
**Core-Dominant-Peripheral
Organization of Perception
Lexemes in English and Uzbek: A
Symmetry-Asymmetry Model****Sherali Ibrohimovich Shokirov***Doctoral Researcher
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Annotation *This article proposes a core-dominant-peripheral model for the comparative analysis of perception lexemes in English and Uzbek. The study covers five sensory domains: vision, taste, smell, hearing, and touch. Its material consists of explanatory dictionary entries and examples from literary and publicistic texts examined through comparative, componential, semantic-field, conceptual-modeling, and statistical methods. Symmetry is understood as the preservation of an invariant perceptual meaning across the two languages, whereas asymmetry arises from differences in lexical granularity, evaluation, duration, intentionality, stylistic coloring, and contextual extension. The neutral pairs see/ko'rmoq, look/qaramoq, hear/eshitmoq, listen/tinglamoq, touch/tegmoq, smell/hid, and taste/ta'm occupy the central zones of their fields. More specific verbs and evaluative nouns or adjectives move toward the periphery and display stronger asymmetry. Quantitative results confirm that lexical field size and the proportion of symmetric units vary by sensory modality, while the overall organization remains systematically comparable.*

Keywords *Perception lexemes, symmetry, asymmetry, desymmetry, semantic field, English and Uzbek*

**Ядерно-доминантно-
периферийная организация
перцептивной лексики
английского и узбекского
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Аннотация *В статье предлагается ядерно-доминантно-периферийная модель сопоставительного анализа перцептивной лексики английского и узбекского языков. Исследование охватывает пять сенсорных сфер: зрение, вкус, обоняние, слух и осязание. Материалом послужили словарные дефиниции и примеры из художественных и публицистических текстов, проанализированные с помощью сопоставительного, компонентного, полевого, концептуально-моделирующего и статистического методов. Симметрия понимается как сохранение инвариантного перцептивного значения в двух языках, тогда как асимметрия возникает вследствие различий в степени лексической детализации, оценочности, длительности, целенаправленности, стилистической окраске и контекстуальном расширении. Нейтральные пары see/ko'rmoq, look/qaramoq, hear/eshitmoq, listen/tinglamoq, touch/tegmoq, smell/hid и taste/ta'm образуют центральные*

зоны соответствующих полей. Более специализированные глаголы, существительные и прилагательные перемещаются к периферии и проявляют усиленную асимметрию. Количественные результаты показывают различия в объёме полей и доле симметричных единиц при общей сопоставимости их системной организации.

Ключевые слова Перцептивная лексика, симметрия, асимметрия, десимметрия, семантическое поле, английский и узбекский языки

Ingliz va o'zbek tillarida perseptiv leksemalarning yadro-dominanta-periferiya asosidagi tashkil topishi: simmetriya-asimmetriya modeli

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Annotatsiya Mazkur maqolada ingliz va o'zbek tillaridagi perseptiv leksemalarni qiyosiy tahlil qilish uchun yadro-dominanta-periferiya modeli taklif etiladi. Tadqiqot ko'rish, ta'm bilish, hid bilish, eshitish va teginish kabi besh sensor sohani qamrab oladi. Material izohli lug'at birliklari hamda badiiy va publitsistik matnlardan olingan misollardan tashkil topib, chog'ishtirma, komponent, semantik maydon, konseptual modellashtirish va statistik tahlil usullari asosida o'rganildi. Simmetriya ikki tilda invariant perseptiv ma'noning saqlanishi sifatida, asimmetriya esa leksik tafsilot, baholash, davomiylik, maqsadlilik, uslubiy bo'yoq va kontekstual kengayishdagi farqlar sifatida talqin qilinadi. See/ko'rmoq, look/qaramoq, hear/eshitmoq, listen/tinglamoq, touch/tegmoq, smell/hid va taste/ta'm juftliklari tegishli maydonlarning markaziy qismini tashkil etadi. Xususiy ma'noli va baholovchi birliklar periferiyaga siljib, asimmetrik xususiyatni kuchaytiradi. Miqdoriy natijalar sensor sohalar hajmi va simmetrik birliklar ulushi turlicha ekanini ko'rsatadi.

