

COGNITIVE-SEMANTIC CATEGORIZATION AND PROTOTYPICAL  
REPRESENTATION OF EMOTIONS: A CONTRASTIVE STUDY BETWEEN ENGLISH  
AND UZBEK

Izzatilloeva Gulira'no Hikmatillo qizi

Osiyo Xalqaro Universiteti, Master student

E-mail: [izzatilloevaguli@gmail.com](mailto:izzatilloevaguli@gmail.com) , +998934561402<https://doi.org/10.5281/zenodo.20325281>

**Abstract.** *This paper examines the cognitive-semantic categorization and prototypical representation of emotions in English and Uzbek from the perspective of prototype theory and conceptual metaphor theory. Based on the work of Rosch, Shaver, Kövecses, and Wierzbicka, the study illustrates how basic emotions like anger (anger/rage), sadness (sorrow), and joy (joy) are conceptualized in the two languages. The analysis shows that although conceptual elements of emotional expressions bear common embodied foundations (for example, ANGER IS HEAT; SADNESS IS DOWNWARD ORIENTATION), their prototypical cores and radial structures are distinctly different. English emotional prototypes are more individual oriented, whereas Uzbek prototypes are relational, deeply embedded, and connected with social constructs like heart, honor, and respect. The findings highlight the importance of culture-specific cognitive models in emotional conceptualization and contribute to cross-linguistic emotion research and translation.*

**Keywords:** *prototype theory, cognitive-semantic categorization, emotion conceptualization, conceptual metaphors, embodied cognition, cross-linguistic study, English-Uzbek, cultural models.*

**Introduction.** Emotions lie at the heart of human cognition, social interaction, and linguistic communication. They influence how we perceive the world, make decisions, and build relationships. Although emotional experiences are biologically rooted and shared by all human beings, the ways in which emotions are categorized, conceptualized, and verbalized show considerable variation across languages and cultures. This duality — universality on the one hand and cultural specificity on the other — has become one of the most fascinating topics in modern cognitive linguistics and cross-cultural psychology.

In recent decades, prototype theory, originally developed by Eleanor Rosch has provided a powerful theoretical lens for understanding the internal structure of emotion concepts. Unlike the classical Aristotelian model with its rigid boundaries and necessary-and-sufficient features, prototype theory argues that natural categories, including emotions, are organized around central, prototypical members with fuzzy boundaries and graded membership. Building on this foundation, Shaver demonstrated that laypeople's knowledge of emotions is structured hierarchically and contains rich, script-like prototypes that include typical causes, physiological responses, expressive behaviors, and social consequences.<sup>1</sup>

This line of research has been significantly enriched by Zoltán Kövecses' conceptual metaphor theory, which highlights the embodied nature of emotional conceptualization through systematic metaphors such as EMOTION IS HEAT, EMOTION IS A CONTAINER, and

---

<sup>1</sup> Shaver, P. R., Wu, S., & Schwartz, J. C. (1992). Cross-cultural similarities and differences in emotion and its representation. In M. S. Clark (Ed.), *Emotion* (pp. 175–212). Sage Publications.

EMOTION IS FORCE<sup>2</sup>. At the same time, Anna Wierzbicka's Natural Semantic Metalanguage (NSM) approach has offered a rigorous method for cross-linguistic comparison that avoids imposing English-based psychological categories on other languages. Despite these theoretical advances, there remains a noticeable imbalance in empirical cross-linguistic studies.<sup>3</sup> While numerous contrastive analyses have been conducted between English and other major European or Asian languages, relatively few studies have examined emotions between English — a language shaped by individualistic cultural values — and Uzbek, a Turkic language embedded in a predominantly collectivist, relational, and socio-moral cultural framework. This gap is particularly significant in the context of increasing globalization and intercultural contact between English-speaking and Central Asian societies. The present study seeks to address this gap by investigating the cognitive-semantic categorization and prototypical representation of emotions in English and Uzbek. Its main objectives are: To identify the prototypical cores and peripheral members of selected basic emotion concepts (ANGER/G'AZAB, SADNESS/QAYG'U, and JOY/QUVONCH) in both languages; To examine the role of conceptual metaphors, somatic idioms, and cultural models in shaping these prototypes; To determine the extent to which universal embodied experiences interact with culture-specific values such as ko'ngil, nomus, hurmat, and izzat in Uzbek emotional conceptualization; To discuss the theoretical and practical implications of these findings for cognitive linguistics, translation studies, and intercultural communication.

**Literature Review:** The study of emotions within cognitive linguistics has evolved significantly over the past five decades. One of the most influential approaches has been prototype theory, introduced by Eleanor Rosch. Rosch challenged the classical Aristotelian view of categories as having clear-cut boundaries and equal membership. Instead, she proposed that natural categories are organized around central, prototypical members with fuzzy boundaries and graded typicality. This theory has proven particularly valuable for analyzing abstract domains such as emotions, which resist strict definitional boundaries<sup>4</sup>.

