuz, Karaganda 100028, Kazakhstan

⁵ Foreign Languages Department, Kazakh National Research Technical University, Almaty 050013, Kazakhstan

ABSTRACT

This article explores the concept of *qoňyr* as a unique phenomenon within Kazakh linguoculture. The primary objective of the study is to identify the semantic dominants and cultural associations activated in the minds of native speakers when perceiving this word. The research is based on an associative experiment conducted with 103 respondents using the semantic differential method. Participants were asked to evaluate the degree of associative connection between *qoňyr* and 64 concepts grouped into 16 thematic categories, including nature, emotions, age, moral traits, musical instruments, and others. Statistical processing through the Jamovi software enabled the identification of stable associative links that reflect the deep integration of *qoňyr* into Kazakh national consciousness. The results revealed that *qoňyr* extends beyond its literal meaning as a color term, encompassing a broad spectrum of emotional, symbolic, and axiological meanings. It is most

*CORRESPONDING AUTHOR:

Zaure Sovetova, Department of languages, Almaty University of Power Engineering and Telecommunications named after Gumarbek Daukeyev, Almaty 050013, Kazakhstan; Email: zaure.sovetova@mail.ru; Beken Sagyndykuly, Higher School of Humanities, NCAS «Pavlodar pedagogical University named after Alkey Margulan», Pavlodar 140000, Kazakhstan; Email: kasabek65@mail.ru

ARTICLE INFO

Received: 12 May 2025 | Revised: 20 May 2025 | Accepted: 30 May 2025 | Published Online: 11 June 2025

DOI: <https://doi.org/10.30564/fls.v7i6.9964>

CITATION

Sovetova, Z., Baltabayeva, A., Sagyndykuly, B., et al., 2025. Concept in Kazakh Linguoculture: An Experimental-Associative Study. Forum for Linguistic Studies. 7(6): 804–820. DOI: <https://doi.org/10.30564/fls.v7i6.9964>

COPYRIGHT

Copyright © 2025 by the author(s). Published by Bilingual Publishing Group. This is an open access article under the Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC 4.0) License (<https://creativecommons.org/licenses/by-nc/4.0/>).

frequently associated with concepts such as autumn (*küz*), soil (*topyraq*), the traditional musical instrument *dombra*, the personality trait *momyn* (meek), and ethnic identity (*Qazaq*), indicating its role as a cultural code. The findings suggest that *qoňyr* functions as a complex linguocultural construct expressing core Kazakh values, including simplicity, spiritual harmony, emotional depth, and connection with nature and tradition. The study contributes to the fields of cognitive linguistics, ethnolinguistics, and language pedagogy by offering empirical evidence of concept formation in minority languages. The results may also be applied in the development of culturally grounded Kazakh language teaching materials and comparative cultural-linguistic research.

Keywords: Concept; Kazakh Linguoculture; Associative Experiment; National Consciousness

1. Introduction

Contemporary humanities are undergoing a phase of active interdisciplinary integration, where language is viewed not only as a means of communication^[1], but also as a reflection of national consciousness, mentality, and worldview^[2]. Within this framework, special attention is given to concepts—mental constructs that encapsulate both linguistic and cultural information^[3, 4]. In linguistics, a concept is understood as a key unit of consciousness, representing the outcome of human experience, cultural heritage, and emotional perception of the world. Concepts function as “intersections” of language, culture, and cognition^[5, 6].

One of the vivid examples of such a concept in Kazakh linguoculture is the word *qoňyr*. While it originally denotes a soft, warm shade of brown, in the consciousness of the Kazakh people, this word carries much deeper, multilayered meanings. It serves as a lexical-semantic carrier of cultural memory, national identity, and the traditional worldview. The concept of *qoňyr* has been shaped by nature, the nomadic way of life, traditions, and historical experiences of the Kazakh ethnic group.

In the Kazakh language, *qoňyr* is more than just a color. It is an image that evokes a particular emotional state: calmness, balance, gentle melancholy, nostalgia for the past, and quiet joy from unity with nature. It permeates Kazakh poetry, music, folklore, everyday speech, and thinking. Stable expressions such as *qoňyr kesh* (“peaceful evening”), *qoňyr küz* (“quiet autumn”), *qoňyr un* (“soft voice”), and *qoňyr zhel* (“gentle breeze”) reflect specific shades of emotion and associations rooted in the archetypal layers of national consciousness.

The interest in studying *qoňyr* from a conceptual perspective arises from the need to gain a deeper understanding

of how ethnocultural specificity shapes perception of the surrounding world. Language is an integral part of culture, and concepts, as elements of the linguocultural system, help reveal the underlying mechanisms of interaction between language and consciousness. Through such studies, it becomes possible to more accurately model the national linguistic worldview.

Although there have been individual studies devoted to color terms^[7–9], the word *qoňyr* remains insufficiently explored as an independent concept with a multifaceted nature. Previous analyses have been limited to folklore-poetic, symbolic, and lexical-semantic interpretations. However, modern cognitive approaches require a new reading of familiar categories. The aim of this study is to conduct an experimental-statistical analysis of the associative connections of *qoňyr* in the minds of native Kazakh speakers and to identify its key semantic dominants and cultural implications.

The novelty of the current study lies in the application of experimental methods—particularly, the semantic differential technique—to measure the degree of associative proximity between the word *qoňyr* and a set of concepts from various semantic fields: nature, human characteristics, emotions, time, animals, numbers, musical instruments, and others. This approach provides an objective, statistically grounded picture of the perception of this word in collective consciousness.

A distinctive feature of this research is that it goes beyond traditional linguistic interpretation, incorporating elements of psycholinguistics, ethnolinguistics identity, and statistical analysis. This enables both qualitative and quantitative assessment of the significance of the *qoňyr* concept in Kazakh national consciousness. As a result, the study identified the strongest associative connections, highlighting the deep embeddedness of this word in various layers of Kazakh

linguoculture.

One important conclusion of the research is that *qoňyr* in the Kazakh mindset is not a neutral color term, but an entire world of sensations, emotions, symbols, and cultural codes. This word embodies elements of national philosophy, perceptions of time and space, notions of beauty and harmony, and connections with nature and ancestors. The concept of *qoňyr* can be viewed as a central element within the Kazakh ethnolinguistic worldview, structuring a broad range of cultural and emotional associations.

Thus, the study of the associative perception of *qoňyr* enriches our understanding of the lexical-semantic system of the Kazakh language and contributes to the development of cognitive linguistics, ethnolinguistics approach, and cultural anthropology. The findings are valuable not only for linguists, but also for sociologists, cultural researchers, philosophers, and intercultural communication specialists.

Moreover, the data obtained can be applied in teaching Kazakh as a native or foreign language, in the development of curricula, textbooks, dictionaries, and educational platforms aimed at conveying deep national meanings. This research may also serve as a foundation for further comparative linguocultural studies, where the *qoňyr* concept is compared with similar notions in other languages and cultures.

Ultimately, this study represents a step toward a deeper understanding of language as a tool for preserving and transmitting cultural meanings. By analyzing how a single word can encompass an entire universe of associations, we move closer to understanding how collective consciousness operates, how cultural identity is formed and maintained, and how the past and present intertwine in the lexicon of everyday speech.

In this way, the concept of *qoňyr* emerges as a distinct linguocultural marker of the Kazakh nation, reflecting its mentality, worldview, and core values. Its study is not only of academic interest but also of cultural significance, allowing modern researchers to access the core components of ethnolinguistic perception through the lens of a seemingly simple word.

