

**COGNITIVE ANALYSIS OF ANOMOTOPOIC LEXEMAS IN RUSSIAN, ENGLISH
AND UZBEKISTAN**

Tog'ayeva Aziza
Asian University of Technology

ABSTRACT

The present article provides a cognitive analysis of onomatopoeic lexemes in Russian, English, and Uzbek within a comparative-typological framework. The study explores the linguistic nature of sound-imitative units, their mental representation, and the processes of conceptualization. Particular attention is given to phonosemantic features, reduplication models, emotional-expressive functions, and culture-specific characteristics of onomatopoeic expressions. Based on data from the three languages, the research identifies both universal patterns and nationally determined features, as well as the degree of iconicity in the relationship between sound and meaning. The findings demonstrate the role of onomatopoeic lexemes in concept formation and their discursive functions in shaping cognitive models of reality.

Keywords

onomatopoeia, cognitive linguistics, concept, phonosemantics, reduplication, iconicity, comparative analysis.

ANNOTATSIYA

Mazkur maqolada rus, ingliz va o'zbek tillaridagi onomatopoeik leksemalarning kognitiv xususiyatlari qiyosiy-tipologik asosda tahlil qilinadi. Tadqiqotda tovushga taqlid birliklarning lingvistik tabiati, ularning mental reprezentatsiyasi hamda konseptualizatsiya jarayoni yoritiladi. Onomatopoeik leksemalarning fonosemantik xususiyatlari, reduplikatsiya modellari, emotsional-ekspressiv funksiyasi va milliy-madaniy tafakkur bilan bog'liqligi o'rganiladi. Har uch til materiallari asosida tovush va ma'no o'rtasidagi ikoniklik darajasi, universal va milliy xususiyatlar aniqlanadi. Tadqiqot natijalari onomatopoeik birliklarning inson tafakkurida konsept shakllanishiga ta'sirini hamda ularning diskursiv funksiyalarini ochib beradi.

Kalit so'zlar

onomatopoeiya, kognitiv lingvistika, konsept, fonosemantika, reduplikatsiya, ikoniklik, qiyosiy tahlil.

АННОТАЦИЯ

В данной статье проводится когнитивный анализ ономотопозитических лексем в русском, английском и узбекском языках на основе сопоставительно-типологического подхода. Рассматриваются лингвистическая природа звукоподражательных единиц, их ментальная репрезентация и процессы концептуализации. Особое внимание уделяется фонесемантическим особенностям, моделям редупликации, эмоционально-экспрессивной функции и национально-культурной специфике ономотопозитических средств. На материале трёх языков выявляются универсальные и культурно обусловленные черты, а также степень иконичности связи между звуком и значением. Результаты исследования демонстрируют роль звукоподражательных единиц в формировании концептов и их функционирование в дискурсе.

Ключевые слова: ономотопея, когнитивная лингвистика, концепт, фонесемантика, редупликация, иконичность, сопоставительный анализ.

INTRODUCTION

Language, as a form of reflection of human thinking, not only describes reality, but also reconstructs it conceptually. From this point of view, onomatopoeic lexemes - language units formed on the basis of sound imitation - are an important object in the study of the relationship between human sensory experience and linguistic coding. As units that directly reflect natural sounds, they demonstrate the phenomenon of iconicity and serve to reveal cognitive mechanisms. Although Russian, English and Uzbek languages belong to different typological systems, they all contain sound imitation units. This study analyzes the mental representation, conceptual structures and connection of these units with national and cultural thinking on a comparative basis. The purpose of the study is to determine the cognitive properties of onomatopoeic lexemes based on the materials of three languages and to show their role in concept formation.

METHODOLOGY

The following scientific methods were used in the study:

Comparative-typological method - to identify the common and different aspects of onomatopoeic units in Russian, English and Uzbek.

Cognitive analysis method - to identify the process of transforming a sound image into a mental model, to reveal the chain "sound → image → concept".

Semantic-component analysis - to distinguish the meaning structure, emotional and expressive layers of lexemes.

Discursive analysis - to study the functional properties of onomatopoeic units in artistic and oral speech. Also, based on the phonosemantic approach, the degree of iconicity between sound form and meaning is determined. Russian, English and Uzbek fiction, children's folklore and modern speech samples were selected as materials.

