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Linguocultural Aspect of English Phraseological Units With Numbers

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ABSTRACT

This article presents a comprehensive linguocultural analysis of phraseological units containing numerical components, using material from both the English and Kazakh languages. The primary objective of the study is to identify the semantic, structural, and symbolic characteristics of these expressions and to examine their role in reflecting the national worldview and value system of the respective linguistic communities. Phraseological units with numerals are deeply embedded in the collective consciousness and serve as important carriers of cultural knowledge, historical experience, and social norms. The study employs a multi-methodological approach, including lexical-semantic analysis, cultural contextualization, comparative linguistic techniques, and analytical synthesis, allowing for a nuanced understanding of how these expressions function in different cultural and linguistic environments. The research reveals that numerical phraseological units are not random linguistic formations but culturally loaded constructs that convey metaphorical meanings, stereotypes, and shared beliefs. For instance, certain numbers may carry positive or negative connotations depending on cultural context, symbolizing luck, completeness, duality, or limitation. The contrastive analysis between English and Kazakh data uncovers

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both universal tendencies and culturally specific patterns in the use and interpretation of numerals in idiomatic language. The findings underscore the relevance of such expressions in shaping and transmitting national identity. The practical significance of the study lies in its potential application in fields such as foreign language teaching, translation studies, intercultural communication, and cultural linguistics. Overall, the research highlights the intrinsic connection between language and culture, emphasizing the value of phraseological units as tools for understanding and bridging cultural differences.

Keywords: Numerical Idioms; Phraseological Units; Cultural Symbolism; Intercultural Linguistics; English and Kazakh Languages

1. Introduction

The study of the linguocultural nature of phraseological units holds a prominent place in modern linguistics and foreign language pedagogy, as these expressions play a crucial role in encoding cultural meanings and articulating national identity within both spoken and written communication. In any language, idioms function not only as means of linguistic economy but also as repositories of worldviews, archetypes, traditional concepts of reality, and the value orientations of a people. Of particular significance in this context is the exploration of phraseological units containing numerals, as numerals traditionally carry not only a quantitative but also a rich symbolic function, reflecting the deeper layers of mythopoetic thinking, religious symbolism, and cultural memory^[1,2].

Understanding the nationally specific character of numerals in idiomatic language has substantial practical value for successful language acquisition, as it enables learners to grasp and reproduce not only the lexical level but also the figurative and metaphorical dimensions of utterances. Speech thus acts not only as a mechanism for reproducing established expressions but also as a medium for their creative reinterpretation and adaptation to new communicative contexts^[3].

From a linguocultural perspective, idioms with numerals represent “crystallization points” of collective experience, traditional beliefs, and entrenched cultural codes that have developed over centuries and become fixed in language as stable signs. Their formation is significantly influenced by extralinguistic factors—religious traditions, mythological plots, folklore, historical events, and social practices—that collectively shape a community’s unique linguistic space^[4,5].

The scholarly tradition of exploring the interplay be-

tween language and culture traces back to the works of classical anthropologists and ethnographers. In the nineteenth century, Edward Tylor famously defined culture as “that complex whole which includes knowledge, belief, art, morals, law, custom, and any other capabilities and habits acquired by man as a member of society”^[6,7]. This idea was later developed within linguoculturology, an interdisciplinary field that studies the interaction of language and culture as a unified system shaping a nationally specific worldview^[8]. Today, there is scholarly consensus on the central role of language in reproducing and transmitting cultural identity.

In this context, idioms with numerical components are of particular interest as they play an essential role in linguocultural encoding of collective experience. Numbers in language serve not only as instruments for quantitatively describing reality but also as symbolic signs that can function as metaphors for harmony, chaos, perfection, or uniqueness^[9]. For example, in English idiomatic language, “one” frequently symbolizes exceptionality (“one in a million”), “three” denotes completeness and closure (“third time’s a charm”), “seven” conveys luck and divine perfection (“seventh heaven”, “lucky seven”), and “nine” represents an extreme state or culmination (“cloud nine”, “to the nines”). Such expressions have developed over centuries, drawing on biblical, mythological, and folkloric sources^[10].

A comparative analysis of numerical idioms across languages helps to identify both universal elements of their symbolism and distinctly marked ethnocultural features. For instance, English and Kazakh languages exhibit both similarities and differences in the interpretation of numbers, reflecting each nation’s mentality, historical memory, and traditional values. In Kazakh culture, the number “three” is also sacralized and frequently appears in proverbs and sayings, symbolizing wholeness and completeness. The number

“seven” traditionally signifies sanctity and protection^[11–13].

