

The Influence of Language on the Perception and Resolution of Environmental Issues

A Influência da Língua na Perceção e Resolução de Questões Ambientais

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ABSTRACT: The study examined how cultural stereotypes concerning nature and the environment shape the ecological function of language and influence environmental discourse across different cultures. Through comparative analysis, key stereotypes and their impact on ecological behavioural patterns in Kyrgyz, Kazakh, and English-speaking societies were identified. It was noted that proverbs and sayings related to dominance fostered a sense of control over nature and reduced responsibility for resource use, while paremias reflecting the perceived infinitude of resources led to careless exploitation. Anthropocentric notions highlighted human capacity to alter the environment. Positively, harmony between humans and nature was emphasised, promoting environmental respect. Warnings embedded in folklore highlighted the consequences of irresponsible behaviour. Proverbs and sayings that underscored dependence on natural resources contributed to awareness of the need for rational resource use. While Kyrgyz and Kazakh paremias conveyed a deep cultural connection and mutual harmony with nature, English proverbs more frequently reflected a worldview in which human agency is central, often framing interdependence with nature through a lens of control and utilitarian value.

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KEYWORDS: Linguistic Worldview, Proverbs, Sayings, Concept, Cognitive Linguistics, Natural Environment

RESUMO: O estudo analisou como os estereótipos culturais relativos à natureza e ao ambiente moldam a função ecológica da linguagem e influenciam o discurso ambiental em diferentes culturas. Através de uma análise comparativa, foram identificados os principais estereótipos e o seu impacto nos padrões de comportamento ecológico nas sociedades quirguizes, cazaques e de língua inglesa. Observou-se que os provérbios e ditados relacionados com a dominância fomentavam uma sensação de controlo sobre a natureza e reduziam a responsabilidade pela utilização dos recursos, enquanto as parémias que refletiam a perceção da infinitude dos recursos conduziam a uma exploração descuidada. As noções antropocêntricas destacavam a capacidade humana de alterar o ambiente. De forma positiva, a harmonia entre os seres humanos e a natureza era enfatizada, promovendo o respeito pelo ambiente. Os avisos incorporados no folclore destacavam as consequências de um comportamento irresponsável. Os provérbios e ditados que sublinhavam a dependência dos recursos naturais contribuíam para a consciencialização da necessidade de uma utilização racional dos recursos. Enquanto os parémios quirguizes e cazaques transmitiam uma profunda ligação cultural e harmonia mútua com a natureza, os provérbios ingleses reflectiam mais frequentemente uma visão do mundo na qual a acção humana é central, enquadrando muitas vezes a interdependência com a natureza através de uma lente de controlo e valor utilitário.

PALAVRAS-CHAVE: Visão de Mundo Linguística, Provérbios, Ditos, Conceito, Linguística Cognitiva, Ambiente Natural

Introduction

Language serves not only as a mode of communication, but also as a reflection of social and cultural stereotypes. Stereotypes can have a significant impact on how people perceive their surroundings. For example, entrenched stereotypes about nature or the environment can shape attitudes and thus influence ecological awareness. Language's ecological function is to shape representations of nature and ecosystems. Language has the potential to help spread environmental knowledge, protect the environment, and promote long-term development. Stereotypes, on the other hand, have the potential to either support or undermine this function, especially when they lead to oversimplification or distortion of ecological processes. Stereotypes' impact on the ecological function of language may differ depending on the cultural context. Different cultures may perceive and use language differently when addressing environmental issues, reflecting their own stereotypes and value systems. Thus,

studying the impact of stereotypes on the ecological function of language is critical for comprehending the relationship between language, culture, and ecosystems.

The specific features of cognitive linguistics in the context of Kyrgyzstan were explored by Samatov (2021), who also analysed theoretical approaches and methodologies used in cognitive linguistics, discussing their application to the study of Kyrgyz language and culture. This work underscored the importance of cognitive linguistics for understanding language as a tool of thought and cultural expression. Furthermore, Naimanova and Aalieva (2022) examined the concept of “home” in the Kyrgyz-speaking world through the lens of an associative experiment. Their study analysed how this notion was perceived and interpreted by native speakers, identifying the cultural and social dimensions associated with the idea of home. The results provided insight into how language and culture shape the perception of space and identity in Kyrgyz society. However, the issue of how ecological themes are reflected in Kyrgyz culture remained unaddressed.

