

The Interconnection Between Cognitive Linguistics, Cultural Semantics, and Lacuna Theory

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Abstract. *This study investigates the phenomenon of lacunas at the intersection of cognitive linguistics, cultural semantics, and translation studies, emphasizing the complex interplay between language, culture, and cognition. It analyzes Lakoff and Johnson’s conceptual metaphor theory, Langacker’s cognitive grammar, Fillmore’s frame semantics, and the cultural scripts model of Wierzbicka and Goddard, alongside lacuna theory as proposed by Sorokin, Markovina, and Sternin. Using Uzbek and English lexical examples, such as mahalla versus “neighbourhood,” the study demonstrates that lacunas arise not merely from the absence of lexical equivalents but from deeper conceptual and cultural asymmetries between languages. The conceptsphere framework is employed to explain how concepts, metaphors, frames, and cultural scripts are organized within a linguistic community, revealing the sources of linguistic, linguacultural, and pragmatic gaps. The research concludes that lacunas should be regarded as analytical tools that illuminate cultural values and cognitive structures, offering insights for translation, intercultural communication, and theoretical linguistics.*

Keywords: *Lacuna, Conceptual Metaphor, cognitive grammar, frame semantics, cultural scripts, Conceptsphere, linguoculturology, cross-cultural communication, Translation Studies, Uzbek–English Comparison*

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Koqnitiv dilçilik, mədəni semantika və lakuna nəzəriyyəsi arasındakı qarşılıqlı əlaqə

Şirzad Lətifov 

Xülasə. *Bu tədqiqat lakuna fenomenini koqnitiv dilçilik, mədəni semantika və tərcüməşünaslığın kəsişməsində araşdırır, dil, mədəniyyət və idrak arasındakı mürəkkəb qarşılıqlı əlaqəni vurğulayır. Araşdırmada Lakoff və Johnsonun konseptual metafora nəzəriyyəsi, Langackerin koqnitiv qrammatikası, Fillmorun freym semantikası, həmçinin, Wierzbicka və Goddardın mədəni skriptlər modeli Sorokin, Markovina və Sterninin irəli sürdüyü lakuna nəzəriyyəsi ilə birlikdə təhlil edilir. “Mahalla” və “neighbourhood” (qonşuluq məhəlləsi) kimi özbək və ingilis leksik nümunələrindən istifadə etməklə göstərilir ki, lakunalar yalnız leksik ekvivalentlərin olmamasından deyil, dillər arasındakı daha dərin konseptual və mədəni asimetriyalardan yaranır. Konseptosfer çərçivəsi vasitəsilə anlayışların, metaforaların, freymlərin və mədəni skriptlərin müəyyən bir dil icmasında necə təşkil olunduğu izah edilir və bunun nəticəsində dilçilik, linqvokulturoloji və pragmatik boşluqların mənbələri üzə çıxarılır.*

Tadqiqat belə nəticəyə gəlir ki, lakunalar yalnız dil boşluqları deyil, həm də mədəni dəyərləri və koqnitiv strukturları üzə çıxaran analitik vasitələr kimi qiymətləndirilməlidir. Bu yanaşma tərcümə, mədəniyyətlərarası ünsiyyət və nəzəri dilçilik sahələri üçün mühüm nəticələr təqdim edir.

Açar sözlər: *lakuna, konseptual metafora, koqnitiv grammatika, freym semantikasi, mədəni skriptlər, konseptosfer, linqvokulturologiya, mədəniyyətlərarası ünsiyyət, tərcüməşünaslıq, özbək–ingilis müqayisəsi*

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Introduction

The in-depth study of the relationship between language and culture is considered a pressing issue in 21st-century linguistics. The phenomenon of lacuna should be explained not only from a linguacultural perspective but also from a cognitive point of view. Research in cognitive linguistic and cultural semantics examines how human thinking and cultural values are encoded through language.