In the field of emotion research, prototype theory was systematically applied by Shaver in their seminal work "Emotion Knowledge: Further Exploration of a Prototype Approach." Through extensive empirical studies, they demonstrated that emotion concepts possess a hierarchical structure consisting of superordinate ("emotion"), basic-level (anger, sadness, joy, fear, love), and subordinate levels. They also showed that people possess rich, script-like knowledge of emotional episodes, including typical antecedents, physiological symptoms, expressions, and behavioral consequences. Subsequent studies by Fehr and Russell further confirmed the graded nature of emotion categories.

---

<sup>2</sup> Kövecses, Z. (2010). *Metaphor and emotion: Language, culture, and body in human feeling* (2nd ed.). Cambridge University Press

<sup>3</sup> Wierzbicka, A. (1999). *Emotions across languages and cultures: Diversity and universals*. Cambridge University Press

<sup>4</sup> Rosch, E. (1975). Cognitive representations of semantic categories. *Journal of Experimental Psychology: General*, 104(3), 192–233

A major development in the cognitive study of emotions came with conceptual metaphor theory proposed by Lakoff and Johnson and extensively applied to emotions by Zoltán Kövecses. Kövecses argues that emotions are largely conceptualized through embodied metaphors grounded in physiological experiences. The most widespread metaphors include EMOTION IS HEAT (“boiling with anger”), EMOTION IS A CONTAINER (“full of joy”), and EMOTION IS FORCE (“overwhelmed by sadness”). These metaphors are considered near-universal due to shared human bodily experience, yet they receive different cultural elaborations across languages<sup>5</sup>. From a cross-linguistic perspective, Anna Wierzbicka’s work *Emotions Across Languages and Cultures* has been particularly influential. Using the Natural Semantic Met language (NSM) approach, Wierzbicka demonstrated that while certain emotional components may be universal, the actual conceptualization of emotions is deeply shaped by culture and language. She warned against the imposition of English-based emotion categories on other languages, advocating for culture-sensitive semantic analysis.

Several contrastive studies have examined emotions between English and other languages. For example, comparisons between English and Russian (Gladkova, 2010), English and Chinese (Ye, 2010), and English and Polish (Lewandowska-Tomaszczyk, 2013) have revealed systematic differences in prototypical emotional scripts and metaphorical patterns. However, research on Turkic languages, particularly Uzbek, remains limited. Existing studies on Uzbek emotions (e.g., works on ko‘ngil and nomus) are mostly descriptive and lack a systematic cognitive-semantic framework.

Thus, while the theoretical foundations are well-established, there is a clear research gap in comprehensive contrastive cognitive-semantic analyses between English and Uzbek. The present study aims to fill this gap by examining the prototypical representation of basic emotions through an integrated theoretical approach combining prototype theory, conceptual metaphor theory, and cross-linguistic semantic analysis.

**Methodology.** This study adopts a qualitative comparative research design based on theoretical guidelines of Cognitive Semantics and Prototype Theory. The purpose of this study is to study the cognitive-semantic categorization and prototypical representation of emotions in English and Uzbek, and the differences and similarities in how emotional meanings are conceptualized in the two languages. The study data consisted of English and Uzbek explanatory dictionaries, literary texts, online corpora, and genuine communicative expressions. Emotional lexical units of the most basic human emotions (e.g. happiness, sadness, anger, fear, love and surprise) were chosen for examination. Approximately one hundred emotional utterances were screened from both languages as the reference texts of the same language for comparison. The study utilizes a number of methodologies. First, the cognitive-semantic analysis method was employed to detect conceptual structures, semantic associations, and metaphorical representations of emotions in both languages. Second, the prototype approach of analysis was followed up to find central and peripheral affective categories according to Prototype Theory. This approach assisted in finding what emotional concepts serve as prototypical representations in the linguistic

---

<sup>5</sup> Kövecses, Z. (2000). *Metaphor and emotion: Language, culture, and body in human feeling*. Cambridge University Press.

consciousness of English and Uzbek speakers. Third, such a contrastive analysis was carried out in order to identify emotional categorization patterns and to reveal cultural and linguistic differences that might affect emotional conceptualization. Analysis was conducted in four stages: selection of emotional lexical units, semantic structure of affective concepts, typology and peripherality categories, and comparative analysis of cognitive and cultural features. The results were analyzed in line with the theoretical context of Cognitive Linguistics, including the theories of conceptual metaphor, categorization, and prototype structures pioneered by George Lakoff, Mark Johnson, and Eleanor Rosch. All linguistic examples were chosen from naturalistic and credible sources to guarantee the credibility and validity of the evidence, and the analysis was developed in conjunction with known methods in Cognitive Linguistics and Cross-Cultural Semantics.