Kalit so'zlar Perseptiv leksemalar, simmetriya, asimmetriya, desimmetriya, semantik maydon, ingliz va o'zbek tillari

Introduction

Perception is one of the principal interfaces between human cognition and the external world. Visual, auditory, tactile, olfactory, and gustatory information is not transferred into language in an unmediated form. It is selected, categorized, evaluated, and organized by the linguistic system. Consequently, words of perception reveal both shared cognitive foundations and language-specific ways of structuring experience. In a comparison of English and Uzbek, this duality is

especially visible because the languages belong to different structural types but refer to the same basic sensory capacities.

The central problem of the present study is not whether the two languages possess words for seeing, hearing, touching, smelling, and tasting. Such basic nominations are expected in every developed language. The more significant question is how each language distributes meanings inside a sensory field: which units function as neutral identifiers, which lexicalize direction, duration, intensity,

emotional attitude, or evaluation, and which concepts lack a direct counterpart. The concepts of symmetry and asymmetry make it possible to describe these relations without reducing comparison to simple translation equivalence.

The aim of the article is to construct a unified core-dominant-peripheral model of English and Uzbek perception lexemes. The model synthesizes material from five sensory domains and explains how invariant meaning is preserved at the center while language-specific semantic components become more prominent toward the periphery. A further task is to distinguish ordinary asymmetry from desymmetry, understood here as the lexical representation of deprivation, absence, or loss of a perceptual capacity.

Theoretical Framework and Analytical Principles

Cognitive linguistics treats lexical meaning as a structured representation of experience rather than as an isolated correspondence between a word and an object. Langacker (1987) emphasizes that linguistic units profile selected aspects of a conceptual domain, while Lakoff and Johnson (2004) demonstrate that embodied experience systematically motivates conceptual organization. Perception vocabulary is therefore especially suitable for cognitive and typological analysis: its basic meanings are grounded in the body, but its semantic extensions are culturally and linguistically variable.

The semantic-field approach provides a second foundation for the analysis. A field is organized through relations among its members, not only through definitions of individual words. Distributional and componential analysis identifies recurrent semantic features such as sensory modality, subject, object, direction, intentionality, duration, intensity, result, evaluation, and emotional state (Apresyan, 1962). Taxonomic modeling then establishes different degrees of proximity to the invariant concept (Babina &

Budantseva, 2013; Boldyrev, 2004). In the present model, the core contains maximally neutral representatives, the dominant zone includes frequently used units that interpret or specify the core, and the periphery contains highly differentiated, expressive, or context-dependent meanings.

Symmetry is defined as a relation in which English and Uzbek units preserve the same essential perceptual archiseme and show comparable functional behavior. Symmetry does not require absolute identity of grammatical form. For example, English *listen* and Uzbek *tinglamoq* are structurally different words but share the intentional auditory component. Asymmetry appears when one language lexicalizes a semantic distinction more compactly, when an apparent equivalent has additional evaluative or pragmatic components, or when correspondence is possible only through a phrase rather than a single word. The distinction is gradual: some pairs are close to the invariant center, whereas others show increasingly distant correspondence.

Desymmetry constitutes a privative relation. It is represented by units such as *blind*, *eyeless*, and *blindness* in English and *ko'rmalik*, *ko'zsiz*, and *ko'rlik* in Uzbek. These words do not merely occupy a remote part of the visual field; they negate or remove the basic capacity on which the field is built. Treating this group separately prevents two analytically different phenomena from being conflated: semantic specialization within an existing capacity and lexicalization of the absence of that capacity.

Materials and Methods

The empirical material was drawn from English and Uzbek explanatory dictionaries and from literary and publicistic examples used in the dissertation corpus. The principal lexicographic sources include the Oxford Advanced Learner's Dictionary of Current English (Hornby, 2000) and the five-volume O'zbek tilining izohli lug'ati (Madvaliyev, 2020). Corpus items were assigned to one of five

sensory domains and classified by part of speech, invariant perceptual meaning, and additional semantic components.

