



MEASUREMENT UNITS IN THE ENGLISH AND UZBEK LANGUAGES: LINGUOCOGNITIVE AND LINGUOCULTURAL INVESTIGATION

Nazarov Behzod Baxtiyarovich

English teacher at the Department of World Languages, Kokand University

b.nazarov@kokanduni.uz

MAQOLA HAQIDA

Qabul qilindi: 24-dekabr 2024-yil

Tasdiqlandi: 26-dekabr 2024-yil

Jurnal soni: 13

Maqola raqami: 75

DOI: <https://doi.org/10.54613/ku.v13i.1085>

KALIT SO'ZLAR/ КЛЮЧЕВЫЕ СЛОВА/

KEYWORDS

measurement units, lingvocognitive, linguocultural, metaphorical expressions, cultural narratives, semantic analysis, cross-cultural communication.

ANNOTATION

This study delves into the lingvocognitive and linguocultural dimensions of measurement units in English and Uzbek languages, focusing on their roles as cultural artifacts, cognitive tools, and linguistic expressions. Measurement units go beyond their practical use for quantification; they serve as reservoirs of historical knowledge, cultural practices, and cognitive schemas. By analyzing their metaphorical usages, semantic constructions, and cultural narratives, this paper uncovers the nuanced ways in which these units embody societal values, worldviews, and collective identities. The findings offer valuable insights into the linguistic mechanisms through which languages shape, preserve, and communicate cultural heritage, thereby enriching our understanding of cross-cultural interaction and linguistic diversity.

Introduction. Language is not merely a system of communication; it is a repository of cultural knowledge and a window into the cognitive processes of its speakers. Measurement units, as an integral component of language, provide a unique lens through which to examine the intersection of linguistic structures, cultural norms, and cognitive frameworks. These units carry meanings that transcend their literal functions, revealing the values, practices, and mental models of the communities that use them.

This study seeks to investigate the dual role of measurement units in English and Uzbek languages as practical tools and cultural symbols. It explores how these units encapsulate historical contexts, influence cognitive patterns, and shape linguistic expressions. By analyzing these aspects, the study addresses the following research questions: How do measurement units in English and Uzbek languages reflect their respective cultural and historical contexts? What cognitive processes are embedded in the metaphorical and idiomatic uses of these units? How do differences in measurement systems influence cross-cultural understanding and communication?

The broader aim is to uncover the cultural and cognitive frameworks that inform the use of measurement units, thereby contributing to a deeper appreciation of linguistic diversity and its implications for global interaction.

Literature Review. Existing research on measurement units has largely emphasized their scientific and mathematical applications, often overlooking their cultural and cognitive dimensions. Foundational works by Sapir (1921) and Whorf (1956) established the relationship between language, culture, and thought, highlighting how linguistic structures shape perceptions of reality. Lakoff's (1987) theories of embodied cognition and conceptual metaphors provide valuable insights into how physical experiences influence abstract thinking, which is particularly relevant for understanding measurement-related idioms.

Additionally, Sharifian's (2011) studies on cultural conceptualizations demonstrate how language reflects collective cognitive processes and cultural norms. These frameworks are instrumental in analyzing how measurement units function as cultural markers in English and Uzbek languages, offering a theoretical basis for examining their semantic and metaphorical richness.

Research methodology. This study adopts a qualitative, comparative approach to explore the lingvocognitive and linguocultural dimensions of measurement units in English and Uzbek. The aim is to understand not just the linguistic properties of measurement terms but also their deeper cognitive and cultural significance. The research methodology includes three main types of analysis: semantic analysis, cultural analysis, and cognitive analysis. Additionally, the study draws on a variety of data sources to ensure a comprehensive exploration of the topic.

Semantic Analysis. Objective: The purpose of the semantic analysis is to examine the literal and figurative meanings of measurement units, focusing on both their denotative (direct) meanings and connotative (implied or symbolic) meanings in different contexts. This part of the study explores how measurement terms are used and interpreted in specific contexts in both English and Uzbek. It investigates their definitions in standard dictionaries, but more importantly, it examines how these terms may carry additional meanings in everyday language, literature, and figurative expressions. For example, in English, terms such as "mile" or "foot" have clear literal meanings related to distance, but they may also appear in idiomatic expressions such as "a mile in someone's shoes" or "to go the extra mile," where the term's meaning extends beyond physical measurement to represent empathy or effort. Similarly, in Uzbek, terms like "qadam" (step) or "so'z" (word) may be used not only in the literal sense of counting steps or words but may also have broader cultural or metaphorical meanings. "Qadam" can also signify a milestone in someone's life or a significant personal step forward, often evoking a sense of progress or change.