However, despite the substantial body of research on phraseology and linguoculturology, detailed symbolic analysis of numerals within English phraseological units and their comparison with Kazakh equivalents remains fragmented. Most studies focus on lexical-semantic descriptions or structural classifications of idioms, while their cultural-symbolic dimension is often addressed only episodically. This gap defines the focus of the present study^[14,15].

The aim of this research is to uncover the symbolic meanings and cultural function of numerical phraseological units in English, compared with Kazakh analogues, and to justify their practical value for developing learners’ intercultural and pragmatic competence. The research tasks include analysing the etymology and evolution of numeral meanings in English idioms, describing their symbolic interpretation within cultural contexts, and developing methodological recommendations for integrating such idioms into English as a Foreign Language (EFL) instruction^[16,17].

The methodological framework combines lexical-semantic analysis, cultural contextualization, elements of comparative-historical linguistics, and analytical synthesis. The empirical material is drawn from authoritative idiom dictionaries, electronic corpora, and expert interviews with six specialists—four PhDs in philology and two cultural studies scholars—ensuring the reliability and scholarly validity of the results^[18].

The analysis shows that numerical idioms exhibit a dual nature: they simultaneously retain their original quantitative sense and carry profound symbolic meaning. For instance, “*seventh heaven*” derives from religious beliefs about the seven heavens, while “*at sixes and sevens*” illustrates the idea of chaos rooted in medieval English tradition. The idiom “*cloud nine*” conveys a notion of ultimate happiness and bliss, resonating with the symbolic association of the number nine with completion and culmination.

The study of the etymology of numerical idioms reveals their link to key cultural concepts. The number “seven” frequently appears in biblical texts (seven days of creation) and folklore (seven wonders of the world). The number “three” symbolizes the triad as a universal model of harmony and balance, confirmed by common expressions like “*third time’s a charm*” or “*three’s company*”. The number “nine” is associated with the full completion of a cycle or spiritual

enlightenment, reflected in idioms such as “*to the nines*” and “*cloud nine*”.

It is noteworthy that certain idioms with numerals continue to evolve under the influence of contemporary sociocultural trends. For example, “*two cents’ worth*” illustrates the democratization of opinions and the value of everyone’s contribution, while “*two heads are better than one*” emphasizes the importance of collective intelligence and collaboration—fundamental values of modern Western society.

The practical relevance of this research lies in the potential integration of numerical idioms into EFL teaching to foster learners’ intercultural and pragmatic competence. Understanding the symbolic weight of numbers in language enables deeper comprehension of hidden meanings, helps to avoid intercultural misunderstandings, and enhances accurate interpretation and reproduction of figurative expressions in both spoken and written discourse.

Thus, this study addresses an existing gap in the linguocultural examination of numerical idioms by offering a novel intercultural approach to their analysis. The results can inform courses in phraseology, intercultural communication, and EFL methodology. They underscore the inseparable link between language and culture and contribute to the development of linguistic personalities capable of acting flexibly and appropriately in the multilingual and multicultural environment of the twenty-first century.

2. Literature Review

Contemporary studies of phraseological units with numerical components highlight the growing interest in their symbolism, evaluative potential, and role in shaping cultural identity and intercultural competence. Analysis of key thematic directions helps to generalize and systematize progress in this area, revealing existing gaps and positioning the present research within the current scholarly landscape. Recent works emphasize that numerical idioms play a significant role in conveying symbolic meanings rooted in mythology, religion, and collective psychology. Yousaf^[19] shows that idioms with numerals construct a coherent worldview for language learners and enhance intercultural understanding. Xue demonstrates that the number “four” in various languages functions as an element of a universal numerical code while retaining culture-specific connotations.

Several publications in international journals expand this topic: Chen analyses the role of sacred numbers in English and Chinese idioms (*Journal of Pragmatics*), while Kim examines the persistence of number symbolism in modern English and Korean expressions (*International Journal of Cultural Linguistics*). These studies confirm that the symbolic load of numbers endures despite cultural and linguistic differences^[20,21].

Particular attention in some works is given to the evaluative aspect of numerical idioms. Khuzin highlights that evaluativity is an integral feature of phraseological meaning: it encodes speakers' attitudes toward described phenomena and supports the transmission of cultural norms. Aliyeva stresses that such expressions convey not only quantitative information but also value judgments closely linked to ethnic and cultural characteristics^[22].

Recent studies, such as Singh & Patel and Hernández show that numerical idioms actively contribute to the development of pragmatic competence and help learners interpret culturally marked utterances appropriately^[23,24].

The connection between numerical phraseological units and the formation and preservation of cultural identity is emphasized in the work of Jumayev, which focuses on language as a key marker of national distinctiveness in a globalized context. Jones and Wang view numerical idioms as representatives of stable archetypes and collective mindsets, making them an important tool for enhancing intercultural competence and fostering critical cultural awareness in foreign language learners^[25].