Key developments and directions in ecolinguistics in Zhang’s (2022) work, which analysed the influence of language on the perception of ecology and the environment, emphasising the importance of studying language structures related to nature and environmental issues. Bang and Wilhelm (2014) proposed a theoretical framework for understanding language as an ecological system. The study examined how linguistic practices and structural features of language interact with the environment, influencing cultural and social perceptions of ecology. Harrison’s study (2023) explored how language can be used to discuss environmental issues and sustainable development, with a focus on the role of linguistic practices in shaping public awareness of ecological concerns.

Gul et al. (2021) analysed how language was used in advertising and communication during the COVID-19 pandemic, drawing attention to ecolinguistic aspects and examined how advertising could shape ecological awareness and behaviour. The research by Ouadhiri et al. (2023) focused on the influence of language on corporate environmental practices, highlighting the role of linguistic strategies in fostering corporate environmental responsibility and sustainable behaviour. However, these works did not examine how the ecological function of language is manifested in folklore.

The work by Fish et al. (2024) demonstrated how linguistic practices contribute to biodiversity conservation. It emphasised the key role of language in transmitting ecological knowledge and practices, which in turn support environmental protection efforts. Liu and Buckingham (2024) analysed how language choice in academic publishing affects the accessibility and dissemination of environmental knowledge, stressing the importance of representing non-English languages in scientific discussions on ecology. Brown (2022) discussed how multilingual education supports linguistic ecology and the preservation of linguistic diversity, addressing issues of sustainable development and ecological awareness. Furthermore, the article by Singh et al. (2024) investigated the

impact of ecological diversity on research and education, particularly in the context of bilingualism, noting that linguistic and cultural diversity enrich understanding of environmental issues. However, none of these studies focused on the role of ecological stereotypes.

The purpose of the present study was to investigate the influence of social and cultural stereotypes on the ecological function of language and to determine their role in shaping ecological awareness and behaviour. Key objectives of this study included the exploration of stereotypes related to nature and ecology in various cultural contexts, and the analysis of environmental stereotypes through the lens of proverbs and sayings in Kyrgyz and English-speaking cultures.

1. Materials and methods

To examine the influence of stereotypes on the ecological function of language, a range of oral and written sources was utilised. The proverbs for this study were carefully selected based on several inclusion and exclusion criteria to ensure cultural relevance and ecological focus. Only those proverbs that are widely recognised and culturally significant within Kyrgyz, Kazakh, and English-speaking societies were included. These proverbs had to reflect traditional ecological knowledge, specifically addressing themes such as human-nature interdependence, resource management, sustainability, or respect for the environment. Additionally, the proverbs needed to come from authoritative cultural sources, including traditional folklore, literary works, or historical collections, ensuring their authenticity. Only proverbs that maintained their ecological content in translation were considered, ensuring that the cultural context was preserved.

Proverbs that did not focus on ecological or environmental themes were excluded from the analysis. Those that centred on social, political, or religious matters without a clear connection to nature were also omitted. Similarly, modernised or newly coined proverbs that reflected contemporary rather than traditional ecological values were excluded to maintain the study's historical and cultural integrity. Proverbs that were incomplete, ambiguous, or lacked direct ecological meaning were also excluded from the selection process.

The final corpus includes approximately 120 proverbs, with 38 from Kyrgyz culture, 42 from Kazakh, and 40 from English. These proverbs were selected from prominent collections, such as Koichumanov (2012) for Kyrgyz proverbs, Asykova (2013) for Kazakh proverbs, and Ray (1813) for English proverbs. A comparative analysis of these proverbs allowed for the identification of shared motifs and significant differences in ecological perceptions across these cultural contexts. The data were systematised following the methodology of Bromham et al. (2022).

Research literature in the fields of linguistics, cultural studies, and environmental science, which examined the relationship between language and ecology, was also reviewed. These materials

served as the theoretical foundation for the analysis and comparison of data from diverse sources. Key theoretical concerns included the ecological model of language integrating cognitive linguistics and ecological semantics; linguistic constructions influencing the perception of environmental problems and solutions; the interpretation of ecological concepts; and the cultural role of ecology. The collected materials formed the basis for the subsequent analysis and comparison of proverbs and the identification of ecological stereotypes in language.

A detailed analysis was conducted on Kyrgyz proverbs concerning nature, ecosystems, and human relationships with the environment. Each proverb was examined according to thematic categories and key motifs reflecting the interrelationship between humans and nature.