**Results.** The comparative cognitive-semantic analysis showed that emotional concepts in English and Uzbek are organized by universal cognitive patterns as well as culture-specific semantic structures. This showed that emotions can be categorized on the basis of not only psychological experience, but also cultural values, social norms, and collective conceptualization. The analysis revealed some common emotional categories in both languages, such as happiness, sadness, anger, fear, love, and shame. Of these, happiness and love ranked highly in lexical productivity in English, and Uzbek emotional expressions indicated higher semantic productivity in expressions related to respect, modesty, honor, and interpersonal harmony. Data proved that the English emotional expressions usually make use of metaphorical language, movement, temperature, and pressure. For instance, anger was often expressed via metaphoric representations such as “boiling with anger,” “bursting with rage,” and “heated emotions.” These metaphorical patterns see emotion as an internal and physical force whose magnitude intensifies. Uzbek was one of several conceptual models that similar pattern appeared, while the more prominent features of Uzbek emotional responses included emotional reserve, patience, and social decorum. Uzbek categorizations of emotions, even with positive qualitative findings on collectivism, were indicated in the analysis. Emotional experiences have often been combined with family relations, regard for elders, social duties, and collective ideals. The words associated with shame, honor, and dignity had taken a central position in Uzbek emotional culture. By contrast, the English emotional expression was centred around individual’s psychological state of being, personal. In another key discovery, it relates to prototypical organization of emotional categories. Prototype analysis found that certain emotional categories are cognitively central, and others are semantically at the periphery, of how they should work. In English, some lexical units like “love,” “fear,” and “happiness” are highly common, have a wide range of meanings, possess many strong forms, and are high in metaphorical productivity, suggesting that they are prototypical. In Uzbek, the cognitive salience and semantic significance of emotional concepts such as morality, politeness, interpersonal respect is higher. Results also showed differences in the semantic boundaries between categories of emotions. Among Uzbek expressions, a variety of both emotional, ethical, and social meanings were intertwined, while English emotional categories appear to have clearer semantic separation of emotional and moral judgment. This indicates that emotional conceptualization in Uzbek is rooted in cultural and ethical standards more than elsewhere. Furthermore, the investigation found many commonalities of bodily and spatial metaphor in both languages in relation to emotions. Emotions were often conceived in

physiological terms like heat, pressure, heartbeat, crying, and body movement. This also included spatial metaphors of upwards and downwards orientation. Positive emotions were associated with light and upward movement and negative emotions with heaviness, darkness, and downward orientation. These results provide evidence for the universal role embodied cognitive experience plays in emotional conceptualization. Data analysis from the corpus also indicated that metaphorical expressions associated with the heart and soul were substantially more prevalent in Uzbek emotional communication. The descriptions Uzbek emotional representations used referred to feelings through reference to the “heart,” “inner world,” and “soul,” as would be expected with the spiritual and relational direction of Uzbek culture. In contrast, English emotional discourse more frequently used metaphors related to the mind, psychological state, and personal internal experience. The comparative findings further indicated that emotional intensity is linguistically structured differently between the two languages. The use of dynamic verbs and physical metaphors are used to develop emotional responses in English and to reinforce feelings in Uzbek while both languages use descriptive expressions and cultural details that highlight emotional depth, stamina, and social sensitivity. At a level of emotion, this finding reaffirms that the categorization of emotion in English and Uzbek is shaped by complex interrelationships of cognition, language, and culture. And while both languages possess the same universal conceptual machinery to organize emotional experience, there are significant differences that emerge from which the most striking, such as the prototypical representation, the semantic prioritization, and the metaphorical interpretation of emotions. These differences result as much from national worldview and cultural tradition, as social value when it comes to language understanding.

**Discussion:** The contrastive analysis reveals the complex nature of emotional conceptualization, with universal embodied foundations and significant prototypical structures specific to culture evident in English and Uzbek. These shared metaphorical patterns (especially ANGER IS HEAT and heart-related expressions for sadness) greatly support the embodiment hypothesis according to Kövecses's research. These common patterns indicate that the same physiology — higher body temperature in anger, heaviness or emptiness in sadness — can serve as the cognitive foundation for emotional categorization across languages. This universality verifies Rosch's (1978) and Shaver et al.'s (1987) argument that basic emotions have broadly stable prototypical cores grounded in human biology. But the study also documents significant differences in the prototypical representation of emotions. English emotional theories are more individual-oriented, and typically focused internally. In that sense, anger is primarily considered to be a personal emotional reaction to goal frustration or violation of rights, whereas sadness is commonly interpreted as an individual psychological state. This orientation resonates with the strong cultural values of individualism that appear in most English-speaking world. Uzbek emotional prototypes, on the other hand, are very relational, social, and moral. The primacy of the notion *ko'ngil* (*ko'ngli siqilmoq*, *ko'ngli og'rимоq*) and the robust coupling of anger to *nomus* (honor) and *hurmat* (respect) show that in Uzbek society, emotions are not simply a set of internal states but also are closely connected to the development of social harmony, family relations, and moral values. This association supports the contention made by Wierzbicka that cultural models have been influential in the semantic and cognitive structure of emotion concepts. This theoretical difference in prototypical structure has crucial implications. They suggest that emotion concepts