These findings confirm the need to include numerical idioms in foreign language curricula, as they deepen learners' understanding of the native speakers' worldview and prevent cultural and translation errors.

To summarize, the reviewed studies indicate that research on the symbolic function and evaluative potential of numerical idioms has largely been conducted in a fragmented manner, often within the framework of a single language or limited data sets. A systematic intercultural analysis of English numerical idioms compared with Kazakh equivalents remains absent. Moreover, the pedagogical potential of these idioms as tools for developing pragmatic and intercultural competence has not been sufficiently explored.

3. Materials and Methods

This study follows a multi-stage, interdisciplinary methodological design aligned with best practices in cognitive linguistics and linguocultural research. The methodological framework directly addresses the research aim of uncovering the semantic, structural, and symbolic functions of numerical phraseological units in English and Kazakh, clarifying their cultural underpinnings and pedagogical value.

3.1. Research Design

The research employs a mixed qualitative approach that integrates lexical-semantic analysis, cultural contextualization, and cross-linguistic comparison within a cognitive linguistics paradigm^[14]. The design ensures methodological triangulation and replicability.

3.2. Data Collection

3.2.1. Idiomatic Corpus Compilation

A corpus of 120 idioms containing cardinal numbers was compiled from authoritative idiomatic dictionaries (e.g., Cambridge Idioms Dictionary, Oxford Dictionary of English Idioms) and validated against the British National Corpus and Corpus of Contemporary American English.

3.2.2. Expert Interviews

Six experts were purposefully selected for semi-structured interviews: four PhDs in linguistics and two cultural studies scholars. Interviews explored cultural connotations, pedagogical implications, and semantic interpretations. Sessions lasted 45–60 minutes and were audio-recorded and transcribed verbatim for qualitative coding.

3.2.3. Comparative Samples

Idiomatic data from Kazakh and Russian were sourced from bilingual dictionaries, folklore archives, and cross-cultural studies, ensuring comparability of symbolic numerical constructs.

3.3. Methods of Analysis

3.3.1. Lexical-Semantic Analysis

This step systematically examined the denotative and connotative meanings of numerical idioms (e.g., “one in a

million”, “*at sixes and sevens*”). Semantic maps and historical etymologies were developed to detect stable patterns and contextual shifts^[15]. This analysis addressed Research Question 1: *How do cardinal numerals function semantically in idiomatic contexts?*

3.3.2. Cultural Contextualization

Phraseological units were interpreted as cultural artefacts preserving mythological and religious narratives. This aligns with principles outlined by Kövecses on metaphor and culture^[16]. Textual sources included folklore collections, proverbs, literary works, and sacred texts. This stage illuminated Research Question 2: *What cultural scripts and values are embedded in numerical idioms?*

3.3.3. Comparative Linguistic Analysis

Cross-linguistic comparison followed principles of ethnolinguistic typology^[17]. English idioms were compared to Kazakh and Russian counterparts to identify universal versus culture-specific symbolic patterns (e.g., the recurring sacredness of “three”). This analysis directly addressed Research Question 3: *How do symbolic meanings of numerical idioms vary across languages?*

3.4. Analytical Framework

The overall analysis was grounded in cognitive linguistics and linguocultural theory, treating idioms as metaphorical expressions that encapsulate cultural cognition^[18]. Coding and thematic interpretation employed NVivo software to ensure systematic data organization and traceability.

3.5. Methodological Rigor and Ethical Considerations

Purposeful sampling and triangulation across data sources and methods enhanced credibility. Participants gave informed consent per institutional ethical guidelines.

3.6. Visual Summary

To facilitate transparency, a methodological flowchart illustrates all stages: corpus compilation, semantic mapping, cultural contextualization, comparative analysis, and thematic synthesis.

4. Results and Discussion

4.1. Lexical-Semantic Patterns of Numerals

The lexical-semantic analysis revealed that within English idiomatic expressions, numerals consistently function beyond their primary quantitative value and frequently serve as carriers of abstract, evaluative, and symbolic meanings deeply embedded in cultural cognition. This demonstrates their semantic polyfunctionality, confirming that numerals act as cognitive and cultural signifiers rather than merely indicating countable quantities.

For instance, the numeral “one” typically conveys notions of singularity, primacy, and excellence. Idioms such as “*public enemy number one*” and “*one-horse race*” illustrate how the number one is used to emphasize an ultimate or unrivaled status. Conversely, it can also appear in negative evaluative contexts: “*one too many*” suggests excess or overindulgence, while “*one born every minute*” implies naivety or gullibility, framing the numeral as a subtle marker of human vulnerability to deception.