In addition, the study investigated how linguistic expressions shape public perceptions of nature and contribute to the formation of ecological consciousness. A similar analysis was conducted on Kazakh proverbs related to ecology and human-nature interaction. Comparative analysis with Kyrgyz proverbs enabled the identification of both commonalities and differences in the cultural perception of nature. The study also determined the role of Kazakh proverbs in shaping sustainable ecological stereotypes and values.

The study further explored how English linguistic expressions reflect public attitudes toward nature and influence the formation of environmental consciousness. Comparative analysis with Kyrgyz and Kazakh proverbs allowed for the identification of both similarities and differences in ecological perception across these cultures. Special attention was paid to the role of English proverbs in shaping stable environmental representations and values.

This comparative approach made it possible to identify shared themes, cultural differences in environmental perception, and the influence of linguistic stereotypes on the ecological function of language across cultures. It also demonstrated how ecological values and norms are transmitted from generation to generation through language. The findings contribute to a deeper understanding of the interaction between language and culture within the context of ecological awareness, underscoring the importance of cultural sensitivity in the formation of environmental worldviews.

2. Results

The concepts of stereotype, cultural metaphor, and ideology are interrelated but distinct, each contributing uniquely to how we perceive and understand the world. A stereotype is a simplified, often fixed belief about a group, attributing generalized traits to its members without regard for individual differences, reinforcing social divisions and sometimes fostering prejudice. In contrast, a cultural metaphor uses symbolic imagery to express abstract cultural values or ideas, offering a deeper, more flexible understanding of cultural identity. Unlike stereotypes, which are rigid, metaphors provide rich,

nuanced representations of complex concepts. Ideology, meanwhile, refers to a comprehensive system of beliefs and values that shapes societal structures and guides political, social, and cultural norms. While stereotypes can be part of an ideology, the latter is a broader, more systematic framework that influences how power and social roles are distributed.

Cultural stereotypes related to ecology are shaped by the media, historical experience, and national characteristics, generating simplified images that may not accurately reflect the actual situation. Such stereotypes often divide countries into “environmentally responsible” and “polluters”, disregarding the complexity of the issue and the multitude of factors influencing environmental policy (Zhou et al., 2021; Zheng, 2022; Xiong, 2023). For instance, economic development, technological advancement, natural conditions, and political may have greater significance than national mentality or traditions. These stereotypes contribute to inflated expectations or, conversely, foster pessimism, thereby hindering objective analysis and the search for effective solutions. Moreover, they can justify inaction if individuals believe that environmental problems are the sole responsibility of particular countries or cultures (Erdem-Mobius et al., 2022; Altarriba and Basnight-Brown, 2022; Sajjad et al., 2022).

The ecological function of language is to convey knowledge and raise awareness about the importance of environmental protection. Individuals use language to express their values, opinions, and attitudes toward nature, which promotes environmental education. Language also plays an important role in the creation and dissemination of environmental terminology, allowing for clearer comprehension and discussion of ecological issues and sustainable development. (Chun-ling, 2021; Sun, 2021; Zhou and Luo, 2024). Table 1 illustrates the implementation of the ecological function of language.

Communication about the environment	Formation of ecological consciousness	Cultural identity	Ecological terms and concepts	International cooperation
Language serves as a medium for transmitting knowledge and information about nature, environmental issues, and their solutions.	Language can foster the development of ecological consciousness by influencing people’s attitudes towards environmental protection.	In many cultures, language is closely tied to nature, conveying traditions, customs, and knowledge related to the preservation of	Language employs specific terminology to describe ecological phenomena, enhancing awareness and stimulating dialogue on environmental challenges.	Language is a crucial tool in international negotiations and cooperation in ecology, enabling countries to share expertise and develop joint strategies for planetary conservation.

		natural resources.		
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Table 1. Implementation of the ecological function of language

Source: compiled by the authors based on Maddieson and Benedict (2023), Bromham et al. (2022), Tiv et al. (2022)

Language significantly reflects culture, tradition, and perceptions of the world (Ha, 2023). In Kyrgyz culture, which is replete with natural imagery and symbolism, proverbs and sayings serve as important instruments for transmitting ecological knowledge and experience. However, like any other linguistic element, they may also be subject to cultural stereotypes that shape societal attitudes toward the environment.