In Kazakh, *qoňyr* refers not only to a soft brown tone, but also carries deep cultural connotations—representing gentleness, modesty, nostalgia, spiritual harmony, and connection to the land. The word functions across domains such as sound (*qoňyr ün*-resonant voice), time (*qoňyr kesh*), emo-

tion (melancholy, calmness), and moral character (modesty, patience), making it a highly associative and symbolic term in Kazakh thought.

The selection of *qoňyr* as the focal concept stems from its multifunctional nature in Kazakh culture. It bridges natural imagery, emotional nuance, traditional ethics, and musical expression—making it a powerful cognitive and cultural prototype worthy of dedicated investigation.

The main objective of this study is to explore how the concept of *qoňyr* reflects the Kazakh perception of nature, emotion, identity, and ethical values through associative links. Unlike previous works that focused on poetic or lexical meanings, this study provides an empirical, statistical approach to understanding how *qoňyr* functions in cognitive ethnolinguistics worldview. The research also contributes to a broader understanding of how color-based concepts are culturally structured and transmitted in minority languages.

2. Literature Review

The study of the concept *qoňyr* requires an interdisciplinary approach that spans cognitive linguistics, ethnolinguistics worldview, semiotics, linguoculturology, and the philosophy of language. Although *qoňyr* may appear to be a commonplace and neutral color term, in the Kazakh linguistic worldview it plays a special role: it serves as an ethnocultural marker, an archetypal symbol, and a means of expressing national perceptions of the world.

In linguistics, significant insights into this concept have come from studies focused on the semantics of color terms. These studies reveal that, in Turkic languages, color designations often convey not only visual characteristics but also complex associative, axiological, and emotional meanings. In Kazakh, the word *qoňyr* is associated with warmth, softness, stability, and naturalness. It lacks sharpness or extremes—instead, it symbolizes moderation and harmony, aligning with the philosophy of the nomad, for whom stability and adaptation to the natural cycle are essential for survival.

Historical and ethnographic analysis shows that *qoňyr* is deeply embedded in the structure of traditional Kazakh culture^[7]. It appears in proverbs, sayings, folklore texts, and especially in poetic and musical works. In traditional songs, for example, *qoňyr äuen* (melody) conveys shades of melancholy and inner tranquility, while in the titles of *küy*

compositions such as *qoňyr* küy or *qoňyr* qaz, it emphasizes a connection with nature, nostalgia, and spiritual depth^[10]. Folkloric analysis confirms that *qoňyr* functions not merely as a color descriptor but as an indicator of a particular state of the world and of humans within it^[11].

In the context of cognitive linguistics, *qoňyr* is of interest as an image-laden, emotionally charged, and value-oriented element of the Kazakh conceptual sphere^[12]. Its semantic fields encompass categories such as time (kesh, küz-autumn), space (zher, tau), sensations (sağynysh, tynystyq), personality traits (momyn, qarapayım), social identity (Qazaq, tektilik-nobility), and even the sacred (qasiet, ruq). This multidimensionality makes *qoňyr* an archetypal notion at the core of national consciousness^[13].

From a linguoculturological perspective, studying the concept *qoňyr* allows the identification of stable cultural codes that reflect the Kazakh way of perceiving and organizing the world^[7]. For instance, the concept is closely linked to traditional categories such as qarapayımdylyq (simplicity), tektilik (nobility), and qudaıdyn maly (sacred animal), each of which reveals deep meanings of national ethics and aesthetics. In these contexts, *qoňyr* represents not merely modesty as a social norm, but a lifestyle founded on reverence for nature, elders, the land, silence, and balance.

Special attention in the literature is given to the metaphorical potential of the word *qoňyr*^[14]. Metaphors based on this word are widespread in both literary texts and colloquial speech: *qoňyr* dauys (gentle voice), *qoňyr* küz (autumn of life), *qoňyr* tirshilik (peaceful existence). In these expressions, *qoňyr* functions as a means of semiotic transformation from a physical phenomenon (color) into a socio-cultural and philosophical category. This transformation is possible due to the deep rootedness of *qoňyr* in the collective unconscious of the Kazakh people.

Several studies highlight the significance of *qoňyr* in the formation of gender and age-based associations^[15]. In folk poetry and songs, this color is most frequently associated with the image of a mother, grandmother, or elder—symbols of femininity, maturity, warmth, and care. It is also linked with old age as a period of wisdom, tranquility, and reconciliation. Thus, *qoňyr* symbolizes not so much a physical characteristic as a comprehensive life philosophy based on serenity, constancy, and deep acceptance of existence.

Psycholinguistic research emphasizes the importance

of words with high associative saturation for the development of national self-awareness^[8]. In this context, the concept of *qoňyr* can be used in language education as a tool for introducing learners to their native culture through language. By analyzing metaphors and fixed expressions involving this word, students grasp not only vocabulary but also the value structure of their heritage. This is particularly important in the context of globalization, where preserving national identity becomes a key goal of education.

Ethnolinguistic analysis shows that the perception of *qoňyr* is not arbitrary: it is rooted in stable forms of cultural memory transmitted across generations^[16]. These memory forms may be verbal (proverbs, folklore) or nonverbal (melodies, rituals, customs). Even in the architecture and interior design of traditional Kazakh dwellings (kiiz üi), *qoňyr* tones prevail, symbolizing comfort, protection, and stability. In this regard, *qoňyr* may be described as a cultural quantum—simultaneously visual, auditory, emotional, and semantic.

Interestingly, unlike most color terms, *qoňyr* lacks an opposing meaning. It is almost always positive and devoid of strongly negative connotations. This makes it unique in terms of conceptual and axiological analysis. Whereas other colors may shift between positive and negative meanings depending on context, *qoňyr* maintains a consistent semantic field of comfort, simplicity, and emotional warmth.

Thus, the reviewed literature supports the view that the concept *qoňyr* is a complex linguocultural unit—multidimensional in its content and deeply embedded in the collective memory of the Kazakh people. Its analysis requires an integrated approach that combines the methodologies of cognitive linguistics, ethnolinguistics, psycholinguistics, and cultural anthropology. The study of this concept not only enriches linguistic science but also contributes to the preservation and promotion of Kazakh cultural identity in the face of global change.

3. Method

3.1. Participants

The survey was conducted online in March 2024 and lasted for approximately two weeks. A total of 103 native speakers of the Kazakh language voluntarily participated in the study. Participants ranged in age from 7 to 61 years (mean age: 20.7). Of these, 62 identified as female, 28 as

male, and 13 did not specify their gender. All participants confirmed their ability to read and understand the Kazakh language.

Respondents represented a diverse professional background, including education, philology, journalism, psychology, international relations, tourism, medicine, engineering, IT, business, sculpture, and law. The recruitment was open and anonymous via public calls shared on educational platforms, cultural networks, and academic mailing lists.

3.2. Materials

This study aimed to substantiate the status of the word *qoňyr* as a national concept. Therefore, the experimental questions were designed to assess whether a set of culturally meaningful associations related to the word *qoňyr* functioned as conceptual markers in the minds of Kazakh speakers. Additionally, the associative chains identified in a previous associative experiment by Khassenov concerning the word *qoňyr* were also taken into account as a foundation for comparison^[17].