ought to be conceptualized as Idealized Cognitive Models (Lakoff, 1987) where both universal embodied experiences are combined with culture-adapted knowledge<sup>6</sup>. The study also supports Wierzbicka's proposed avoidance of Anglocentric bias in the study of emotion. From the practical implications, the findings have important lessons for translation studies, cross-cultural communication, and foreign language teaching. Translations of emotional expressions in English and Uzbek literally can lose some cultural nuances and they can even be misunderstood. For example, a translation of Uzbek expressions that describe ko'ngil into "heart" does not incorporate the larger social and spiritual aspects which the original idea has. This study presents useful qualitative contrastive analysis, but has some limitations. It is heavily based on linguistic data and native speaker intuition. Furthermore, experimental studies such as prototypicality rating surveys, physiological studies, or large-scale corpus analysis would help further validate these results and support their findings.

**Conclusion:** In this study, we examine the cognitive-semantic grouping and prototypical representation of emotions in both English and Uzbek. The results show how emotions are shaped by universal and culture-specific cognitive models. While there are common embodied metaphorical devices for emotion (such as anger being like heat, or sadness involving the heart), the prototypical models of these emotions differ significantly between English and Uzbek. English emotional prototypes tend to be more individualistic, internally focused, and psychologically oriented. In contrast, Uzbek emotional concepts are highly relational, socially embedded, and morally charged, primarily mediated through central cultural concepts like ko'ngil, nomus, and hurmat. These findings demonstrate that prototype structure is not uniform and depends on cultural, social, and linguistic values and resources. In Uzbek culture, the central role of ko'ngil highlights a broader integration of emotional, spiritual, and interpersonal aspects that English lacks. The findings contribute to the literature on language, culture, and cognition in the conceptualization of emotion. The implications for practice are significant for translation studies, intercultural communication, foreign language instruction, and lexicography. Effective cross-cultural communication requires not only language competence but also the recognition that our prototypical representations of emotions may differ from one another. Although this research focuses on only three fundamental emotions, future studies could expand the topic to include many emotion constructs, using experimental techniques such as prototypicality rating surveys or large data collection methods. The way cognitive-semantic categories and prototypes for emotions represent emotions reflects not only our shared human nature but also an important cultural diversity of human experience. This balance is crucial for advancing linguistic theory and enabling meaningful intercultural exchange in an increasingly globalized world.

#### **References:**

1. Fehr, B., & Russell, J. A. (1984). Concept of emotion viewed from a prototype perspective. *Journal of Experimental Psychology: General*, 113(3), 464–486.

---

<sup>6</sup> Lakoff, G. (1987). *Women, fire, and dangerous things: What categories reveal about the mind*. University of Chicago Press

2. Kövecses, Z. (2010). *Metaphor and emotion: Language, culture, and body in human feeling* (2nd ed.). Cambridge University Press.
3. Lakoff, G. (1987). *Women, fire, and dangerous things: What categories reveal about the mind*. University of Chicago Press.
4. Lakoff, G., & Johnson, M. (1980). *Metaphors we live by*. University of Chicago Press.
5. Rosch, E. (1975). Cognitive representations of semantic categories. *Journal of Experimental Psychology: General*, 104(3), 192–233.
6. Rosch, E. (1978). Principles of categorization. In E. Rosch & B. B. Lloyd (Eds.), *Cognition and categorization* (pp. 27–48). Lawrence Erlbaum Associates.
7. Shaver, P. R., Schwartz, J., Kirson, D., & O'Connor, C. (1987). Emotion knowledge: Further exploration of a prototype approach. *Journal of Personality and Social Psychology*, 52(6), 1061–1086.
8. Shaver, P. R., Wu, S., & Schwartz, J. C. (1992). Cross-cultural similarities and differences in emotion and its representation. In M. S. Clark (Ed.), *Emotion* (pp. 175–212). Sage Publications.
9. Wierzbicka, A. (1999). *Emotions across languages and cultures: Diversity and universals*. Cambridge University Press.