As cultural representations, stereotypes exert a profound influence on the ecological function of language, as they inform modes of interaction with the environment. Proverbs emphasising the interconnection between humans and nature contribute to the formation of positive ecological stereotypes, such as the value of nature. Statements such as “Токой тоонун көркү, эр элдин көркү” (“A forest is the beauty of mountains, a worthy man is the beauty of the people”) reflect the notion that nature and humanity are inseparable. This supports the idea that preserving ecosystems is essential for societal well-being. Harmonious coexistence is further underscored in the phrase “Суу менен жер көгөрөт, эл менен эр көгөрөт” (“Water nourishes the land, and people nourish the man”), which highlights the crucial role of water resources and the direct link between societal prosperity and ecological health.

Many stereotypes function as warnings against the dangers arising from irresponsible attitudes toward nature. Expressions such as “Суу менен ойнобо – чөгөсүң, от менен ойнобо – күйөсүң” (“Do not play with water – you will drown; do not play with fire – you will burn”) illustrate the hazards of ignoring natural forces. These sayings reinforce the notion that nature can be both a life source and a threat if not approached with due caution. The proverb “Адамзатты сөз бузат, тоо-ташты сел бузат” (“Words destroy humanity, floods destroy mountains and stones”) conveys those human actions can have far-reaching consequences beyond individual experience, highlighting the importance of precaution in human-environment relations.

Stereotypes that foreground human dominance over nature may reduce concern for environmental issues. For example, the saying “Жаратылыш меники жана сеники, жаркын келечек ээлериңики!” (“Nature belongs to you and me, the owners of a bright future!”) can be associated with a sense of ownership over nature, leading to diminished responsibility for environmental stewardship and the sustainable use of resources.

While proverbs such as “Суу – өмүр булагы” (“Water is the source of life”), emphasise the importance of water, they may also perpetuate the stereotype that resources like water will always be readily available. This assumption risks undermining awareness of the need for conservation and careful resource management. The expression “Жаздын бир күнү – жылга азык” (“One spring day nourishes the entire year”) reflects spring as a time of hope, fertility, and industriousness. It conveys the stereotype that the beginning of the year is critical for laying the foundations of future prosperity. In traditional Kyrgyz life, based on agriculture and animal husbandry, spring indeed marked a crucial period for preparing the harvest and grazing livestock.

Stereotypes in proverbs tend to simplify and solidify perceptions of nature, frequently expressing fatalism, the cyclical nature of environmental phenomena, and human dependence on the natural world. This shapes the perception of natural resources as finite and reinforces the need for conscious usage. The proverb “Кыш камын жайда көр” (“Prepare for winter in summer”) conveys the importance of long-term planning, thereby fostering a sense of responsibility for the environment.

Proverbs convey ecological norms and models of interaction with nature. For instance, “Жамгыр менен жер көгөрөт” (“The land greens with rain”) highlights the interconnectedness of natural phenomena and the need to respect water as a life-giving force. The proverb “Шамал жерди кургатат, байлык элди жыргатат” (“The wind dries the earth, wealth brings joy to the people”) points to the dual nature of natural processes, as wind can bring benefit and harm. This reflects the stereotype that natural wealth should be used wisely. Some stereotypes may hinder the development of ecological responsibility if they reinforce the notion of unchangeable natural cycles. The proverb “Зордукчуга мал жокпу?” (“Does the violent man lack cattle?”) questions the legitimacy of forcibly acquiring resources and, in the context of ecological ethics, can be interpreted as affirming the idea that respect for nature takes precedence over greed.

Stereotypes that place humanity at the centre highlight the capacity to transform the environment. For example, “Адам кааласа таштан суу, такырдан гүл чигарат” (“If a person desires, they can draw water from stone and grow flowers in the desert”) represents an anthropocentric approach in which humans are seen as active agents of natural transformation. Statements that encourage active human engagement in natural processes may foster responsible attitudes toward resources but may also justify ecological neglect if misinterpreted. Linguistic stereotypes significantly impact the ecological function of language, shaping perceptions of nature, modes of interaction with it, and human responsibility for ecosystems. A critical understanding and reinterpretation of such stereotypes may foster healthier attitudes toward the environment, positively influencing ecological outcomes in the future.