The main stimulus word for the experiment was *qoňyr*. Participants were asked to rate its degree of associative connection with a list of 64 words from 16 semantic fields, including:

Nature (topyraq – soil, tau – mountain, ağaş – tree, zhapyrak – leaf);

Natural phenomena (zhel – breeze, bozan – blizzard, tuman – fog);

Birds (qaz – goose, qyran – eagle, aqu – swan, qarlgash – swallow);

Emotions (sağynu – longing, quanysh – joy, ash – anger);

Moral traits (tektilik – nobility, zhalqawlyq – laziness, nadandyq – ignorance, tākapparlıq – arrogance);

Musical instruments (dombyra, shankobyz, zhetigen, daby);

and others.

Each word was rated on a 10-point semantic differential scale: 1 = no association, 10 = very strong association with *qoňyr*.

3.3. Procedure

The survey was administered online using Google Forms. There were no restrictions based on age, gender, or

cultural status for participation. The primary requirements were normal visual and auditory abilities and the ability to read and understand the Kazakh language.

Participants were instructed to rate a series of words on a numerical scale to assess their level of association with *qoňyr*. The evaluation scale ranged from 1 to 10, where “1” indicated a low degree of association and “10” indicated a high degree of association. Thus, the semantic differential method was employed to conduct the experiment.

3.4. Data Collection and Analysis

The responses were processed using the Jamovi statistical software, which enabled systematization of the data and performance of statistical tests. The findings are presented below with accompanying graphs and explanatory descriptive statistics. Responses were collected electronically and processed using Jamovi. Descriptive statistics (mean, median, SD, SE) were calculated. Group comparisons (e.g., by age) were tested using ANOVA and post-hoc Tukey analysis.

3.5. Ethical Considerations

The research was conducted in accordance with ethical principles of anonymity, voluntariness, and informed consent. Prior to beginning the survey, each participant was informed of the study’s purpose and gave their explicit consent to participate. No identifying personal data were collected, and all results were analyzed in aggregated form. The study did not involve vulnerable populations or potentially harmful procedures.

4. Results

Typical associative responses to *qoňyr* included words such as topyraq (soil), küz (autumn), dombyra (traditional string instrument), momyn (meek), and Qazaq (Kazakh). These associations were rated highly across the respondent pool, indicating that *qoňyr* activates not only sensory perception (e.g., brown tones) but also emotional and cultural layers—such as calmness, simplicity, and national identity. The study revealed the following lexical-associative connections for the 16 thematic categories examined. The 64 stimulus words were grouped into the following categories:

Emotional associations (e.g., sadness, tranquility, long-

ing);

Sensory and natural imagery (e.g., soil, autumn, fog, sound);

Cultural and ethnic markers (e.g., dombyra, Kazakh, old age, shaman);

Moral traits and values (e.g., modesty, wisdom, patience);

Time-related concepts (e.g., evening, past, eternity).

This categorization facilitated the interpretation of patterns across dimensions of perception and cognition, linking lin-

guistic data to broader cultural themes.

4.1. Association between *qoňyr* and Concepts Related to Nature

The strongest association between *qoňyr* and natural concepts was found with the word soil (topyraq): mean = 7.25, SD = 3.13. This was followed by tree (ağaş, mean = 5.44, SD = 3.14) and mountain (tau, mean = 5.00, SD = 3.12). In contrast, the word leaf had the weakest association with *qoňyr* (mean = 3.02, SD = 2.82) (see **Table 1**).

Table 1. Descriptive Statistics for Nature-Related Concepts.

Nature-Related Concept	Mean	Median	SD	SE
Mountain	5.00	4.00	3.12	0.384
Soil	7.25	9	3.13	0.331
Tree	5.44	5.00	3.14	0.392
Leaf	3.02	2	2.82	0.361

These associations align with the instinctive perceptions of color. According to Turkologist Kormushin (2001), the ancient Turkic term jayyz, now preserved only in Turkish, was used in old texts as a stable color epithet for earth or the color of horses. He suggests that *qoňyr* may have etymologically derived from this root meaning.

4.2. Association between *qoňyr* and Natural Phenomena

In Kazakh, *qoňyr* is often used as an attribute describing nature, time, and environmental features (e.g., *qoňyr zhel* – gentle breeze, *qoňyr küz* – mild autumn, *qoňyr kesh* – tranquil evening). The phrase *qoňyr zhel* refers to a soft and even wind. This understanding is reflected in the results, with breeze receiving the highest association (mean = 5.84, SD = 3.63). The other terms showed weaker associations: heat (mean = 3.97), blizzard (mean = 2.62), and fog (mean = 2.14) (see **Table 2**).

Table 2. Descriptive Statistics for Natural Phenomena.

Natural Phenomena	Mean	Median	SD	SE
Breeze	5.84	4	3.63	0.399
Blizzard	2.62	1	2.47	0.311
Heat	3.97	3.00	3.02	0.372
Fog	2.14	1	2.04	0.270

4.3. Association between *qoňyr* and Birds

From the table of descriptive statistics, we observe that the response “qyran” (golden eagle) shows the strongest associative connection: mean – 7.13, SD – 3.30. The golden eagle, soaring high in the sky and depicted on the national flag of Kazakhstan, is held in special regard by the Kazakh people. In the worldview of the nation, the eagle symbolizes noble qualities such as power and vigilance, bravery and agility, determination and generosity, magnanimity and nobility. The results of the experiment also suggest that all

these characteristics are closely linked to the color *qoňyr* (brown), which resonates deeply with the Kazakh spirit.

In second place is the response “qaz” (goose): mean – 5.44, SD – 3.50. One of the waterfowl species inhabiting rivers and lakes in Kazakhstan is the wild goose of brown color, commonly referred to as the “*qoňyr qaz*” (brown goose) [18]. Furthermore, there exists a popular traditional kui (instrumental composition) titled “*Qoňyr qaz*” which is based on a legend about this noble bird. Therefore, the relatively high association between “qaz” and the color brown is not coincidental.

Meanwhile, the responses “qarlugash” (swallow) – mean 3.12, SD 2.69 – and “aqqu” (swan) – mean 1.70, SD 1.70 – show a very weak degree of association with the word *qoňyr* (Table 3).

Table 3. Descriptive Statistics for Bird-Related Concepts.

Bird	Mean	Median	SD	SE
Goose	5.44	5	3.50	0.410
Swan	1.70	1.00	1.70	0.231
Swallow	3.12	2.00	2.69	0.353
Eagle	7.13	9.00	3.30	0.374

4.4. Association between *qoňyr* and Animals

When associating the word *qoňyr* (brown) with animal-related concepts, respondents gave the highest rating to the response “ayu” (bear): mean – 7.45, SD – 3.29 (see Table 4). This may reflect a color-based perception associated with the natural appearance of the bear.

The second and third highest responses were “bugy” (deer) – mean 7.29, SD – 2.98, and “elik” (roe deer) – mean 6.59, SD – 3.04. In Kazakh tradition, herbivorous and non-predatory wild animals are commonly referred to as *qoňyr* aň (brown game animals). According to mythological beliefs, animals such as deer, argali (mountain sheep), roe deer, and mountain goats are considered sacred. It was believed that

the spirit of a deceased person could reincarnate into one of these animals, and thus they were regarded as sacred beings or “God’s creatures.” Out of reverence, even hunters and marksmen refrained from harming them^[11].