Similarly, “two” frequently symbolizes concepts of duality, complementarity, and mutual dependence. Expressions like “*it takes two to tango*” highlight the necessity of cooperation or shared responsibility in social contexts, whereas “*stand on one’s own two feet*” conveys a positive evaluative sense of self-reliance and independence. This demonstrates how the same numeral can project both relational and individualistic values depending on context.

Higher numerals in English idioms carry even richer symbolic associations. The number “three” often represents wholeness, balance, and narrative completeness, as reflected in idioms like “*three’s a crowd*”, which conveys social dynamics, or “*third time’s a charm*”, which encodes cultural optimism toward repeated efforts. The number “seven” is strongly linked to sacredness, luck, and perfection—a reflection of its biblical and folkloric roots—seen in idioms such as “*seventh heaven*” or “*lucky seven*”. The number “nine” typically signifies extremes or ideal states, as in “*cloud nine*”, denoting ultimate happiness, or “*to the nines*”, referring to doing something to the highest degree.

Other numerals like “dozen”, “million”, and “hundred” further extend this pattern by emphasizing abundance, exaggeration, or value judgments. For example, “*a dime a*

dozen” denotes something common and low in value, while *“million-dollar question”* emphasizes exceptional importance or difficulty.

Numerals in idiomatic usage create intricate semantic fields where literal quantity coexists and interacts with metaphorical and culturally specific connotations. This interplay reinforces the hypothesis in Research Question 1 that numerals perform multiple semantic and pragmatic functions in idioms, shaping how speakers interpret, evaluate, and communicate complex social realities. Thus, the symbolic extensions of numerals exemplify how language condenses and transmits culturally embedded cognitive structures through compact, memorable expressions.

4.2. Cultural Symbolism Across Idioms

The cultural contextualization confirms that idioms containing numerals serve as condensed carriers of collective memory, belief systems, and culturally shared narratives. In English, numerals such as *seven* and *nine* are particularly rich in symbolic significance. The number *seven* strongly reflects Judeo-Christian concepts of divine perfection, spiritual completeness, and cosmic order, as seen in idioms like *“seventh heaven”* (ultimate bliss) and *“seven deadly sins”* (cardinal moral transgressions). These expressions highlight how religious and moral frameworks shape everyday language, reinforcing a worldview where certain numbers act as metaphors for the sacred and the complete.

Likewise, the number *nine* resonates with Western folklore and popular culture as a symbol of finality, abundance, or mystical transcendence. Phrases such as *“dressed to the nines”* indicate doing something to perfection, while *“cat has nine lives”* draws from ancient superstitions about resilience and supernatural luck.

In Kazakh linguoculture, numerals are even more deeply intertwined with folklore, oral tradition, and national identity. The number *бір* (one) typically symbolizes unity and monotheistic faith, as in the saying *бір Аллаға тәуекел* (trust in one God), reflecting the strong Islamic cultural context. The number *үш* (three) is considered sacred and frequently appears in proverbs and folk narratives, symbolizing completeness, harmony, and social structure, exemplified by *үш жүз* (the three main Kazakh tribal unions).

Equally significant is the number *жети* (seven), which carries powerful sacred and protective meanings. Expres-

sions like *жети қазына* (the seven treasures) encapsulate core values such as wisdom, bravery, and prosperity, embedded in collective cultural knowledge. Additionally, the number *төрт* (four) often implies balance and stability in everyday contexts, seen in idioms like *төрт аяғы тең жорға* (a gaited horse with four equal legs), metaphorically describing a person of admirable character and integrity.

This comparative insight underlines that while numerals in both languages convey shared human concepts of order and perfection, Kazakh idioms often elaborate these symbols with vivid ties to tribal cosmology, kinship, and moral codes, demonstrating the dynamic role of numerals as culture-specific semantic anchors in everyday communication. The symbolic layer of *three* and *seven* shows remarkable cross-cultural parallels: both embody notions of wholeness and divine order. However, Kazakh idioms elaborate this sacredness more vividly, often linked to cosmology and tribal social structures.

4.3. Thematic Integration and Pragmatic Function

Beyond their lexical meaning, numerical idioms operate as pragmatic instruments that both mirror and reinforce cultural expectations, social hierarchies, and shared behavioral norms. The analysis demonstrates that idioms containing numerals play an active role in everyday communication, subtly guiding interlocutors on how to interpret social contexts and act within them.

In English, idioms such as *“one-upmanship,” “third wheel,”* or *“one in a million”* exemplify the way numerals contribute to framing interactions around ideas of competition, unique status, or social awkwardness. These expressions encode values central to Western communicative style, such as self-assertion, personal achievement, and individuality. For example, *“one-upmanship”* implies constant rivalry and the desire to surpass others, reflecting a cultural emphasis on personal success and differentiation. Similarly, *“third wheel”* pragmatically signals a feeling of being an unnecessary addition to a pair, highlighting the social preference for balanced or expected group dynamics.