Stereotypes of nature in Kazakh culture have emerged from centuries of nomadic life, close interaction with the environment, and cultural traditions. In Kazakh culture, nature is held in high esteem, as reflected in language, proverbs, folklore, and traditional wisdom. One prevailing stereotype is the idea of unity between humans and nature. The Kazakh worldview perceives humans not as proprietors but as integral parts of the natural world. This is encapsulated in proverbs such as “Алма ағашынан алыс түспейді” (“The apple doesn’t fall far from the tree”), which emphasises the connection between parents and children as well as between humans and their environment. This stereotype underscores the idea that individuals also inherit behavioural patterns and character shaped by nature and surroundings.

Another prevalent stereotype is the perception of nature as a source of life and well-being. Kazakhs believe that clean water and healthy land are vital for survival. The proverb “Су да басынан тұнады” (“The headwaters are always clean”) illustrates this belief. The purity of the source is seen as the basis for prosperity, applicable not only to nature but also to broader socio-economic contexts. Nature is perceived as generous and noble, provided it is treated with respect and care.

Kazakh culture also promotes the concept of cyclical harmony in nature. The saying “Жер бауыры – жазық” (“The earth’s slope is a plain”) emphasises the natural structure and balance of the landscape. This reflects an understanding that nature operates according to its own laws, and people must live in harmony with these laws. Disregarding this harmony can lead to the collapse of both natural and social systems.

A deep reverence for nature is evident in Kazakh proverbs such as “Жер – семіз, от – арық” (“The land nourishes, fire destroys”), expressing the idea that the land can provide everything necessary if treated with care, while fire symbolises destruction and reminds of nature’s finite resources and the need for prudent use.

Nature occupies a central place in Kazakh folklore and the arts. Numerous songs, poems, and tales depict natural elements – from mountains to rivers and steppes. For instance, the expression “Жер шегесі – тау, дау шегесі – ант” (“Mountains are the nails of the earth, oaths are the nails of conflict”) illustrates how natural features are intertwined with human values and relationships. Mountains represent stability and permanence, while oaths signify the importance of trust and honesty in social interactions.

Nature-related stereotypes in Kazakh culture also highlight the interconnectedness of environmental elements. The saying “Су жүрген жер шүлен” (“Where water flows, the land prospers”) emphasises the essential role of water in sustaining life and well-being. Water is considered not only a physical necessity but also a symbol of purity and sanctity.

The Kazakh people are acutely aware of the need for environmental care and conservation. This is reflected in sayings like “Жаман өзен сай қуалай ағады” (“A bad river flows along ravines”), which conveys the negative outcomes of improper resource use. It encourages maintaining ecological balance and caring for the environment with the understanding that irresponsible actions may yield long-term consequences. Respect for nature, recognition of life’s cycles, resource stewardship, and the pursuit of harmony reflect the values and worldview of the Kazakh people. These stereotypes are passed down through generations and remain a vital part of Kazakh identity and culture, shaping attitudes towards nature and social relationships.

The proverb “Бір ағаш кессең, орнына он ағаш отырғыз” (“If you cut down one tree, plant ten in its place”) underscores the importance of environmental care and restoration. It promotes not merely the utilisation of resources but also their replenishment, contributing to ecological sustainability. This reflects the understanding that nature requires careful treatment and that every individual bears responsibility for its preservation. The proverb “Бұлақ болмаса, өзен болмас еді” (“Without the spring, there would be no river”) highlights the interdependence of all natural elements. Without the source, the river ceases to exist. This metaphor symbolises the significance of safeguarding every component of the ecosystem. It reminds us that even the smallest elements play a crucial role in maintaining ecological balance – an idea that is equally relevant to human society.

The phrase “Жасыл қоршау – тірі қуаныш” (“A green fence is a living delight”) demonstrates how greenery and nature can influence a person’s emotional state. Living plants are perceived as a source of joy and comfort, while green spaces play a crucial role in creating a pleasant atmosphere in human life. This expression also reflects the aspiration for harmony between human beings and the natural world. The proverb “Жаз сайға қонба, Қыс қырға қонба” (“Do not settle in lowlands in summer, nor on high ground in winter”) highlights the importance of choosing a suitable place of residence and understanding natural conditions. It emphasises the necessity of adapting to the environment and knowing how to benefit from it – an essential aspect of nomadic life. Familiarity with natural cycles and geographical positioning contributes to survival and the conservation of resources.