One of the scholars who studied the etymology of the word *qoňyr*, Khassenov^[17], cites the folk line “Qoy suydi balasyn «*qoňyrym*» dep” (“The sheep adores its offspring, calling it ‘*qoňyr*’”) and notes the semantic proximity of the words *qoňyr*, *qozy* (lamb), and *qoshaqan* (young sheep). This connection helps explain why the gentleness of the sheep has become associated with the meaning of *qoňyr* as “meek” or “docile.” According to our survey, however, the sheep (*qoy*) ranked last in terms of its associative connection with the word *qoňyr*: mean – 6.22, SD – 3.37 (Table 4).

Table 4. Descriptive Statistics for Animal-Related Concepts.

Animal	Mean	Median	SD	SE
Bear	7.45	10.00	3.29	0.363
Deer	7.29	8	2.98	0.359
Roe deer	6.56	7	3.04	0.383
Sheep	6.22	6.00	3.37	0.397

4.5. Association between *qoňyr* and Seasons

The word *qoňyr* (brown) is associated with temporal concepts such as seasons, periods, months, and weeks, indicating a direct connection with nature. In the autumn season, natural phenomena become particularly distinct: as leaves turn yellow and fall to the ground, they form what resembles a brown carpet; fruits and vegetables that ripen in autumn often display shades of brown. Thus, the various tones of brown contribute to the cozy and serene atmosphere of autumnal nature. The expression *qoňyr küz* (“brown autumn”) itself refers to the early phase of autumn – mild, dry, and calm,

without cold or rainfall– distinguishing it from the harsher late autumn (*qara küz*) (Kazakh Phraseological Dictionary, 1977). This may explain why autumn is most strongly associated with the color brown in the human mind.

In our survey as well, respondents rated the connection between the word *qoňyr* and the concept of time highest for the response “*küz*” (autumn): mean – 7.85, SD – 2.98.

The associative impact of the remaining three options was significantly lower. Specifically, the response “*koktem*” (spring) had a mean of 4.29, SD – 3.20; “*zhaz*” (summer) – mean 4.21, SD – 3.39; and “*qys*” (winter) – mean 2.28, SD – 2.19 (Table 5).

Table 5. Descriptive Statistics for Season-Related Concepts.

Season	Mean	Median	SD	SE
Winter	2.28	1.00	2.19	0.298
Spring	4.29	3	3.20	0.417
Summer	4.21	3	3.39	0.465
Autumn	7.85	10.00	2.98	0.311

4.6. Association between *qoňyr* and Time of Day

According to the Phraseological Dictionary of the Kazakh Language (1977), the moment when dusk begins to fall– when the evening shadows slowly appear– is referred to as *qoňyr kesh* (“brown evening”). This phrase evokes an image of a calm and peaceful evening: the sun has just set, twilight is descending, and a gentle, cool breeze is blowing. Therefore, it is natural that, when analyzing the association of the word *qoňyr* with temporal concepts, the response “kesh”

(evening) holds the strongest associative meaning. This is clearly reflected in the data: mean – 6.93, SD – 3.35.

In contrast, other time-related responses demonstrated much weaker associations with the word *qoňyr*: “tun” (night), when darkness fully sets in, had a mean of 3.75, SD – 3.37; “tus” (noon), the peak of daylight, showed a mean of 3.32, SD – 2.81; and “taň” (dawn), the time of sunrise, had the weakest result: mean – 2.37, SD – 2.17 (**Table 6**). Respondents thus perceived these three temporal references as having very low associative relevance to the word *qoňyr*.

Table 6. Descriptive Statistics for Time-of-Day Concepts.

Time of Day	Mean	Median	SD	SE
Dawn	2.37	1.50	2.17	0.296
Noon	3.32	2.00	2.81	0.362
Evening	6.93	8.00	3.35	0.353
Night	3.75	2	3.37	0.447

4.7. Association between *qoňyr* and Personality Traits

As previously noted, there is a scholarly view that the words *qoňyr* (brown) and *qozy* (lamb) are semantically related in the context of etymology. From this perspective, the gentle and docile nature of the sheep may have contributed to the word *qoňyr* being associated with meekness. This connection is also evident in the participants’ evaluations: when associating *qoňyr* with personality traits, the response “momyn” (meek/gentle) received the highest score – mean

7.17, SD 3.34. The meaning of *qoňyr* as “meek,” reflecting Kazakh identity, seems to reinforce the idea that this color is emotionally and culturally close to the Kazakh spirit.

The second most selected response was “батыл” (brave): mean 4.34, SD 3.44. The third was “shiraq” (agile/energetic): mean 2.65, SD 2.62. The weakest associative response was “qorqaq” (cowardly): mean 2.61, SD 2.45 (**Table 7**). This distribution of answers highlights a clear contrast between opposing character traits. Accordingly, responses expressing traits contrary to meekness received the lowest scores.

Table 7. Descriptive Statistics for Personality Trait Associations.

Trait	Mean	Median	SD	SE
Meek	7.17	9	3.34	0.354
Cowardly	2.61	2	2.45	0.325
Brave	4.34	3.00	3.44	0.430
Agile	2.65	1	2.62	0.353

4.8. Association between *qoňyr* and Emotions

The various shades of the color *qoňyr* (brown) often

evoke negative emotions and are associated in human consciousness with feelings such as sorrow and grief, melancholy and despair, longing and nostalgia. For instance, in

literary works, the frequent use of the color brown in descriptions may be linked to the presence of tragic events. In such contexts, *qoňyr* serves as a complex and multifaceted symbol: beyond expressing sadness, it can also convey a sense of nostalgia for the past, exhaustion, emptiness, and abandonment. Through these emotional associations, the color brown can immerse readers in deep reflection and emotional resonance.

The influence of *qoňyr* on emotional states – partic-

ularly its association with sadness and longing – is further supported by the results of our survey: respondents gave the highest score to this association, with a mean of 6.86 and a standard deviation of 3.39.

The response “ashu, yza” (anger, rage) ranked second (mean – 3.13, SD – 2.93), while the opposing concepts – “quanysh, baqyt” (joy, happiness)– were perceived as having a very weak association with the color brown (mean – 3.18, SD – 2.93) (**Table 8**).

Table 8. Descriptive Statistics for Emotion-Related Concepts.

Emotion	Mean	Median	SD	SE
Anger, rage	3.13	1	2.93	0.375
Longing, sadness	6.86	9	3.39	0.363
Joy, happiness	3.18	2	2.93	0.388

4.9. Association between *qoňyr* and Parts of the Human Body

Globally, approximately 79% of the human population has brown eyes. The majority of the Kazakh ethnic group also shares this trait. Such facts likely influence the strong associative link between the word *qoňyr* (brown) and the concept of eyes. This connection is supported by the results of our experiment: when asked to associate *qoňyr* with human body parts, respondents rated the response “koz” (eye) the highest–mean of 7.41, SD of 3.45.

In his dissertation *The Archetypal Nature of Kazakh*

Language Sounds, scholar Khassenov^[9], drawing on S. Qondybay’s interpretation of the Abak symbol system, analyzed the concept of *qoňyr* through the lens of the notions of “center” and “navel”^[13]. That is, he linked *qoňyr* to the human navel as a symbolic point of origin. In our survey, the response “кіндік” (navel) showed the second-highest level of associative strength after “eye”: mean – 4.98, SD – 3.67.