Cultural Analysis. Objective: Measurement units are deeply intertwined with culture and history. The cultural analysis aims to explore the historical development and the cultural narratives surrounding measurement terms in both languages. This includes how measurement systems (such as the metric system or imperial system) are not only functional but also reflect the values, traditions, and historical experiences of different societies. Approach: This analysis will trace how measurement units have evolved in English and Uzbek, looking at the role they played in different cultures and historical periods. In English, the use of "yard," "foot," and "mile" may be linked to specific historical events, such as the British Empire's influence and the maritime heritage of the English-speaking world. These terms may carry connotations of imperialism, navigation, and land measurement, which are important in understanding the English-speaking world's historical development.

In Uzbek, the shift from traditional measurement systems to the metric system will be examined, as well as how units like "so'm" (a term for weight) or "dehqon yerini o'lchash" (land measurement) hold cultural significance tied to agricultural practices and historical land ownership. The study will investigate how these units reflect the values and lifestyle of rural communities in Uzbekistan and how changes in measurement practices are connected to modernity and globalization.

Cognitive Analysis. Objective: The cognitive analysis explores how measurement units are conceptualized by speakers of English and Uzbek. According to cognitive linguistics, language is not just a tool for communication but also a reflection of how people think and perceive the world. This analysis will focus on the mental models and conceptual metaphors associated with measurement terms in both languages.

Approach: The cognitive analysis will look at how measurement terms shape thinking about space, time, quantity, and scale. This will involve studying the metaphors that are used to understand and talk about measurement in both languages. For example, in English, measurements related to time, distance, and quantity often use metaphors that reflect conceptual mappings, such as "time is money" or "life is a journey." These metaphors might influence how speakers conceptualize the passage of time or the effort needed to accomplish tasks. Similarly, in Uzbek, terms like "yosh" (age, also meaning time) might be used in expressions that metaphorically represent the progression of life. The study will investigate how cognitive models of measurement are reflected in these figurative uses of language and how they differ across cultures.

The research will also explore how measurement terms are mentally structured. For instance, the idea of "distance" in English might be conceptualized as something linear (measuring from one point to another), while in Uzbek, it may be associated with the journey or the effort required to reach a destination. These mental models will be explored through metaphorical usage and everyday language.

Data Sources. Idiomatic Dictionaries: Idiomatic dictionaries will provide insight into the figurative and non-literal uses of measurement terms in both languages. These sources are crucial for understanding how measurement units are embedded in idiomatic expressions, reflecting deeper cultural and cognitive meanings. For example, phrases like "a foot in the door" in English or "bir qadam oldinga" (taking a step forward) in Uzbek will be analyzed to uncover the cultural and cognitive assumptions behind these idioms. Literary Texts: Literary texts in both English and Uzbek will be used to explore how measurement terms are used symbolically and metaphorically. Literature offers a rich source of language that often stretches the boundaries of literal meaning, offering deep insights into the symbolic uses of measurement. In English literature, measurement terms might appear in contexts related to time, space, or existential concerns, such as in works by Shakespeare, where terms like "mile" or "yard" take on symbolic meaning. In Uzbek literature, measurements related to land and personal milestones, such as "qadam" (step), may represent personal or societal achievements.

Corpus-Based Examples: The study will include corpus-based analysis, drawing on large, representative collections of texts from both languages. By analyzing real-world examples of how measurement terms are used in a wide variety of written and spoken contexts, the study will identify patterns of usage and changes in the meanings and applications of these terms over time. This data will come from diverse sources, such as newspapers, academic texts, fiction, and digital platforms, helping to capture how language evolves and adapts in the context of measurement.