The importance of planning and foresight is underscored in the proverb “Қыстың қамын жаз ойла” (“Prepare for winter in summer”). The ability to anticipate and prepare for future challenges is a key aspect of survival. This expression draws attention to the need to care for natural resources and living conditions in advance, in order to avoid hardship in the future. The phrase “Тай кезеңсіз болмас, өлке өзенсіз болмас” (“There is no mountain without a foothill, and no region without a river”) reflects the interconnectedness of landscape elements. Mountains and rivers, as vital components of nature, create a harmonious environment and support human life. It also stresses that all parts of nature are interlinked, and the absence of one element can disrupt the integrity of the

ecosystem. “Тай мен тасты су бұзар, Адам затты сөз бұзар” (“Water alone can erode mountains and stones, while words can destroy a person”) is a proverb that draws attention to the power of words and their influence on human relationships. It emphasises that, although nature can be destructive, human speech and actions also possess great power – capable of both creation and destruction. This serves as a reminder of the need for caution in our words and behaviours.

Language serves not only as a means of communication but also reflects culture, traditions, and perceptions of the surrounding world. In English culture, proverbs and sayings play an important role in transmitting knowledge and experience related to nature. However, these expressions may also reinforce stereotypes that shape societal attitudes towards the environment. One of the most prominent stereotypes in English proverbs is the notion of human superiority over nature. The idiom “Water, water, everywhere, nor any drop to drink”, although highlighting the importance of water, may also perpetuate the stereotype that resources are always available, even when they are not. This poses the risk of disregarding the necessity for careful and sustainable management of natural resources. English culture also includes many proverbs that warn against disrespecting nature. For example, “You reap what you sow” stresses that human actions have consequences, thus reinforcing the importance of caring for the environment. This expression may foster an understanding that neglect or disrespect towards nature can lead to negative outcomes for both humans and the natural world.

English proverbs also contain stereotypes relating to animals and vegetation. For example, the saying “Every cloud has a silver lining” implies that even in adverse situations, there is something positive to be found. This can be interpreted as a call to appreciate nature attentively, as opportunities may be hidden within perceived difficulties. On the other hand, the expression “The grass is always greener on the other side” signifies dissatisfaction with one’s current situation, which can sometimes lead to disregard for the resources already at hand.

Climatic conditions are likewise reflected in English proverbs. The saying “April showers bring May flowers” points to the necessity of rain for the growth and prosperity of plants, highlighting the interconnectedness of natural phenomena. Such expressions can cultivate an understanding that natural conditions are vital to life and wellbeing, potentially encouraging the conservation of natural resources. Proverbs that emphasise the interconnectedness between humans and nature can contribute to the development of ecological consciousness. For example, the proverb “We do not inherit the Earth from our ancestors; we borrow it from our children” stresses the current generation’s responsibility to preserve the environment for future generations.

Stereotypes focusing on human dominance over nature can diminish interest in ecological issues. The expression “The Earth is ours to exploit”, for example, may instil a sense of ownership over nature, leading to a decline in environmental responsibility and sustainable resource use. The

proverb “Make hay while the sun shines” emphasises the need to utilise resources at the appropriate time while they are available. In ecological terms, this may be interpreted as a call for the prudent use of natural resources before they are depleted or rendered inaccessible due to climate change or human activity. This principle, for instance, may be applied to water conservation during droughts or the sustainable use of forest resources to prevent deforestation. The implementation of this principle can support sustainable development and minimise harm to ecosystems.

The idiom “like a fish out of water” describes a person who feels out of place in unfamiliar or uncomfortable surroundings. In an ecological context, it may symbolise the sense of alienation from nature experienced in modern urban societies. Re-establishing this connection is vital for fostering environmental awareness and respect for the natural world. Feeling “like a fish out of water” may result in unconscious harm to nature if individuals fail to understand the importance of its preservation.

The proverb “Don’t count your chickens before they hatch” cautions against premature expectations that may lead to disappointment. In ecological discourse, it can pertain to the reckless use of natural resources and the disregard of potential environmental risks. For example, when developing new technologies or exploiting resources, it is crucial to consider potential ecological repercussions and not expect immediate benefits without acknowledging long-term consequences. This also underscores the importance of planning and precaution in resource management to avoid crises such as water shortages or species extinction.

Stereotypes about nature, as reflected in English proverbs and idioms, have a significant impact on the ecological function of language. To achieve sustainable development and ecological preservation, it is necessary to reconsider and reinterpret these stereotypes, promoting new approaches that foster respect for nature and its resources. Language, as a living and dynamic tool, can serve as a powerful means in this process, shaping new awareness and traditions that help preserve the natural heritage for future generations. Education and the active use of language in ecological contexts can play a pivotal role in developing a new environmental culture based on respect for and understanding of nature’s value. Table 2 presents stereotypes about nature in Kyrgyz, Kazakh, and English cultures.