The analysis combined contrastive comparison, componential analysis, structural description, semantic-field modeling, conceptual interpretation, and quantitative calculation. A unit was classified as symmetric when its central perceptual meaning and its main functional profile had a regular counterpart in the other language. It was classified as asymmetric when correspondence required semantic narrowing, expansion, contextual substitution, evaluative compensation, or a multiword expression. The statistical stage compared both absolute field size and the relative proportion of symmetric and asymmetric units.

The Visual Field: From Neutral Perception to Expressive Gaze

Visual perception has the largest lexical inventory in both languages. The English verbs *see* and *look* and the Uzbek verbs *ko'rmoq* and *qaramoq* form the organizing center. *See* and *ko'rmoq* primarily designate the occurrence or result of visual perception, whereas *look* and *qaramoq* foreground direction and intentional orientation. These relations are not completely identical in every construction, but the shared components of subject, object, visual channel, and perceptual result make the pairs the most stable symmetric representatives of the field.

The dominant and peripheral zones encode increasingly specific modes of looking. English *watch* and Uzbek *kuzatmoq* add duration and sustained attention. *Stare* and *tikilmoq* indicate a fixed gaze, while gaze may correspond to *termilmoq* when prolonged looking is associated with expectation, admiration, or emotional involvement. Glance is often rendered by *ko'z tashlamoq* or a contextual form of *qaramoq*, and glare corresponds only partially to *o'graymoq* or *xo'mraymoq* because the Uzbek verbs more explicitly encode hostility and facial expression. Uzbek also possesses expressive verbs such as *alanglamoq*, *angraymoq*, *bo'zraymoq*,

bezraymoq, *mo'ltiramoq*, and *baqraymoq*. Their meanings combine visual action with anxiety, amazement, passivity, pleading, or an altered shape of the eyes. A single English verb rarely reproduces all these components.

This distribution illustrates a general principle of the model. Near the core, correspondence is supported by shared embodied experience. Toward the periphery, languages select different features for lexicalization. English often differentiates duration and manner through a series of gaze verbs; Uzbek frequently integrates visual manner with the observer's emotional or evaluative state. Thus, asymmetry does not indicate a deficiency in either language. It reflects different patterns of semantic packaging.

Taste and Smell: Evaluation and Lexical Granularity

Taste vocabulary combines physical perception with evaluation more directly than the visual field. The central English unit *taste* and the Uzbek nouns *ta'm* and *maza* represent the invariant domain, while adjectives such as *sweet/shirin* and *bitter/achchiq* show broad symmetry. However, gustatory words readily extend to character, speech, experience, and aesthetic judgment. At this level, correspondence becomes context-dependent because the languages differ in collocational norms and in the cultural salience of particular evaluative meanings. The corpus contains 190 English taste lexemes and 107 Uzbek units. Despite the larger English inventory, the proportion classified as symmetric is higher in Uzbek: 87 percent compared with 82 percent in English.

The olfactory field is organized around English *smell* and Uzbek *hid* and *is*. The central units identify the presence or perception of odor, whereas *scent*, *aroma*, *fragrance*, *stench*, *stink*, *whiff*, *bouquet*, and related words specify source, intensity, pleasantness, or unpleasantness. Uzbek equivalents may be single words, derivatives, or phrases, and the relation between *hid* and *is* itself illustrates

internal lexical differentiation. The study records 122 English and 81 Uzbek olfactory lexemes. Symmetric items account for 72 percent of the English field and 74 percent of the Uzbek field, indicating a closely comparable overall organization despite differences in the density of particular lexical classes.

Taste and smell also demonstrate that symmetry should not be measured only by word count. A larger inventory can result from derivational productivity or from finer lexical segmentation, while a smaller inventory may rely more heavily on regular word formation and contextual combinations. The typological task is therefore to identify which semantic features are obligatorily encoded and which are left to the surrounding construction.

Hearing and Touch: Intentionality, Contact, and Internal Sensation

Auditory perception is centered on the correlation hear/listen and eshitmoq/tinglamoq. Hear and eshitmoq typically denote the reception of sound, whereas listen and tinglamoq introduce directed attention. Uzbek quloq solmoq provides a phraseological alternative that also includes the pragmatic meaning of taking notice or accepting advice. The lexical corpus contains 46 English and 56 Uzbek auditory units. In both languages, 78 percent of the units were classified as symmetric and 22 percent as asymmetric. This identical proportional distribution is noteworthy because the absolute inventories and grammatical resources differ.