This article analyzes Lakoff and Johnson’s theory of conceptual metaphor, Langacker’s concept of cognitive grammar, and Fillmore’s frame semantics approach, as well as the theory of lacunas and their connection with the conceptsphere.

Methods

The research was based on theoretical analysis and the comparative method:

Cognitive approaches: Lakoff and Johnson’s theory of conceptual metaphor, Langacker’s concept of cognitive grammar, and Fillmore’s frame semantics were analyzed.

Pragmatic and linguacultural approaches: Goddard and Wierzbicka’s theories of cultural scripts and the Natural Semantic Metalanguage (NSM) were examined.

Lacuna research: The concept of lacuna and its emergence in translation were studied in the works of Sorokin, Markovina, Sternin, and Kostomarov.

As research material, lexical units from Uzbek and English (for example, “mahalla” vs. “neighbourhood”) were used as illustrative examples.

Results

Metaphor and frame system: Lakoff and Johnson demonstrate that meaning in conceptual metaphors is formed on the basis of human bodily and social experience, while abstract concepts are structurally modeled through metaphors (Lakoff & Johnson, 1980, pp. 3–5). In Langacker’s concept of cognitive grammar, the lexicon and grammar are viewed as a unified system of form – meaning pairings (Langacker, 1987). Fillmore, in turn, emphasizes that behind every word there exists a “frame” – a scenario that includes a set of participants and a system of values (Fillmore, 1982, pp. 111–137).

Emergence of lacunas: The Uzbek lexeme “mahalla” includes not only the frame of a geographical area but also value components such as neighborhood relations, religious ceremonies, and social control. The English words “neighbourhood” or “community” do not fully encompass this frame, which results in a semantic gap – a conceptual lacuna (Goddard & Wierzbicka, 2004, pp. 153–166).

Cultural scripts and the NSM approach: Each culture transmits intergenerational experience through specific “scripts.” In the conceptosphere of another language, these scripts may be absent or encoded differently, which leads to the emergence of pragmatic lacunas.

Types of lacunas: Sorokin and Markovina distinguish linguistic, linguacultural, and pragmatic lacunas. Modern research suggests that lacunas should be viewed not merely as a problem of finding equivalents, but as a tool for identifying cultural differences (Sorokin & Markovina, 1987, pp. 91–97).

Discussion and Conclusion

The results of the present study demonstrate that the phenomenon of lacuna cannot be explained solely through the absence of lexical equivalents between languages. Traditional translation studies often treat lacunas as simple lexical gaps; however, contemporary approaches in cognitive linguistics and linguaculturology reveal that lacunas are the result of deeper conceptual and cultural asymmetries between linguistic communities. In this regard, the conceptosphere functions as a theoretical framework that allows researchers to analyze how concepts are organized within the collective consciousness of a particular culture and how these conceptual structures are reflected in language (Latipov, 2025).

One of the central insights of cognitive linguistics is that meaning is not an abstract and isolated property of linguistic units but is grounded in human experience. Lakoff and Johnson’s theory of conceptual metaphor demonstrates that many abstract concepts are structured through metaphorical mappings derived from bodily and social experience. For instance, metaphors such as TIME IS MONEY or ARGUMENT IS WAR illustrate how complex cognitive domains are conceptualized through more concrete experiential domains. When different cultures employ distinct metaphorical models to structure similar experiences, conceptual mismatches may occur. These mismatches often lead to lacunas because the metaphorical frameworks underlying certain concepts in one language may not exist in another (Latipov, 2025, p. 42).

Langacker’s theory of cognitive grammar also contributes significantly to understanding the emergence of lacunas. According to Langacker, linguistic knowledge is composed of symbolic units that combine form and meaning, and grammar itself is not separate from the lexicon but forms part of a unified conceptual system (Faziljan, 2023). This perspective implies that lexical gaps cannot be understood independently from grammatical and conceptual structures. When a concept occupies a central position in one culture’s conceptual system but is peripheral or absent in another, the corresponding linguistic expressions will also differ. As a result, translation difficulties arise not only at the lexical level but also at the level of conceptual representation.