Criterion	Kyrgyz proverbs	Kazakh proverbs	English proverbs
Human-nature interaction	Respect for nature and its resources	Harmony with nature	Often human dominance
Interdependence	Emphasises the interdependence of humans and nature	Interdependence framed within identity	Acknowledges interdependence but often with a focus on exploitation
Sustainable use	Advocates restoration and care for resources	Mixed attitudes, sometimes implying infinite resources	Mixed attitudes, sometimes implying infinite resources

Attitude towards ecology	Profound connection with nature	Emphasis on care for flora	Both positive and negative perceptions
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Table 2. *Stereotypes about Nature in Kyrgyz, Kazakh, and English Cultures*
Source: compiled by the authors.

Thus, proverbs containing ecological stereotypes can help to shape public perceptions of the importance of environmental protection and sustainable resource management. They pass on traditional knowledge and values about nature, thereby influencing environmentally responsible behaviour. Stereotypes in proverbs facilitate the quick and effective communication of complex ecological ideas and concepts, making them more accessible to a wider audience. This helps to spread ecological knowledge and raises awareness about environmental issues. Language and proverbs reflect societal attitudes toward nature. Stereotypes can either reinforce or undermine a sense of responsibility for environmental preservation.

3. Discussion

When discussing the ecological function of language, it is critical to consider how cultural stereotypes embedded in proverbs and sayings influence perceptions and attitudes toward the environment. A comparative analysis of Kyrgyz, Kazakh, and English-speaking cultures reveals that proverbs about nature frequently embody deeply ingrained cultural stereotypes that promote either sustainable practices or environmental degradation. While some cultures emphasise environmental harmony and the importance of responsible resource use, others perpetuate stereotypes of dominance and exploitation.

The article by Xiong (2023) explored the intersection of ecolinguistics, language, and ecology, focusing on narratives that shape worldviews. It also discussed how storytelling practices influence ecological behaviour and how language reflects and constructs our relationship with the natural world. Within the framework of critical discourse analysis, it was demonstrated that language can both reinforce and challenge ecological narratives. The study contributes to the growing field of ecolinguistics by illustrating how linguistic inquiry can provide insight into environmental issues and their representation through language. The current research places greater emphasis not on ecological problems per se, but on ecological stereotypes that manifest in both environmentally responsible and detrimental practices.

The work by Tan et al. (2023) examined the role of ecology in Chinese culture through the lens of socio-cultural practices and historical narratives. It highlighted that ecological concepts are integral to the Chinese cultural code. In China, the natural environment is seen not only as a physical domain but also as a moral compass and an essential component of national identity. Nature-related concepts

such as “harmony with nature” play a significant role in cultural education and moral orientation. The article further investigated how these concepts are expressed in Chinese literary, religious, and philosophical texts, as well as in environmental policy practices. It is noted that ecology in China is understood not merely as a natural science, but also as a key aspect of cultural ethics. In this respect, the conception of nature described by the researchers resonates with the Turkic worldview, particularly as reflected in Kyrgyz and Kazakh expressions of ecological awareness.

Zhang (2024) examined how the Kyrgyz language reflected traditional conceptions of nature and human interaction with the environment. The research drew attention to the use of specific expressions and metaphors indicating that nature is perceived as an integral part of the spiritual and ethical framework of society. The importance of language in shaping ecological consciousness was emphasised, with linguistic references to natural resources possessing not only practical, but also moral, significance. However, in addition to positive stereotypes in proverbs and sayings – such as the unity of humans and nature, nature as a life source, and the cyclical harmony of the environment – negative stereotypes are also present, including anthropocentrism and the notion that natural resources are inherently available for human use.

Within a cognitive approach to ecology, research has examined how environmental conditions may influence linguistic structures. In the research by Maddieson and Benedict (2023), elements of nature (water, earth, air) were shown to be embedded in language structures. The study highlighted the utility of cognitive linguistics in exploring how linguistic categories and metaphors interact with specific ecological contexts. The authors’ argument that cultural and linguistic interpretations of ecological concepts vary according to environmental differences in which each culture has evolved is compelling. This perspective is consistent with the findings of this study, which, after comparing Kyrgyz and English folklore, highlights how these cultural contexts shape distinct ecological perceptions.