In contrast, numerical idioms in Kazakh linguoculture tend to encode notions of collective well-being, moral behavior, and spiritual grounding. Phrases like *“бір Аллаға тәуекел”* (trust in one God) or *“жети қазына”* (seven trea-

asures) are not only linguistic artifacts but also pragmatic reinforcers of values like faith, loyalty, and respect for communal heritage. These idioms are frequently used in everyday speech to remind community members of their ethical obligations and spiritual roots, demonstrating how numerals function as carriers of social norms.

Moreover, the pragmatic dimension of numerical idioms manifests in their didactic function. Both English and Kazakh idioms often serve as concise moral lessons or social commentaries, efficiently transmitting complex cultural knowledge. For example, the idiom “*two heads are better than one*” pragmatically promotes collaboration and joint problem-solving, while its Kazakh equivalents highlight collective decision-making and unity.

Idioms with numerals thus operate simultaneously at symbolic and pragmatic levels: they encapsulate cultural values while providing speakers with ready-made tools to negotiate social roles, expectations, and acceptable conduct. This dual function underscores their relevance not only in

linguistic theory but also in practical intercultural communication and language teaching contexts.

4.4. Synthesis with Research Objectives

Overall, the integrated findings comprehensively address all the formulated research questions and demonstrate the effectiveness of the multi-layered methodological design.

Regarding RQ1 (Semantic Function): The analysis confirms that numerals embedded in idiomatic expressions consistently extend their literal quantitative meanings to convey layered metaphorical and evaluative senses. This semantic flexibility enables speakers to encapsulate complex ideas such as uniqueness (*one in a million*), duality and cooperation (*it takes two to tango*), or ultimate states (*cloud nine*) (Table 1). Such patterns align with theories of conceptual metaphor and cognitive linguistics, illustrating how numeral-based idioms function as compact cognitive schemas that structure social reality and discourse.

Table 1. A comparative table summarizing the data illustrating how numbers act as cultural constants and differently designed symbols.

Numeral	English Idioms & Symbolism	Kazakh Idioms & Symbolism	Shared Cultural Value
<i>One</i>	Uniqueness, leadership (<i>number one</i>)	Monotheistic trust (<i>бір Аллаға тәуекел</i>)	Priority, singularity
<i>Two</i>	Duality, partnership (<i>it takes two to tango</i>)	Duality (<i>екі жүзді</i> —two-faced)	Ambivalence, balance
<i>Three</i>	Completeness, harmony (<i>third time's a charm</i>)	Sacredness (<i>үш жүз</i>)	Wholeness, unity
<i>Seven</i>	Sacredness, luck (<i>seventh heaven</i>)	Sacred number (<i>жеті қазына</i>)	Perfection, spiritual fullness
<i>Nine</i>	Extremes, mysticism (<i>cloud nine</i>)	Rarely used; more abstract	Ultimate states, culmination

In relation to RQ2 (Cultural Scripts): The study shows that numerals within idioms are deeply embedded in cultural scripts, transmitting collective values and moral norms. For instance, in English, the prominence of *seven* symbolizes completeness and spiritual perfection rooted in Judeo-Christian heritage, while *nine* captures folk beliefs about luck or extremes. In Kazakh, numbers like *бір* (one) and *үш* (three) encapsulate notions of unity, social order, and sacredness, reflecting the community-oriented and spiritual worldview central to Kazakh culture. These cultural scripts explain why similar numerals acquire distinct connotations across cultures while still fulfilling a universal cognitive role.

As for RQ3 (Cross-Cultural Variation): The comparative linguistic analysis reveals both convergence and divergence in symbolic numerology. Universal motifs, such as the sacredness of three and seven, show that certain numerical archetypes recur globally, supporting Jungian and structuralist interpretations of cultural universals. However, the depth

and mode of elaboration differ significantly: Kazakh idioms demonstrate a more vivid linkage to cosmology, tribal kinship, and moral didacticism, whereas English idioms tend to foreground individualistic or pragmatic evaluative nuances.

In summary, this synthesis clearly demonstrates how numerical idioms function simultaneously as linguistic, cognitive, and cultural tools. By explicitly mapping these findings to the research questions, the study provides robust empirical evidence for the polyfunctional role of numerals in idioms and highlights their significance for understanding how language encodes and perpetuates culturally specific worldviews.

4.5. Structured Summary

To consolidate a complex multi-stage procedure and enhance transparency and coherence, a step-by-step breakdown is presented. The sequential stages of analysis demonstrate

how each of them systematically contributes to addressing the research questions.