Other responses, such as “mañday” (forehead) – mean 4.79, SD – 3.53, and “auyz” (mouth) – mean 2.71, SD – 2.65, demonstrated the lowest levels of associative relevance with the word *qoňyr* (**Table 9**).

Table 9. Descriptive Statistics for Body-Part-Related Concepts.

Body Part	Mean	Median	SD	SE
Mouth	2.71	1.00	2.65	0.355
Eye	7.41	10.00	3.45	0.372
Navel	4.98	4.00	3.67	0.459
Forehead	4.79	4.00	3.53	0.464

4.10. Association between *qoňyr* and Age Categories

An associative experiment aimed at identifying the meaning of the word *qoňyr* (brown) was conducted prior to our study. In that earlier research^[17], when examining the association of *qoňyr* with age categories, responses such as “between 50 and 70 years old” and “middle-aged married couples” (orta zhas) were commonly reported. In our own survey, the highest-rated association was with the category

“old age,” which received a mean score of 6.54 and a standard deviation of 3.40. This result demonstrates that in the Kazakh worldview, the color *qoňyr* is closely linked with elderly individuals.

In our experiment, the category “middle age, maturity” showed a moderate associative connection with the word *qoňyr*: mean – 5.82, SD – 3.39. The association with “youth” (zhigittik zhas) yielded a lower result: mean – 4.34, SD – 3.11. The weakest association was observed with “childhood” (balalyq): mean – 3.28, SD – 3.27 (**Table 10**).

Table 10. Descriptive Statistics for Age-Related Concepts.

Age Category	Mean	Median	SD	SE
Childhood	3.28	1	3.27	0.419
Youth	4.34	4.00	3.11	0.408
Middle age	5.82	6	3.39	0.386
Old age	6.54	8	3.40	0.415

4.11. Association between *qoŋyr* and Numbers

The numbers 3, 7, 9, and 40 presented in this question are considered sacred in the traditional worldview of the Kazakh people. According to the responses in our survey, the number “qyryq” (forty) received the highest rating: mean – 6.07, SD – 3.48. In her work Küretamyr (2019), Zeynep Akhmetova explains the significance of the number forty in Kazakh customs and beliefs, noting that it is linked to human creation and spiritual understanding. We suggest that the

phonetic and syllabic similarity between the words *qoŋyr* (brown) and “qyryq” (forty) may have also influenced respondents’ perception, enhancing the degree of associative meaning between them.

The second highest rating was given to the number “zheti” (seven): mean – 5.10, SD – 3.62, closely followed by “togyz” (nine): mean – 5.08, SD – 3.37. The weakest associative connection was observed for the number “ush” (three): mean – 3.84, SD – 3.51 (**Table 11**).

Table 11. Descriptive Statistics for Number Associations.

Number	Mean	Median	SD	SE
Three	3.84	2	3.51	0.449
Seven	5.10	4.00	3.62	0.467
Nine	5.08	4.50	3.37	0.397
Forty	6.07	6.50	3.48	0.449

4.12. Association between *qoŋyr* and Artistic Forms

Summarizing the results from the table containing descriptive statistics: “an-kuy” (music) received a mean score of 6.20, SD – 3.56; “musinshilik” (sculpture) – mean 6.13, SD – 3.56; “aқындық” (poetry) – mean 6.13, SD – 3.38; and “sawletshilik” (architecture) – mean 4.90, SD – 3.53 (**Table 12**).

As we can see, among the art-related concepts, the strongest association with the word *qoŋyr* (brown) was observed for “an-kuy”. In general, the expression *qoŋyr* ән refers to a song performed in a soft, steady, and calm tone—reflecting the emotional character of the term.

The strong association with “musinshilik” (sculpture)

may be attributed to the natural brown shades of materials commonly used in sculpting. Additionally, the qualities essential to sculpture—patience, endurance, and steadiness—are traditionally linked to the symbolic meanings of the word *qoŋyr* in Kazakh cultural understanding.

Emotional states such as melancholy and introspection, which are often associated with the color brown, tend to be most deeply experienced by poets, writers, scholars, and public intellectuals. These emotional connotations may explain the relatively high associative rating for the concept of “poetry.”

Conversely, the weakest association among the responses was observed with “sawletshilik” (architecture), as reflected in the participants’ evaluations (**Table 12**).

Table 12. Descriptive Statistics for Art-Related Associations.

Art Form	Mean	Median	SD	SE
Poetry	6.12	6.00	3.38	0.436
Music	6.20	7	3.56	0.412
Sculpture	6.13	8	3.56	0.435
Architecture	4.90	4.00	3.53	0.464

4.13. Association between *qoňyr* and Musical Instruments

The entire essence of the Kazakh individual is closely linked to the word *qoňyr* (brown)—a native color that reflects national identity. The Kazakh temperament, the vast open steppe, the nomadic way of life, traditional instruments, and the very sound they produce are all *qoňyr*. National musical instruments such as the dombra, kobyzy, and sazesyrnay, whether stringed, plucked, wind, or percussion, produce melodies and rhythms that are soothing to the ear and resonate with the soul. These musical expressions reflect the worldview, lifestyle, and spirit of the Kazakh people and have been passed down from generation to generation—largely due to the enduring emotional power of the *qoňyr* tone.

In terms of the association of *qoňyr* with musical instruments, the response “dombyra” (dombra) showed the strongest effect: mean – 7.67, SD – 3.11 (**Table 13**). In his study *Qoňyr undi dombyra* (“The Brown-Toned Dombra”), Näzhimedenov explores the dombra’s timbre and emphasizes that its *qoňyr* sound reflects an archetypal harmony consistent with Kazakh cultural aesthetics that resonates with the very origins of musical tone in the universe^[10].

Among the traditional instruments deeply rooted in Kazakh culture and natural environment, the шаңқобыз (jaw harp) also demonstrated a strong associative connection: mean – 6.80, SD – 3.35.

The responses for “zhetigen” and “dabył” (drum) were slightly lower, with means of 5.97 (SD – 3.21) and 5.50 (SD – 3.29), respectively.

Table 13. Descriptive Statistics for Musical Instrument Associations.

Instrument	Mean	Median	SD	SE
Shankobyz	6.80	8	3.35	0.404
Dombra	7.67	10	3.11	0.345
Drum	5.50	6.00	3.29	0.433
Jetigen	5.97	7	3.21	0.412

4.14. Association between *qoňyr* and Lifestyle-Related Concepts

Among the concepts related to livelihood and daily life, the response “baylyq” (wealth) showed the weakest associative impact: mean – 3.70, SD – 3.16. The response “kedeylik” (poverty) was slightly higher: mean – 4.59, SD – 3.30 (**Table 14**).

In Kazakh cultural understanding—as well as in the broader human perception—the color *qoňyr* (brown) is firmly established as a symbol of simplicity. The results of our survey further confirm this association: the response “qarapayymdylyq” (simplicity) received the highest rating among the concepts of daily life, with a mean of 7.63 and a standard deviation of 3.35.

Table 14. Descriptive Statistics for Lifestyle Concepts.

Concept	N	Mean	Median	SD	SE
Wealth	56	3.70	3.00	3.16	0.423
Poverty	58	4.59	3.00	3.30	0.433
Simplicity	88	7.63	10.00	3.35	0.357

4.15. Association between *qoňyr* and Ethical/Moral Traits

According to the descriptive statistics, the associations between the word *qoňyr* (brown) and negative character traits are generally weak: “zhalqawlyq” (laziness) had a mean score of 3.55, SD – 3.08; “täkapparlyk” (arrogance)—a direct opposite of simplicity—scored 3.45, SD – 3.37; and “nadandyq” (ignorance) received a mean of 3.40, SD – 3.08 (**Table 15**). These results reinforce our view that *qoňyr* pos-

sesses primarily positive connotations, showing little to no connection with negative meanings.