In the work of Nnabueze and Zakirova (2020), the influence of linguistic constructions on the perception of environmental issues and solutions was examined. They highlighted speech as a powerful tool for shaping public awareness of environmental protection, with ecological terminology functioning both in specialised (scientific and technical) and general (public) discourses. The authors rightly argue that in the current global context, where environmental protection has become a universal concern, language should be utilised to foster international understanding of ecological issues while preserving local practices and contexts.

The analysis of Kyrgyz, Kazakh, and English proverbs revealed that the ecological model of language reflects a strong link between linguistic expressions and cultural perceptions of the natural world. These proverbs reveal how different ethnic groups perceive and interpret their ecological

environment, which is manifested through imagery, metaphors, and embedded philosophical perspectives. Inoue (2023) investigated how the meanings of linguistic expressions are shaped by ecological contexts, with particular emphasis on how language reflects and interacts with cognitive and ecological environments. The researcher posits that language cannot be fully understood without consideration of its ecological foundations and proposes a model that incorporates cognitive, cultural, and ecological dimensions. In this study of Kyrgyz and English proverbs, an integrated model was applied that took into account various factors: cognitive (perception, processing, storage, and transmission of environmental information), cultural (conceptualising and engaging with the environment through culture), and ecological (the transformation of the environment under human influence through linguistic patterns).

This work makes a unique contribution to the field of ecolinguistics by concentrating on the ecological function of language as shaped by cultural stereotypes in Kyrgyz, Kazakh, and English-speaking societies. Unlike previous research, which have primarily focused on environmental issues or the role of language in ecological discourse, current study focuses on the cultural transmission of ecological values through language, providing new insights into how cultural stereotypes shape sustainable practices and ecological consciousness.

Conclusions

This study investigated how ecological stereotypes are represented in Kyrgyz, Kazakh, and English proverbs and sayings. Specifically, it identified such stereotypes as human dominance over nature, the interconnection between humans and nature, respect for nature and its resources, and perceptions of resource availability or scarcity.

Proverbs and sayings emphasising human dominance over nature can foster a sense of irresponsibility in the use of natural resources: “Жаратылыш меники жана сеники, жаркын келечек ээлериники!” (“Nature belongs to you and me, to the masters of a bright future!”). This may contribute to careless environmental behaviour and reduced efforts towards environmental protection.

Positive stereotypes emphasise harmonious coexistence between humans and nature, highlighting their mutual dependence: “Жер – семіз, от – арык” (“The earth bestows, fire destroys”), “Суу менен жер көгөрөт, эл менен эр көгөрөт” (“Water nourishes the land, and people nourish the man”), “We do not inherit the earth from our ancestors; we borrow it from our children”. Warning stereotypes serve as cautionary messages about the dangers of irresponsible environmental behaviour: “Суу менен ойнобо – чөгөсүң, вот менен ойнобо – күйөсүң” (“Do not play with water – you will drown; do not play with fire – you will burn”).

Beliefs in the inexhaustibility of natural resources were also reflected, leading to careless use and disregard for environmental conservation: “Water, water, everywhere, nor any drop to drink”, “Жаман өзен сай қуалай ағады” (“A bad river flows through ravines”). Such proverbs and sayings highlight human dependence on natural cycles and processes.

Kyrgyz proverbs demonstrate respect for nature and its resources, underscore human–nature interdependence, often convey messages of restoration and care for the environment, and reflect a profound connection to nature: “Токой тоонун көркү, эр элдин көркү” (“A forest is the beauty of mountains, and a worthy man is the beauty of the people”). Kazakh proverbs reflect harmony with nature, interdependence in the context of identity, careful resource use, and care for plant life: “Бір ағаш кессең, орнына он ағаш отырғыз” (“If you cut down one tree, plant ten in its place”). English proverbs often reflect elements such as human dominance but also include ideas of interdependence: “We do not inherit the earth from our ancestors; we borrow it from our children”.

The limitations of the present study relate to the fact that only three linguistic cultures (Kyrgyz, Kazakh, and English) were examined. Future research priorities include the analysis and identification of ecological stereotypes, the investigation of their impact on environmental awareness, the development of educational programmes, the creation of positive linguistic models, the monitoring of linguistic change, the study of cultural contexts, and the establishment of platforms for intercultural dialogue.

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