Stage 1: Idiom Selection, where a corpus of English and Kazakh idiomatic expressions containing numerals was compiled from authoritative dictionaries, linguistic corpora, and verified through expert consultations. This ensured the relevance and cultural authenticity of the sample.

Stage 2: Lexical-Semantic Mapping involved a detailed breakdown of idioms to identify denotative and connotative layers. Semantic fields were constructed to reveal how literal numerical values expand into metaphorical and evaluative meanings. This stage directly addresses Research Question 1 concerning the polyfunctional semantic role of numerals.

Stage 3: Cultural Contextualization integrated etymological tracing, folklore references, and religious texts to interpret how numerals acquire culture-specific symbolic significance. By situating idioms within broader socio-cultural frameworks, this stage answers Research Question 2 related to cultural scripts encoded by numerals.

Stage 4: Comparative Synthesis juxtaposed English and Kazakh data to extract cross-cultural parallels and divergences. Special focus was given to recurring motifs (such as three and seven) and unique elaborations in Kazakh idioms, thereby fulfilling Research Question 3 on intercultural variation.

Additionally, the figure highlights feedback loops: insights from cultural contextualization refine semantic mapping, while comparative synthesis informs final interpretations and practical recommendations. Such visualization embodies best practices for methodological transparency and allows future researchers to replicate or adapt the process for other languages or symbolic domains. The structured diagram and its alignment with narrative sections demonstrate how an integrated design not only organizes complex qualitative data but also ensures that each step logically contributes to the study's theoretical and practical aims.

5. Discussion

5.1. Theoretical Significance and Conceptual Implications

The findings of this study substantiate and expand current theories in cognitive linguistics and cultural semiotics by

demonstrating that numerals within phraseological units consistently function as cognitive frames that encode evaluative and symbolic meanings. The observation that the numeral “one” signifies singularity and primacy in English idioms (*public enemy number one, go one better than*) illustrates Lakoff’s notion of conceptual metaphor, where numerical quantifiers extend to abstract domains of hierarchy and excellence^[19]. Conversely, negative extensions (*have one too many*) reveal cultural constraints on excess, indicating moral judgement encoded in everyday expressions. Kazakh idioms reveal a deeper spiritual dimension: *ōip* (one) embodies monotheistic reliance, *yū* (three) connotes completeness and tribal identity, and *жәми* (seven) holds sacred connotations, aligning with Wierzbicka’s framework of cultural scripts^[20]. This demonstrates that while both languages exploit universal numeric symbolism, Kazakh idioms integrate numerals more extensively into folklore and collective ethics, providing a contrastive ethnolinguistic lens. These insights advance existing discourse by clarifying how idiomatic numerals function not merely as decorative language elements but as vessels of collective epistemology, echoing Sarafian’s cultural linguistics paradigm.

5.2. Comparative Cultural Dynamics

A deeper cultural synthesis reveals that English idioms with numerals tend to reflect values of individualism, achievement, and pragmatic action (*go one better than, first past the post*), consistent with Western communicative norms that favor self-assertion and result-oriented behavior^[4]. In contrast, Kazakh numerical idioms privilege collective harmony, spirituality, and moral rectitude (*тәрт аяғы тең жорға* – “a person of balanced character”), resonating with traditional Central Asian cultural models emphasizing group cohesion and cosmic order^[5].

This contrast underscores the role of idioms as cognitive blueprints for cultural behavior. Such findings corroborate and nuance the Sapir-Whorf hypothesis in showing how language shapes not only perception but also normative frameworks for social interaction.

5.3. Original Contribution

This research fills a critical gap in phraseological studies by offering the first systematic, cross-linguistic compar-

ison of numerical idioms in English and Kazakh. Previous works have discussed symbolic meanings within single languages or general paremiology; however, this study uniquely synthesizes semantic, cultural, and cognitive perspectives, thereby proposing an integrated linguocultural-cognitive model for interpreting numerical phraseology.

Moreover, it provides practical methodological tools—combining lexical-semantic mapping, cultural contextualization, and comparative analysis—which can be adapted to other languages or symbolic domains.

5.4. Practical Applications

The findings have direct implications for:

Language teaching: Educators can design exercises that explain the metaphorical and cultural underpinnings of idioms (e.g., why *seven* denotes luck or sacredness) to deepen learners' cultural competence.

Translation studies: Translators should be trained to recognize culture-bound numerical connotations to avoid literal renderings that distort meaning.

Intercultural communication: Awareness of numeric symbolism can prevent pragmatic misinterpretations in business or diplomacy where idiomatic usage conveys subtle social positioning.

For example, teaching the contrast between “*third time’s a charm*” and Kazakh *үш қайнаса сорпасы қосылмайды* helps learners appreciate not only literal meaning but also the cultural stance towards luck and social distance.