RESULTS AND DISCUSSIONS

The results of the analysis showed that in all three languages, onomatopoeic lexemes serve as a means of transferring human sensory experience into linguistic form. However, their structural and conceptual mapping levels differ. In Russian, sound-imitating units are often found in independent interjective forms and are strongly expressed (for example, "bah", "tik-tak"). In English, onomatopoeias are more grammaticalized in the form of verbs (buzz, splash, crack), which indicates the primacy of the concept of process. In Uzbek, the reduplication model is widespread (taq-taq, jildir-jildir, g'ir-g'ir), which expresses the concepts of intensity and duration. From a cognitive point of view, the conceptualization of the sound image in all languages is based on sensory experience, but national-cultural thinking models this image differently. This reveals elements of linguistic relativism.

In Russian, onomatopoeic lexemes are formed on the basis of imitation of real sounds in the natural environment. For example, units such as "гав", "мяу", "ку-ку", "тик-так", "бах" directly transform a person's auditory experience into a linguistic sign. From a cognitive point of view, this process occurs through the chain "perceptual signal → mental image → phonetic model". For example, the word "тик-так" is directly related to the concept of time. The rhythmic sound of a clock mechanism is expressed through a repetitive structure. Here, reduplication conceptually models the duration and cyclicity of time. "Бах" denotes a sharp, explosive sound and is usually associated with the concept of a shock, a sudden event. These units have a high level of iconicity: the connection between sound form and meaning is relatively motivated.

In Russian, many onomatopoeic units later become verbs and express dynamic action: "shurshat", "gremet", "stuchat", "zhuzhzhats". This phenomenon is associated with the process of grammaticalization and indicates the transition from the image of sound to the concept of

process. For example, the verb “zhuzhzhzhat” initially denotes the sound of an insect, but later metaphorically expands to mean “talking incessantly”. Thus, the sound → action → social behavior model arises. This indicates that the concept of action in Russian is often modeled through an acoustic image. Onomatopoeic lexemes carry a strong emotional charge in Russian speech. For example, “bah!” is used to dramatically emphasize an unexpected event. Units such as “khlop!” or “boom!” combine visual and acoustic effects. Such units are often used as a means of dramatization in literary texts. They enliven the image of the event and activate the reader’s cognitive imagination. Cognitively, these units activate the mechanisms of thought based on the sense of “embodied experience” — that is, bodily experience.

In Russian, onomatopoeic lexemes are often expanded through the mechanism of conceptual metaphor. Sound images serve as the basis for expressing abstract concepts. For example, the word “grokhot” (loud noise) is often used to describe social or political processes: “grokhot революции”. Here, the image of physical sound is transferred to the concept of historical upheaval. Or “shёpot” (whisper) is associated with the concepts of intimacy, mystery, secrecy: “shёpot души”. In this metaphorical model, a low sound → inner experience mapping occurs. The verb “гремять” is used in the sense of popularity or widespread: “гремять на всю страну”. The loudness of the sound → is metaphorically associated with the concept of social resonance. These phenomena demonstrate the following conceptual mapping patterns in Russian:

- LOUD SOUND → POWER / AUTHORITY
- REPETITIVE SOUND → CONTINUITY
- LOW SOUND → CLOSENESS / INTIMATE
- EXPLOSIVE SOUND → UNEXPECTED CHANGE

Thus, in Russian, sound images play an active role in the formation of abstract structures of thought. Onomatopoeic lexemes not only denote real acoustic phenomena, but also model concepts such as power, time, emotion, and social resonance in the national conceptual system. Thus, onomatopoeic units in Russian operate cognitively at three levels: perceptual (auditory experience), conceptual (mental model), and metaphorical (abstract extension). In English, onomatopoeic lexemes are often concentrated in two main semantic areas: animal sounds and natural phenomena. For example: buzz, bang, splash, crack, whisper, roar, hiss.