Fillmore’s frame semantics further clarifies how meaning is embedded within culturally structured knowledge systems. A frame represents a structured background of knowledge that includes participants, roles, events, and cultural values associated with a particular concept. Words activate these frames in the minds of speakers, allowing them to interpret meaning within a broader cultural context. When frames differ across languages, the translation of individual words becomes problematic because the background knowledge associated with those words cannot be fully transferred (Latipov, 2022). The example of the Uzbek concept “mahalla” illustrates this phenomenon clearly. In Uzbek culture, the term refers not merely to a geographical area but also to a complex social institution characterized by communal solidarity, mutual assistance, moral regulation, and participation in social and religious rituals. The English terms *neighbourhood* or *community* represent only partial equivalents because they lack many of the cultural and institutional connotations

embedded in the Uzbek frame (Dadabaev, 2013, p. 181). Consequently, the translation of “mahalla” often produces a conceptual lacuna.

The role of cultural scripts and the Natural Semantic Metalanguage (NSM), developed by Anna Wierzbicka and Cliff Goddard, provides another important perspective on lacuna formation. Cultural scripts describe shared cultural norms and expectations that guide social behavior and communication within a particular community. These scripts are encoded in language through specific lexical items, expressions, and pragmatic conventions. When speakers of different languages interact, differences in cultural scripts may lead to misunderstandings or pragmatic gaps. For example, expressions of politeness, forms of address, and communicative strategies often vary significantly across cultures. In such cases, lacunas appear not because of lexical absence alone but because the underlying cultural norms governing communication differ.

The study also confirms the relevance of the classification of lacunas proposed by Sorokin and Markovina, who distinguish between linguistic, linguacultural, and pragmatic lacunas. Linguistic lacunas arise from the absence of lexical or grammatical equivalents in another language. Linguacultural lacunas emerge when a concept reflects culturally specific phenomena that do not exist in another culture. Pragmatic lacunas occur when communicative norms or speech behaviors differ between linguistic communities. Later researchers such as Sternin and Kislitsyna expanded this framework by introducing the notions of *activity lacunas* and *speech-behavior lacunas*, emphasizing that lacunas may also arise from differences in patterns of social interaction and behavioral expectations (Sternin & Kislitsyna, 2011).

Within the framework of conceptosphere analysis, these classifications become particularly valuable because they reveal how cultural values are hierarchically organized within the conceptual system of a language community (Likhachev, 1993). Concepts located in the core of the national conceptosphere tend to generate lacunas when translated into languages whose conceptospheres lack comparable structures. Conversely, peripheral concepts are more easily translated because they often relate to universal or globally shared experiences.

Overall, the integration of cognitive linguistics, cultural semantics, and lacuna theory provides a comprehensive approach to understanding cross-linguistic and cross-cultural differences. Instead of viewing lacunas merely as translation problems, they can be interpreted as indicators of deeper conceptual and cultural distinctions between linguistic communities. This perspective not only enriches theoretical linguistics but also contributes to more effective translation practices and intercultural communication.

The present study has demonstrated that the analysis of lacunas requires an interdisciplinary perspective that combines insights from cognitive linguistics, linguoculturology, and translation studies. The conceptosphere provides a useful theoretical model for examining how culturally significant concepts are organized within the collective consciousness of a linguistic community. Within this framework, lacunas appear as natural consequences of conceptual asymmetries between languages and cultures.

The research findings indicate that lacunas emerge primarily from differences in conceptual structures, frames, and cultural scripts. When a concept occupies a central position in one language’s conceptosphere but lacks an equivalent conceptual structure in another language, translation difficulties arise. In such cases, the absence of direct lexical equivalents reflects deeper cognitive and cultural differences rather than simple lexical deficiency.