5.5. Limitations and Recommendations for Future Research

While comprehensive, this study is limited by its focus on English and Kazakh only. Future research should expand the cross-linguistic scope to include languages from other typological families. Additionally, a mixed-methods design combining corpus linguistics and digital ethnography could trace idiom usage in real-time online discourse.

Applying neurocognitive methods, such as eye-tracking or ERP experiments, could reveal how native speakers process symbolic numerals during idiom comprehension—advancing psycholinguistic insights into culturally grounded figurative language.

5.6. Synthesis and Alignment with Research Objectives

In sum, this discussion confirms that:

RQ1 (semantic function) is addressed: numerals act as multi-layered semantic and symbolic markers.

RQ2 (cultural scripts) is explained: idioms encode distinct but comparable cultural values in English and Kazakh.

RQ3 (cross-cultural patterns) is validated: shared archetypes coexist with unique ethno-cultural elaborations.

This integrative understanding reaffirms the vital interplay between language, cognition, and culture—demonstrating that idiomatic numerals are powerful tools for shaping and transmitting cultural knowledge.

6. Conclusion

This study systematically demonstrated that phraseological units containing numerals are not mere fixed expressions but complex linguistic constructs encoding semantic, cultural, and cognitive dimensions. In English idioms, numerals frequently express individuality, evaluation, and pragmatic judgement (*public enemy number one, one in a million, go one better than*). In contrast, Kazakh idioms embed numerals in spiritual, ethical, and folkloric contexts (*бip Аллаға тәуекел, жеті қазына*), highlighting communal values and traditional cosmology. Cross-cultural parallels—especially for numerals like *three, seven, and nine*—illustrate universal cognitive tendencies alongside culturally specific elaborations.

This research fills a documented gap in phraseology and linguocultural studies by providing an integrated, comparative model for analysing the symbolic and evaluative functions of numerals in idioms. It advances cognitive linguistics and cultural semiotics by demonstrating how numerical idioms act as conceptual tools structuring worldviews and social norms. The multi-method approach—combining lexical-semantic analysis, cultural contextualization, and cross-linguistic comparison—offers a replicable framework for future linguocultural inquiry.

The findings have clear practical value for:

Language education: Incorporating numerical idioms into curricula can deepen learners' cultural competence and metaphorical awareness.

Translation practice: Recognising the symbolic charge

of numerals prevents literal errors and preserves cultural nuance.

Intercultural training: Understanding number symbolism enhances communication in global contexts where idiomatic misinterpretation can cause pragmatic failures.

To build on these insights, future studies should:

Extend cross-linguistic analysis to underexplored languages and dialects, particularly in digitally mediated discourse.

Employ digital corpus linguistics to trace diachronic shifts and frequency patterns of numerical idioms.

Conduct psycholinguistic experiments (e.g., reaction time, eye-tracking) to examine real-time idiom processing.

Apply digital ethnography to explore how idioms with numerals circulate in social media and online communities.

In sum, this study demonstrates that numerical idioms are robust cultural signifiers, shaping and reflecting national identities and communicative norms. By illuminating their semantic depth and cultural resonance, this work not only enriches phraseological theory but also equips educators, translators, and cultural mediators with tools to navigate idiomatic meaning in a globalized linguistic landscape.

Author Contributions

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

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Institutional Review Board Statement

The study was conducted in accordance with the Declaration of Helsinki and was approved by the Institutional Ethics Committee of the Department of Kazakh and Russian Languages, Institute of Project Management, K.I. Satbayev Kazakh National Research Technical University, Satbayev

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Informed Consent Statement

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

Data Availability Statement

The data supporting the findings of this study are available upon request.

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Conflicts of Interest

The authors declare no conflict of interest.

References

- [1] Wierzbicka, A., 1997. *Understanding Cultures through Their Key Words*. Oxford University Press: Oxford, UK.
- [2] Sharifian, F., 2017. *Cultural Linguistics*. John Benjamins: Amsterdam, Netherlands.
- [3] Ahmetov, Z.K., Shanbayev, T.S., 1998. *Dictionary of Literary Terms [in Kazakh]*. Ana tili: Almaty, Kazakhstan. pp. 383.
- [4] Toleu, A., 2018. *Fire Pit [in Kazakh]*. *Kazakh Encyclopedia: Almaty, Kazakhstan*. pp. 185.
- [5] Zhanuzak, T.R., Zhunisbek, A.K., 2009. *Dictionary of the Kazakh Literary Language [in Kazakh]*. Arys: Almaty, Kazakhstan. pp. 580.
- [6] Bowler, L., Lopatovska, I., Rosin, M.S., 2023. Teen-adult Interactions During the Co-design of Data Literacy Activities for the Public Library: Insights from a Natural Language Processing Analysis of Linguistic Patterns. *Information and Learning Sciences*. 125(3/4), 252-269. DOI: <https://doi.org/10.1108/ILS-06-2023-0076>
- [7] Gravelin, A.C., Archer, B., Oddo, M., et al., 2023. Reliability of a Linguistic Segmentation Procedure Specified by Systemic Functional Linguistics to Examine Extemporaneous Speech. *Journal of Speech, Language, and Hearing Research*. 66(4), 1280-1290. DOI: https://doi.org/10.1044/2023_JSLHR-22-00554
- [8] Zhang, T., Yang, Z., Chen, S., 2025. A Study on Path Categories in Motion Events. *Forum for Linguistic*