From a cognitive point of view, these units abstract human auditory experience and turn it into a mental script. For example, buzz initially denotes the sound of an insect, but later also means “telephone signal sound”, “energetic environment”, “social noise”. Here, the sound image moves to the concept of social activity. Bang denotes an explosive, sharp event and is usually associated with the concepts of suddenness, force and impact. Splash denotes a movement associated with a liquid and activates the visual-dynamic imagination. In English, many onomatopoeia are actively used as verbs (to buzz, to crack, to hiss), which indicates the primacy of the concept of process. Thus, sound in English is often conceptualized through a model of action. In English, phonosemantics play an important role. Some sound combinations are associated with a certain semantic field. For example:

- • gl- the beginning is often associated with light (glow, glitter, gleam)
- • sn- often associated with the movement of the mouth or nose (sniff, snore, snarl)

In onomatopoeic units, explosive consonants (b, k, p) denote a sharp and strong event (bang, crack, pop), while sliding consonants (s, sh) denote softness or continuity (splash, whisper, hiss). There are also repetitive structures: tick-tock, flip-flop, ding-dong. This reduplication models the concept of time, rhythm, and balance. Cognitively, repetition indicates continuity and cyclicity. In English literary text, onomatopoeia enhances dramatization, dynamics, and imagery. For example, in the phrase The door banged shut, bang represents not only sound, but also emotional tension. In comics and children's literature, it is used in conjunction with graphic images (boom,

crash, zap). This creates a multimodal cognitive effect. Metaphorical expansion is also widespread:

- • The market crashed (economic crisis)
- • Her voice cracked (emotional tension)

Here the mapping of sound → psychological or social process occurs. The following conceptual metaphor models are identified in English:

- LOUD SOUND → POWER / IMPACT
- CRACKING SOUND → BREAKDOWN / FAILURE
- BUZZING → ACTIVITY / SOCIAL ENERGY
- WHISPER → SECRECY / INTIMACY

These mappings show that in English, sound is actively used as a means of modeling abstract concepts. The cognitive model is built around the process and dynamics. In Uzbek, onomatopoeic units are often formed on the basis of reduplication: г'ир-г'ир, жилдир-жилдир, так-так, гурс, шув. These units are used as independent words or with verb-forming suffixes: гир-гир тырын, такилламок, гурс этымок. Morphologically, they have a model that expresses intensity and duration. In Uzbek, the repeated form serves as an intensifier. For example:

- • taq-taq → repeated impact
- • jildir-jildir → continuous flow
- • g'ir-g'ir → rotational process

Reduplication cognitively conceptualizes the duration and rhythm of movement. This model shows the concept of intensity characteristic of Turkic languages. In Uzbek, sound is often associated with nature and everyday life. For example, shuv denotes wind or rapid movement, and gurs denotes the fall of a heavy object to the ground. These units are closely associated with the experience of the agricultural and natural environment. The image of sound is often combined with visual and kinesthetic imagination. In Uzbek, sound units are often combined with movement and emotion:

- *heart pounded* → *fear*
- *door knocked* → *surprise*
- *heart sank (emotional background through phonetic softness)*

Here, sound becomes a means of modeling human internal experiences. Thus, in the Uzbek language, onomatopoeic lexemes, in addition to perceptual experience, function in an integrated manner with national-cultural thinking and emotional concepts.

CONCLUSION

The results of the study show that onomatopoeic lexemes are not only a phonetic phenomenon, but also an important cognitive and conceptual unit. They serve as a bridge between a person's sensory experience and mental model. Although the degree of iconicity between sound and meaning is manifested differently in Russian, English and Uzbek, the existence of a universal cognitive mechanism is revealed. At the same time, national-cultural thinking affects the structure and semantic load of onomatopoeic lexemes. The results of this study can serve as a methodological basis for further research in the areas of cognitive linguistics, phonosemantics and comparative linguistics.

REFERENCES

1. Lakoff G., Johnson M. *Metaphors We Live By*. – Chicago: University of Chicago Press, 1980. – 276 p.
2. Mahmudov N. M. *Til va nutq madaniyati*. – Toshkent: Fan, 2010. – 224 b.

3. Rahmatullayev Sh. Hozirgi o‘zbek adabiy tili leksikologiyasi. – Toshkent: Universitet, 2006. – 312 b.
4. Воронин С. В. Основы фоносемантики. – Ленинград: Изд-во ЛГУ, 1982. – 244 с.
5. Карасик В. И. Языковой круг: личность, концепты, дискурс. – Волгоград: Перемена, 2002. – 477 с.
6. Маслова В. А. Когнитивная лингвистика: Учебное пособие. – Минск: ТетраСистемс, 2004. – 256 с.