For the Kazakh people—who value bloodline purity and adhere to the principle of the seven ancestors—the concept of “tektilik” (nobility of lineage) is among the highest virtues. In our survey, this notion showed a strong association with *qoňyr*: mean – 6.71, SD – 3.69.

National values such as nobility and the symbolic meaning of *qoňyr* complement each other, as both concepts align closely with the essence of Kazakh identity.

Table 15. Descriptive Statistics for Moral Value Associations.

Trait	N	Mean	Median	SD	SE
Nobility	78	6.71	9.00	3.69	0.418
Laziness	58	3.55	2.00	3.08	0.404
Ignorance	55	3.40	2	3.08	0.416
Arrogance	60	3.45	1.00	3.37	0.435

4.16. Association between *qoňyr* and National Identity

When examining the degree of association between the

color *qoňyr* (brown) and specific ethnic groups, the weakest associations were observed with “Russian” (mean – 2.13, SD – 2.36) and “Chinese” (mean – 2.62, SD – 2.62) (**Table 16**).

Table 16. Descriptive Statistics for Ethnic Identity Associations.

Ethnicity	Mean	Median	SD	SE
Russian	2.13	1	2.36	0.324
Chinese	2.62	1.00	2.62	0.344
German	3.14	2.00	2.82	0.377
Kazakh	7.29	9	3.41	0.361

The association with the “German” nationality was slightly higher (mean – 3.14, SD – 2.82), which may be linked to the brown-colored uniforms worn by German soldiers during wartime. During that period, the color brown even became a symbol of Nazism due to its association with the uniforms of the Nazi regime.

Each nation has a color symbolically tied to its historical experiences, worldview, customs, and culture. For the nomadic Kazakh people, the color *qoňyr* carries strong associative meaning, reflecting the vast steppe and natural surroundings. In the final question of our experiment, when respondents were asked to associate the word *qoňyr* with a nationality, the highest score was given to the response “Kazakh”: mean – 7.29, SD – 3.41.

In addition to descriptive statistics (mean, median, standard deviation, standard error), the data were analyzed using inferential statistical methods to identify significant differ-

ences in associative strength between key categories.

Independent-samples t-tests were applied to compare associative scores between male and female respondents across selected high-ranking concepts (e.g., autumn, dombra, meekness, Kazakh). The results showed no statistically significant gender-based differences ($p > 0.05$), confirming uniform perception across genders.

One-way ANOVA was conducted to examine differences across four age groups (under 18, 18–25, 26–40, 41+)(**Table 17**). Statistically significant differences ($p < 0.05$) were found for the concepts old age, dombyra, and tekstilik, with older participants assigning higher associative values. Post-hoc Tukey HSD tests confirmed that the 41+ age group demonstrated a stronger connection to traditional and cultural concepts such as *qoňyr* dombra and nobility than younger respondents.

Table 17. One-Way ANOVA Results for Selected Concepts by Age Group.

Concept	F (df = 3, 99)	p-Value	Post-hoc (Tukey HSD)
Old age	4.76	0.004	41+ > under 18, 18–25 ($p < 0.05$)
Dombra	3.92	0.011	26–40, 41+ > under 18 ($p < 0.05$)
Tektilik	4.18	0.008	41+ > 18–25 ($p < 0.05$)

Note: Significant differences were found only for culturally loaded concepts. For most other concepts (e.g., breeze, soil, poetry), differences between age groups were not statistically significant ($p > 0.05$).

This statistical pattern suggests that older participants tend to associate *qoŋyr* more strongly with concepts tied to traditional Kazakh identity, such as old age, *dombyra*, and *tektilik*. These results support the hypothesis that *qoŋyr* functions as a cultural archetype, whose emotional and symbolic value intensifies with age and accumulated cultural experience.

Figure 1 shows the distribution of associative re-

sponses across five dominant categories (emotional, sensory, symbolic, moral, and ethnocultural). **Figure 2** presents a word cloud generated from the most frequent responses, where size corresponds to relative frequency. These visualizations illustrate the centrality of concepts such as “soil,” “*dombra*,” “Kazakh,” “modesty,” and “autumn” within the associative field of *qoŋyr*.

Figure 2: Қоңыр концептісінің семантикалық өрісі
(Semantic Field of the Concept 'Qoŋyr')



Figure 1. Five Dominant Categories (Emotional, Sensory, Symbolic, Moral, and Ethnocultural).

Figure 2: Top 10 Frequent Associations with 'qoŋyr'
(With English Translations)

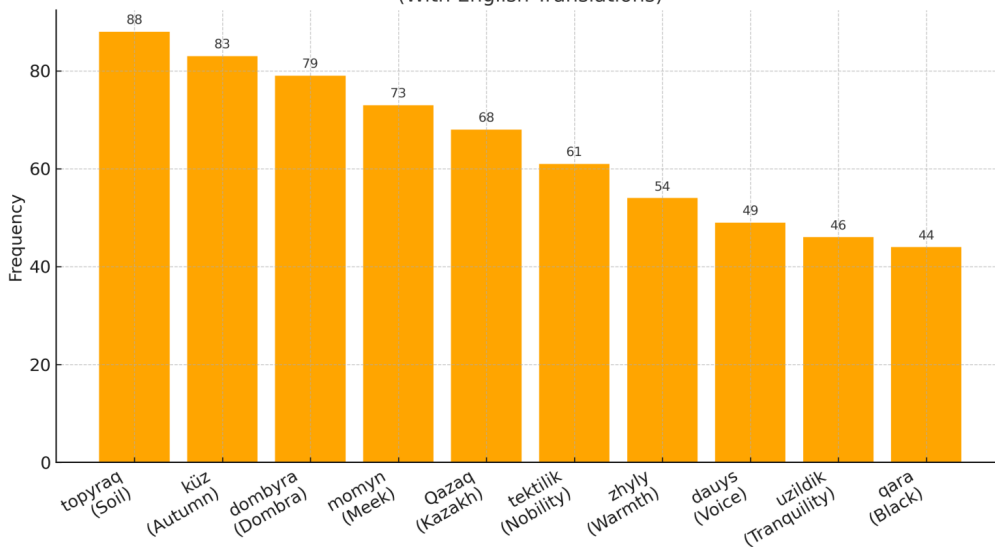


Figure 2. Size Corresponds to Relative Frequency.

5. Discussion

The primary objective of our study was to determine, through statistical and associative methods, the role of the word *qoňyr* as a national concept in the Kazakh linguistic consciousness. The results demonstrated that this term is closely connected to a wide range of cognitive domains, including nature, animals, time, emotions, art, personality traits, ethnic identity, and spiritual values. These findings allow for comparative analysis along several lines within the scholarly context.

The associative prominence of words such as soil, autumn, dombra, meekness, and Kazakh demonstrates that *qoňyr* is not merely a perceptual category but a cultural symbol. It embodies a worldview rooted in harmony with nature, emotional restraint, moral humility, and continuity of tradition. These associations echo the Kazakh nomadic ethos, where survival, dignity, and connection to land are deeply interwoven.