- Studies. 7(2), 72-82. DOI: <https://doi.org/10.30564/fls.v7i2.7668>
- [9] Lewandowski, W., Mateu, J., 2020. Motion Events Again: Delimiting Constructional Patterns. *Lingua*. 247, 102956. DOI: <https://doi.org/10.1016/j.lingua.2020.102956>
- [10] Slobin, D.I., 1997. Mind, Code, and Text. In: Bybee, J.L., Haiman, J., Thompson, S.A. (eds.). *Essays on Language Function and Language Type*. John Benjamins: Amsterdam, Netherlands. pp. 437-467. DOI: <https://doi.org/10.1075/z.82.24slo>
- [11] Alamri, W., Qasem, F., Alfotais, A., et al., 2025. Leveraging ChatGPT AI Model in Academic Writing and Avenues for Further Development: SWOT Framework. *Forum for Linguistic Studies*. 7(2), 61-71. DOI: <https://doi.org/10.30564/fls.v7i2.8218>
- [12] Sun, J., Motevalli, S., Chan, N., et al., 2024. Implementation of Self-Regulated Learning Writing Module: Amplifying Motivation and Mitigating Anxiety among EFL Learners. *Forum for Linguistic Studies*. 6(3), 89-109. DOI: <https://doi.org/10.30564/fls.v6i3.6600>
- [13] Bisriyah, M., 2022. EFL University Students' Difficulties in the Essay Writing Process. *Scope: Journal of English Language Teaching*. 7(1), 66-71. DOI: <https://doi.org/10.30998/scope.v7i1.13793>
- [14] Bruning, R., Dempsey, M., Kauffman, D.F., et al., 2013. Examining Dimensions of Self-Efficacy for Writing. *Journal of Educational Psychology*. 105(1), 25-38. DOI: <https://doi.org/10.1037/a0029692>
- [15] Camacho, A., 2021. Writing Motivation in School: A Systematic Review of Empirical Research in the Early Twenty-First Century. *Educational Psychology Review*. 33(1), 213-247. DOI: <https://doi.org/10.1007/s10648-020-09530-4>
- [16] Chen, A., 2022. The Effects of Writing Strategy Instruction on EFL Learners' Writing Development. *English Language Teaching*. 15(3), 29-37. DOI: <https://doi.org/10.5539/elt.v15n3p29>
- [17] Yousaf, A., 2021. Anthropocentric worldview and the role of phraseological units in English language teaching. *Journal of Language and Cultural Education*. 9(2), 15-27.
- [18] Xue, X., 2023. Cross-linguistic study of the number 'four' in paremias: a comparative ethnolinguocultural perspective. *International Journal of Linguistics*. 35(1), 45-59.
- [19] Aliyeva, S., 2021. Phraseology as a reflection of national identity: the case of Uzbek and English idioms. *International Journal of Humanities and Cultural Studies*. 8(3), 112-120.
- [20] Khuzin, I., 2021. Evaluativity in phraseological meaning: a cognitive-semantic approach. *Journal of Language and Semiotic Studies*. 7(2), 77-89.
- [21] Jumayev, A., 2023. Cross-cultural communication and the challenges of idiom translation in English. *International Journal of Applied Linguistics and English Literature*. 12(1), 34-42.
- [22] Chen, J., 2020. Sacred numbers in English and Chinese phraseology: a pragmatic study. *Journal of Pragmatics*. 162, 55-67. DOI: <https://doi.org/10.1016/j.pragma.2019.12.003>
- [23] Kim, S., 2022. Numerical symbolism in Korean and English idioms: a cultural linguistics perspective. *International Journal of Cultural Linguistics*. 10(1), 23-38.
- [24] Singh, P., Patel, R., 2021. Pragmatic competence and number idioms: teaching implications. *Language and Intercultural Communication*. 21(4), 412-428. DOI: <https://doi.org/10.1080/14708477.2021.1884324>
- [25] Hernández, M., 2022. Idioms and cultural semantics: a cross-linguistic study. *Language, Culture and Society*. 5(2), 55-69.