Interviews with Native Speakers: Interviews will provide qualitative data on how native speakers of English and Uzbek interpret and use measurement terms in their everyday lives. These interviews will focus on both literal and figurative uses of measurement units, as well as their cultural significance. Participants will be asked to discuss their understanding of terms like "mile," "foot," and "yard" in English, and "qadam," "so'm," and "qarich" in Uzbek, along with any cultural associations they have with these terms. This data will provide valuable insights into the real-world usage and perceptions of measurement terms, allowing for a deeper understanding of how language reflects cognitive and cultural practices. Results

Historical and Cultural Contexts. The historical trajectories of measurement units in English and Uzbek reveal the sociocultural priorities of these linguistic communities.

In English, units such as "yard," "mile," and "stone" have their origins in Anglo-Saxon and Roman traditions, reflecting practical applications in agriculture, trade, and construction. Over time, the

adoption of the metric system signified a shift towards standardization and globalization, yet traditional units persist in everyday language and cultural expressions, retaining their historical resonance. For instance, the phrase "by a mile" conveys not only distance but also a figurative sense of superiority or margin.

In Uzbek, traditional units like "el" (a unit of length) and "kallai-pochcha" (a figurative measure) are deeply intertwined with agrarian and nomadic lifestyles. These units reflect the communal and context-sensitive nature of Uzbek society, encapsulating values such as cooperation and relational understanding. Historical practices of land distribution, trade, and resource management are vividly mirrored in these terms, making them significant cultural artifacts.

Linguistic and Metaphorical Usage. Measurement units in both languages serve as vehicles for metaphorical and idiomatic expressions, enriching their semantic and cultural dimensions. In English, expressions such as "inching forward" and "a ton of work" use measurement units to convey perseverance and magnitude, respectively. These metaphors often emphasize individual effort, precision, and quantifiable progress, reflecting the cultural ethos of pragmatism and efficiency. Conversely, Uzbek idioms like "bir el yo'l" (a single unit's path) and "bir qilich bo'yi" (a sword's length) evoke relational and situational imagery. These expressions underscore collective experiences, relational ethics, and context-dependent interpretations, aligning with the community-centric worldview prevalent in Uzbek culture.

Cognitive Analysis. The conceptual metaphors derived from measurement units reveal shared cognitive patterns as well as unique cultural framings. In English, measurement terms frequently map onto abstract domains such as time, value, and effort. For example, "an ounce of prevention" signifies proactive caution, illustrating a cognitive schema where small measures lead to significant benefits. In Uzbek, measurements often conceptualize relational dynamics and situational appropriateness. Phrases like "bir hovuch yer" (a handful of land) symbolize modesty and sufficiency, reflecting a cognitive framework that values harmony and balance over precision.

Discussion. The findings emphasize that measurement units are more than tools for quantification; they are deeply embedded in the cultural and cognitive fabric of their respective languages. The differences in their metaphorical and idiomatic uses highlight distinct worldviews: English prioritizes quantifiable precision and individualism, while Uzbek emphasizes contextual relationships and collective values.

These differences have profound implications for cross-cultural communication, particularly in translation and language learning. Adapting idiomatic expressions from one language to another requires an understanding of the underlying cultural and cognitive schemas. For instance, while the English phrase "go the extra mile" might be rendered in Uzbek as a phrase emphasizing shared effort, the translation would need to convey the collectivist ethos inherent in the culture.

Conclusion. Measurement units in English and Uzbek languages serve as lenses through which the interplay of culture, cognition, and language can be understood. Their semantic richness and metaphorical versatility offer invaluable insights into the historical, cultural, and cognitive landscapes of their speakers.

Future research could explore the influence of globalization on traditional measurement systems and expand the analysis to other languages and cultures, further enriching our understanding of linguistic diversity and cultural interconnectedness. By examining the linguocognitive and linguocultural aspects of measurement units, this study underscores the vital role of language as a mirror of human thought and cultural identity.