Firstly, the symbolic role of colors—particularly *qoňyr*—is especially prominent in Kazakh linguoculture. In this regard, B. Khasenov's works offer an extensive examination of the archetypal and phonetic nature of *qoňyr*^[9, 17]. He defines it as a cultural code that reflects the essence of national identity.

Similarly, I.V. Kormushin^[19], in his analysis of the historical Turkic lexeme *jayyz* (a brownish tone), reveals its semantic connection with the concept of earth, offering linguistic and cultural grounding for the associative links found in our study with soil, mountain, breeze, and old age.

Berlin and Kay's seminal work on the universality and cultural relativity of color terms recognized brown as a non-primary but semantically stable color^[20]. This aligns with our findings, where *qoňyr* is associated with concepts like evening, autumn, dombra, and simplicity.

Rather than merely reflecting national consciousness, language actively constructs and transmits culturally grounded conceptual systems^[21, 22]. In the case of *qoňyr*, linguistic usage encodes emotional, ethical, and ecological values central to the Kazakh ethnolinguistic worldview. Thus, associations formed around *qoňyr* are not incidental but culturally patterned expressions of inherited knowledge and identity.

In Kazakh literature, *qoňyr* also carries a strong aes-

thetic dimension. Expressions like *qoňyr ün* (mellow voice), *qoňyr äuen* (soft melody), *qoňyr küz* (gentle autumn), and *qoňyr kesh* (quiet evening) are emotionally resonant symbols in poetic language. Zhumageldi Nazhimedenov's study *qoňyr ündi dombyra* explores how the sound of the dombra embodies national spirit and harmony—mirrored in our data by the strong associations with dombra and *än-kui* (music)^[10].

From a cognitive semantic perspective, scholars like Zalizniak argue that color concepts are tightly interwoven with national psychology^[23]. This resonates with our findings, where *qoňyr* serves as a symbol of the Kazakh people's humble, steady, and ancestral worldview.

Kazakh researchers such as Akhmetov and Akhmetova have deeply explored the mythological and symbolic significance of *qoňyr*, particularly its ties to sacred animals and moral values^[11, 24]. Our results—showing strong associations with nobility, old age, poverty, and simplicity—align closely with these interpretations.

Recent studies in cultural linguistics emphasize that color terms often function as cultural metaphors reflecting collective cognitive patterns^[25, 26]. In this light, *qoňyr* exemplifies a culturally saturated concept with metaphoric, emotional, and ethical dimensions aligned with Kazakh identity.

Comparative perspective also highlights the distinctive position of *qoňyr* among culturally marked color terms. In Tatar and Turkish linguocultures, similar connotations are found in words like *boz* and *toprak*, which refer to earthy, muted tones and are likewise associated with modesty, calmness, and traditional identity^[27]. Outside the Turkic context, the Japanese concept *wabi-sabi* conveys an aesthetic of simplicity and imperfection that resonates philosophically with *qoňyr*. These parallels emphasize that while the specific word *qoňyr* is unique to Kazakh, its underlying cultural functions—expressing moderation, naturalness, and harmony—can be found across other traditional worldviews.

Unlike previous studies that explored *qoňyr* primarily in poetic, symbolic, or lexical dimensions, this research employs empirical data from associative fieldwork and statistical analysis to uncover how the concept functions cognitively and culturally. It contributes to a deeper understanding of how core cultural concepts are encoded, transmitted, and emotionally anchored in language. The results offer not

only a case study of Kazakh conceptualization but also a methodological model for investigating minority language worldviews.

This study has several limitations. Although the sample included over 100 native speakers of Kazakh from diverse professional backgrounds, it did not explicitly control for regional dialectal variation or level of language proficiency. Moreover, younger respondents dominated the participant pool, which may affect the balance of cultural associations. Future research could address these factors through stratified sampling and expanded regional comparison.

In conclusion, the field of color conceptology, situated at the intersection of language and culture, continues to evolve with distinctive features in Kazakh linguistic research. *qoňyr* is not merely a color term; it is a complex linguocultural concept that encapsulates national identity, worldview, and philosophical outlook.

6. Conclusions

This study confirmed the hypothesis that the concept *qoňyr* in Kazakh linguoculture is not merely a lexical unit denoting color, but a complex mental and cultural category deeply embedded in national consciousness. The experimental and statistical analysis, conducted using the semantic differential method, revealed the key associative links that reflect dominant perceptions among native Kazakh speakers.

The results show that *qoňyr* is most strongly associated with concepts such as soil, breeze, eagle, bear, autumn, evening, meekness, longing, eyes, old age, forty, music, dombra, simplicity, nobility, and Kazakh. These associations indicate that the concept of *qoňyr* encompasses natural, temporal, emotional, aesthetic, ethical, age-related, and ethnic dimensions. It reflects a worldview characterized by balance, simplicity, spiritual depth, memory, attachment to roots, and naturalness.

Compared to earlier studies, this experiment revealed a broader associative network, demonstrating the archetypal function of *qoňyr* within the Kazakh mentality. It serves not only as a reflection of perceptions of the external world but also as an expression of a people's ethics, aesthetics, and philosophical stance.

The research methodology—combining quantitative analysis with cognitive interpretation—enabled not only the

measurement of frequency and strength of associations, but also insights into why particular meanings are activated in the minds of speakers. This enhances the relevance of the study not only for linguistics but also for ethnography, cultural studies, pedagogy, and philosophy.

The findings can be applied in designing curricula for teaching the Kazakh language, developing textbooks and dictionaries, and conducting further comparative studies of concepts in Turkic and other languages. They may also help students and researchers develop a deeper understanding of the cultural values encoded in language.

Overall, the concept of *qoňyr* can be regarded as a cultural code representing the enduring values of the Kazakh people: modesty, wisdom, harmony with nature, reverence for the past, and the aesthetics of calmness and equilibrium. In today's globalized world, its relevance only increases, symbolizing national identity, soft power, and inner strength. Through such concepts, language fulfills its primary role—as a vessel of culture and collective memory.

Thus, *qoňyr* can be regarded not merely as a color term, but as a culturally encoded concept that reflects the Kazakh worldview. It serves as a symbol of modesty, continuity, harmony with nature, and reverence for tradition. Its strong associative ties across emotional, temporal, and moral dimensions highlight its role as a cognitive and cultural archetype in Kazakh linguoculture. The findings of this study can be applied in Kazakh language instruction, especially in developing culturally embedded teaching materials. The associative richness of *qoňyr* demonstrates how color terms encode ethical, emotional, and historical values. Educators may integrate such concepts into classroom discussions, textbooks, and interactive materials to enhance linguistic intuition and intercultural competence. Moreover, the concept can serve as an entry point into exploring Kazakh worldview and aesthetics in heritage language programs.

Further research can expand this study in several directions. Comparative investigations could explore how culturally embedded color concepts such as *qoňyr* function in other Turkic languages—e.g., *boz* (Tatar), *kök* (Kyrgyz), or *qora* (Uzbek)—revealing both universal and unique cultural meanings. These studies may also highlight lexical and semantic shifts tied to geography, religion, or modernization. Additionally, longitudinal analyses might trace how the associative field of *qoňyr* evolves across generations or under

globalization pressures (e.g., language shift, media influence, urbanization). Such research would contribute to the understanding of conceptual change, cultural resilience, and the semiotic dynamics of minority languages in the 21st century.