The theoretical approaches examined in this study – conceptual metaphor theory, cognitive grammar, frame semantics, and the cultural scripts model – collectively demonstrate that language encodes cultural knowledge through complex cognitive mechanisms. These mechanisms shape how speakers conceptualize social institutions, moral values, and everyday experiences. As a result, linguistic expressions cannot always be transferred directly from one language to another because they are embedded within culturally specific conceptual systems.

The example of the Uzbek concept “mahalla” illustrates the importance of this perspective. Although approximate equivalents such as *neighbourhood* or *community* exist in English, they do not capture the full range of social, cultural, and institutional meanings associated with the Uzbek term. This discrepancy reveals the presence of a conceptual lacuna and highlights the need for explanatory translation strategies that convey cultural context rather than relying solely on lexical substitution.

Furthermore, the classification of lacunas into linguistic, linguocultural, pragmatic, activity-related, and speech-behavior categories provides a more nuanced understanding of cross-cultural communication barriers. Recognizing these different types of lacunas allows translators and researchers to identify the specific sources of misunderstanding and to develop appropriate strategies for overcoming them.

From a broader perspective, lacunas should be viewed not merely as obstacles in translation but as valuable analytical tools for exploring cultural diversity. By identifying conceptual gaps between languages, researchers can gain deeper insights into the worldview, social structure, and cultural values of different linguistic communities. In this sense, lacuna analysis contributes to the study of intercultural communication and enhances our understanding of how language reflects cultural identity.

In conclusion, the integration of cognitive linguistics and linguoculturological approaches significantly expands the theoretical scope of lacuna studies. Future research may further explore the interaction between conceptual metaphors, frames, and cultural scripts in shaping national conceptspheres. Such investigations will deepen our understanding of how language, culture, and cognition interact and will provide new methodological tools for analyzing translation challenges and intercultural communication in a globalized world.

References

1. Dadabaev, T. (2013). Community life, memory and a changing nature of mahalla identity in Uzbekistan. *Journal of Eurasian Studies*, 4(2), 181–196. <https://doi.org/10.1016/j.euras.2013.03.008>
2. Faziljan, L.S. (2023). Filling the lexical gap in three different ways. *Journal of Education, Ethics and Value*, 2(4), 20–21.
3. Fillmore, Ch.J. (1982). *Frame Semantics*. Linguistics in the Morning Calm, edited by The Linguistic Society of Korea.
4. Goddard, C. & Wierzbicka, A. (2004). Cultural Scripts: What Are They and What Are They Good For? *Intercultural Pragmatics*, 1(2).
5. Lakoff, G. & Johnson, M. (1980). *Metaphors We Live By*. University of Chicago Press.
6. Langacker, R.W. (1987). *Foundations of Cognitive Grammar*. Vol. 1. Stanford University Press.
7. Latipov, Sh. (2022, November 18). Uy hayvonlari nomlaridagi leksik bo'shliqlar. *In Maktabgacha va boshlang'ich ta'limning dolzarb masalalari: muammo, yechimlar va rivojlanish istiqbollari*, 1(1), 249–251.
8. Latipov, S. F. O. (2025). *Lakuna hodisasining lingvokulturologik tadqiqi*. Farg'ona Davlat Universiteti.

9. Latipov, S.F.O. (2025). *Lakuna hodisasi: Til va madaniyat kesishmasida*. FarDU Nashriyoti.
10. Likhachev, D. S. (1993). Kontseptosfera russkogo yazyka. *Izvestiya Rossiiskoi akademii nauk. Seriya literatury i yazyka*, 52(1), 3–9.
11. Sorokin, Yu.A. & Markovina, I.Yu. (1987). *Opyt klassifikatsii lakun kak odin iz sposobov opisaniya natsional'noi spetsifiki kul'tur. Teoriya lingvisticheskikh klassifikatsii*. Nauka.
12. Sternin, I.A., & Kislitsyna, E.V. (2011). *Lacunae in language and intercultural communication*. Voronezh State University.