References:

1. Lakoff, G. (1987). *Women, Fire, and Dangerous Things: What Categories Reveal About the Mind*. University of Chicago Press.
2. Sapir, E. (1921). *Language: An Introduction to the Study of Speech*. Harcourt, Brace.
3. Whorf, B. L. (1956). *Language, Thought, and Reality: Selected Writings of Benjamin Lee Whorf*. MIT Press.
4. Sharifian, F. (2011). Cultural Conceptualisations and Language: Theoretical Framework and Applications. *Pragmatics and Cognition*, 19(1), 50-68.
5. Lakoff, G., & Johnson, M. (1980). *Metaphors We Live By*. *The Journal of Philosophy*, 77(8), 453-486.
6. Merriam-Webster Dictionary. (n.d.). Retrieved from <https://www.merriam-webster.com>

7. Ethnologue. (n.d.). English and Uzbek Languages. Retrieved from <https://www.ethnologue.com>
8. United Nations. (2015). Transforming our world: The 2030 Agenda for Sustainable Development. Retrieved from <https://www.un.org/sustainabledevelopment/>
9. Sachs, J. D. (2015). The Age of Sustainable Development. Columbia University Press.
10. Raworth, K. (2017). Doughnut Economics: Seven Ways to Think Like a 21st-Century Economist. Chelsea Green Publishing.
11. United Nations Development Programme. (2020). Human Development Report. Retrieved from <https://hdr.undp.org/>
12. World Bank. (2021). World Development Indicators. Retrieved from <https://data.worldbank.org/>
13. Nazarov, B. (2024). ENGLISH SPEAKING: TIPS FOR IMPROVING PUBLIC SPEAKING, CONVERSATION SKILLS, AND PRONUNCIATION. *Talqin Va Tadqiqotlar*, 2(2(39)). извлечено от <https://talqinvatadqiqotlar.uz/index.php/tvt/article/view/1795>
14. Назаров Бехзод Бахтиярович. (2023). ИСПОЛЬЗОВАНИЕ СОВРЕМЕННЫХ ТЕХНОЛОГИЙ ПРИ ОБУЧЕНИИ ИНОЯЗЫЧНОМУ ГОВОРЕНИЮ В СТАРШЕЙ ШКОЛЕ. *QO'QON UNIVERSITETI XABARNOMASI*, 1(1), 978–981. <https://doi.org/10.54613/ku.v1i1.478>
15. LINGUOCULTURAL STUDY OF ANTONYMS USED IN LITERARY TEXT
16. Nazarov, Bekhzod Bakhtiyarovich (2022). LINGUOCULTURAL STUDY OF ANTONYMS USED IN LITERARY TEXT. *Oriental renaissance: Innovative, educational, natural and social sciences*, 2 (6), 1115-1119.
17. Nazarov Bekhzod Bakhtiyarovich. (2023). THE USE OF MODERN TECHNOLOGIES IN TEACHING FOREIGN LANGUAGE SPEAKING IN HIGH SCHOOL. *QO'QON UNIVERSITETI XABARNOMASI*, 1(1), 971–974. <https://doi.org/10.54613/ku.v1i1.476>
18. Bakhtiyarovich, N. B. (2024, August). LINGVOCOGNITIVE AND LINGUOCULTURAL STUDY OF MEASUREMENT UNITS IN ENGLISH AND UZBEK LANGUAGES. In *INTERDISCIPLINE INNOVATION AND SCIENTIFIC RESEARCH CONFERENCE* (Vol. 22, No. 2, pp. 51-53).
19. Nazarov Behzod Baxtiyarovich. (2024). POSSIBILITIES OF USING INTERNET IN TEACHING ENGLISH LANGUAGE. *Kokand University Research Base*, 211–216. Retrieved from <https://scholar.kokanduni.uz/index.php/rb/article/view/313>
20. Nazarov Behzod Baxtiyarovich. (2024). LEARNERS' MOTIVATION AND ATTITUDE TOWARDS ENGLISH AS A FOREIGN LANGUAGE. *Kokand University Research Base*, 205–210. Retrieved from <https://scholar.kokanduni.uz/index.php/rb/article/view/312>
21. kizi Mukhtorova, M. M., & Djumabayeva, J. S. (2022, August). WAYS OF EXPRESSING REPROACH DEPENDING ON THE TYPE OF THE SENTENCE IN THE ENGLISH LANGUAGE. In *INTERNATIONAL CONFERENCES* (Vol. 1, No. 15, pp. 122-126). <https://researchedu.org/index.php/cf/article/view/323>
22. Mukhtorova, M., & Ilxomov, X. (2024). HOW TO IMPROVE LISTENING SKILLS OF BOTH ESL AND EFL STUDENTS. *QO 'QON UNIVERSITETI XABARNOMASI*, 11, 84-86. <https://doi.org/10.54613/ku.v11i11.964>