The tactile field distinguishes physical contact from subjective sensation. English touch and Uzbek tegmoq or teginmoq denote contact, while feel and Uzbek his qilmoq may refer to bodily sensation, emotion, or cognitive assessment. Other units such as hold, press, tap, pat, stroke, and brush and Uzbek ushlamoq, tutmoq, silamoq, and related derivatives add force, duration, instrument, or manner. The field includes 105 English and 91 Uzbek lexemes. Symmetry reaches 81 percent in English but 73 percent in Uzbek, which

suggests that the Uzbek peripheral zone contains a relatively larger group of culturally or contextually differentiated units.

Hearing and touch confirm the dynamic character of the taxonomic model. A lexeme can remain close to the center in a literal sensory construction and move toward the periphery when it develops mental, emotional, or pragmatic meanings. Feel, for example, may shift from tactile sensation to emotional state or judgment; eshitmoq may shift from auditory reception to receiving news or criticism. The location of a unit is therefore determined not only by its dictionary headword but also by the conceptual structure activated in context.

Quantitative Distribution and Typological Interpretation

The quantitative comparison reveals three complementary tendencies. First, English has a larger recorded inventory in four domains: vision, taste, smell, and touch. Second, Uzbek has more auditory lexemes in the analyzed material. Third, the proportion of symmetric units does not mechanically follow total field size. Uzbek shows a higher symmetry ratio in taste and smell, English in vision and touch, while the auditory ratios coincide. These results support a field-based rather than a word-by-word understanding of cross-linguistic equivalence. **Discussion**

The core-dominant-peripheral model explains why direct bilingual substitution is most reliable with neutral sensory verbs and progressively less reliable with expressive or evaluative vocabulary. At the core, words are linked to recurrent bodily operations and therefore show substantial typological convergence. The dominant zone adds intentionality, duration, or result but often retains a regular counterpart. Peripheral units compress several semantic features into one lexical form, and this compression is language-specific.

The findings also clarify the relation between universality and national specificity. The five sensory modalities constitute a universal experiential basis. Nevertheless,

languages differ in the lexical boundaries they draw inside each modality. Uzbek expressive gaze verbs frequently integrate emotion and visible behavior, while English visual verbs often emphasize manner and temporal profile. Gustatory and olfactory evaluation is distributed differently across adjectives, nouns, and derived forms. Such differences represent alternative categorizations rather than incompatible conceptual worlds.

From a translation perspective, symmetric core units generally permit direct correspondence, but peripheral items require component analysis. Translating *alanglamoq* simply as look removes the components of restless movement and anxiety; translating *glare* merely as *qaramoq* loses hostility and intensity. Adequate translation may therefore require an adverb, descriptive phrase, or contextual restructuring. Desymmetric units require additional care because the source may lexicalize a permanent condition, temporary loss, or functional limitation differently.

The model has lexicographic implications as well. Bilingual dictionaries should indicate not only a default equivalent but also the semantic components that determine its range of use. A structured entry could identify the invariant sensory meaning, intentionality, duration, evaluation, emotional state, stylistic

register, and typical syntactic frame. Such representation would make asymmetry explicit and reduce the false impression that all listed equivalents are interchangeable.

Conclusion

English and Uzbek perception lexemes form comparable but non-identical semantic systems. Their organization is best described as a continuum from a symmetric invariant core through a specifying dominant zone to an increasingly asymmetric periphery. Visual, gustatory, olfactory, auditory, and tactile fields differ in size and in the proportion of symmetric units, yet all display the same general principle: semantic specialization intensifies as lexical units move away from the neutral perceptual archiseme.

The separate category of desymmetry captures lexicalized absence or loss of sensory capacity and complements the symmetry-asymmetry opposition. The proposed model can be applied to further contrastive research, bilingual lexicography, translation analysis, and the teaching of English and Uzbek lexical semantics. Its principal advantage is that it combines cognitive invariants, structural differences, contextual functions, and quantitative evidence within one analytical framework.

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