Author Contributions

Conceptualization, B.K. and A.B.; methodology, Z.S.; software, A.S.; validation, B.K., A.B. and A.S.; formal analysis, B.N.; investigation, S.G.; resources, S.Y.; data curation, A.S.; writing—original draft preparation, Z.S.; writing—review and editing, B.S.; visualization, B.S.; supervision, B.K.; project administration, B.K.; funding acquisition, B.K. All authors have read and agreed to the published version of the manuscript.

Funding

This work received no external funding.

Institutional Review Board Statement

The study was conducted in accordance with the Declaration of Helsinki, and approved by the Institutional Review Board of Buketov Karaganda University (Protocol Code: BUK-ETH-2024-07, Approval Date: 15 February 2024).

Informed Consent Statement

Informed consent was obtained from all subjects involved in the study.

Data Availability Statement

The data presented in this study are available on request from the corresponding author. The data are not publicly available due to privacy restrictions.

Acknowledgments

The authors express their gratitude to all participants who took part in the associative experiment. Special thanks to colleagues at Buketov Karaganda University and Pavlodar Pedagogical University for their assistance in organizing the survey and providing expert feedback during the research

process.

Conflict of Interest

The authors declare no conflict of interest.

References

- [1] Arutyunova, N.D., Yanko, T.E., (eds.), 1991. Logical analysis of language: Cultural concepts [Logicheskij analiz jazyka: kul'turnye koncepty]. Nauka: Moscow, Russia.
- [2] Prikhodko, A.N., Prikhodko, A.M., 2013. Concepts and conceptual systems [Konceptii i konceptual'nye sistemy]. FlintA: Moscow, Russia.
- [3] Karasik, V., 2002. Language circle: Personality, concepts, discourse [Jazykovoij krug: lichnost', koncepty, diskurs]. Peremena: Volgograd, Russia.
- [4] Karasik, V., 2008. Linguistic and cultural concepts: Approaches to study. In: Maslova, V. (ed.). Sociolinguistics Yesterday and Today. Nauka: Moscow, Russian. pp. 127–155. Available from: <https://cyberleninka.ru/article/n/lingvokulturnye-kontsepty-podhody-k-izucheniyu> (cited 17 June 2024).
- [5] Medvedeva, T.S., Oparin, M.V., Medvedeva, D.I., 2011. Key concepts of German linguistic culture [Kljuchevye ponjatija nemeckoj lingvokul'tury]. FLINTA: Moscow, Russia.
- [6] Stepanov, Y., 2022. Concepts: The thin film of civilization [Konceptii: Tonkaja plenka civilizacii]. Litres: Moscow, Russia.
- [7] Qaidarov, A., Aktamberdieva, Z., Umirbekov, B., 1992. Colorative expression in language [Tur-tus anawlarynyng tildegi korinisi]. Ana tili: Almaty, Kazakhstan.
- [8] Aitova, N.N., 2006. Cognitive semantics of color names in the Kazakh language [Qazaq tilindegi tys ataularynyng tanymdyq semantikas]. AOU: Aktobe, Kazakhstan.
- [9] Khassenov, B.R., 2021. The archetypal nature of Kazakh phonemes [PhD dissertation]. Karaganda Buketov University: Karaganda, Kazakhstan.
- [10] Nazhimedonov, ZH., 2008. The mellow sound of the dombra [Qongyr undi dombyra]. Daik-Press: Astana, Kazakhstan.
- [11] Akhmetov, A., 2015. Taboo and euphemisms in Turkic languages [Turki tilindegi tabu men evfemismder]. Gylm: Astana, Kazakhstan.
- [12] Khassenov, B., Adilova, A., Rapisheva, Z., 2022. Colour symbolism in Turkic culture: A new look in the reconstruction of colour designation. *Pertanika Journal of Social Sciences and Humanities*. 30(4), 1753–1766.

- [13] Qondybay, S., 2003. Hyperborea: The rot of the times of dreaming [Giperboreya: Tus korgen zaman shezhiresi]. Ush Qyan: Almaty, Kazakhstan.
- [14] Akhmetova, A., 2012. Zhumecken Nazhimedenov poetry syndagi “tuster” cheeses. Secrets of “bright realities” in the poetry of Zhumecken Nazhimedenov. Eurasian Journal of Philological Science and Education. 139 (5–6). Available from: <https://philart.kaznu.kz/index.php/1-FIL/article/view/1345> (cited 15 February 2024).
- [15] Mankeyeva, A.K., 2015. Linguocultural features of associations “brown” color depending on the age of people. Eurasian Journal of Philology Science and Education. 157 (5). Available from: <https://philart.kaznu.kz/index.php/1-FIL/article/view/1643> (cited 15 February 2024).
- [16] Zhenis, J., 2022. Ancient history of the Konyrat tribe in the Kazakh people [in Kazakh]. National History – Domestic History. 1(97), 200–209. DOI: https://doi.org/10.51943/1814-6961_2022_1_200
- [17] Khassenov, B., 2012. On the origin of color terms. Bulletin of Karaganda University. Philology Series. (4), 4–11. Available from: <https://rep.ksu.kz/bitstream/handle/data/7171/%d0%a4%d0%b8%d0%bb%d0%be%d0%bb%d0%be%d0%b3%d0%b8%d1%8f%205-11.pdf?sequence=1&isAllowed=y> (cited 17 March 2024).
- [18] Kenesbaev, I., 1977. Phraseological dictionary of the Kazakh language. Gylm: Almaty, Kazakhstan.
- [19] Kormushin, I.V., 2001. Color designations [Cvetovye oboznachenija]. In: Tenishev, E.R. (ed.). Comparative Historical Grammar of Turkic Languages. Lexicon [Sravnitel’no-istoricheskaja grammatika tjurkskih jazykov. Slovar’]. Nauka: Moscow, Russia. pp. 592–608.
- [20] Berlin, B., Kay, P., 1969. Basic color terms: Their universality and evolution. University of California Press: Berkeley, CA, USA.
- [21] Lakoff, G., Johnson, M., 1980. Metaphors we live by. University of Chicago Press: Chicago, IL, USA.
- [22] Wierzbicka, A., 1997. Semantics, culture, and cognition: Universal human concepts in culture-specific configurations. Oxford University Press: Oxford, UK.
- [23] Zalizniak, A.A., 2014. Cultural semantics of colour terms in languages: Cognitive and ethnolinguistic approaches [Kul’turnaja semantika cvetovyh terminov v jazykah: kognitivnyj i jetnolingvisticheskij podhody]. LRC Publishing: Moscow, Russia.
- [24] Akhmetova, Z., 2019. Artery [Arteria]. Mazmundama: Almaty, Kazakhstan.
- [25] Sharifian, F., 2020. Cultural conceptualisations and language: Theoretical and applied perspectives. John Benjamins: Amsterdam, Netherlands.
- [26] Yang, H., Huang, B., Li, L. and Zhang, S., 2025. Color Metaphor Mappings for Love Concepts: Empirical Evidence from Chinese Speakers. Metaphor and Symbol, 40(1), pp.1-16. <https://doi.org/10.1080/10926488.2024.2379988>
- [27] Baltabayeva, A., Bakenova, A., Amirbekova, A., et al., 2024. Semantic features of the word *qonyr* (brown): Conceptual analysis of two separate works. Theory and Practice in Language Studies. 14(11), 3347–3354. DOI: <https://doi.org/10.17507/tpls.1411.03>