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LINGUOCULTURAL PECULIARITIES OF HYPONYMS AND HYPERONYMSIN THE ENGLISH AND UZBEK LANGUAGES

Mardonova Gulmira Erkinovna
1-st- year Master's student, Linguistics (Romance–Germanic Languages),
Renaissance Education University, Tashkent, Uzbekistan.
e-mail: gulmiramardonova15@gmail.com
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Abstract: The present article examines the linguocultural dimension of hyponymy and hyperonymy as foundational relations in the lexical systems of English and Uzbek. Drawing on cognitive semantic theory, prototype theory, and cross-linguistic research, the study argues that taxonomic hierarchies in these two languages are shaped not only by logical-semantic subordination but also by culture-specific patterns of categorization. Particular attention is given to asymmetrical lexical structures, lacunae, and domain-specific divergences — most notably in the semantic fields of kinship terminology, colour, and natural kinds. The article demonstrates that the hypero-hyponymic architecture of Uzbek reflects a worldview organized around communal and lineage-based distinctions, while English tends toward broader, more neutrally defined superordinate categories. The findings point to the importance of linguoculturological analysis in contrastive lexical semantics.

Keywords: hyponymy, hyperonymy, lexical semantics, linguoculturology, cognitive linguistics, contrastive analysis, English, Uzbek, semantic field, lexical gap

Аннотация: В данной статье рассматривается лингвокультурное измерение гипонимии и гиперонимии как базовых отношений в лексических системах английского и узбекского языков. Опираясь на теорию когнитивной семантики, прототипическую теорию и сравнительно-типологические исследования, автор обосновывает тезис о том, что таксономические иерархии в данных двух языках формируются не только на основе логико-семантической субординации, но и под влиянием культурно обусловленных моделей категоризации. Особое внимание уделяется асимметричным лексическим структурам, лакунам и расхождениям в отдельных предметных областях — прежде всего в семантических полях терминов родства, цветообозначений и лексики природного мира. В статье показано, что гиперо-гипонимическая архитектура узбекского языка отражает миропонимание, организованное вокруг общинных и родословных различий, тогда как английский язык тяготеет к более широким и нейтральным суперординатным категориям. Результаты исследования свидетельствуют о значимости лингвокультурологического анализа в контрастивной лексической семантике.

Ключевые слова: гипонимия, гиперонимия, лексическая семантика, лингвокультурология, когнитивная лингвистика, контрастивный анализ, английский язык, узбекский язык, семантическое поле, лексическая лакуна

1. Introduction

The relationship between language, culture, and cognition has occupied linguists for well over a century, yet the intersection of these three forces at the level of lexical structure remains an area of persistent scholarly interest. Among the many relations that organize the vocabulary of a language, hyponymy — the relation of semantic subordination by which a more specific term (the hyponym) is subsumed under a more general one (the hyperonym) — holds a particularly privileged status. It is, as

Alan Cruse noted, one of the primary mechanisms through which speakers impose hierarchical order on conceptual experience and encode that order in lexical form [A. D. Cruse., 1986., p. 88].

What has received comparatively less attention, however, is the way in which this seemingly universal logical relation is filtered through culture-specific cognitive habits. The same natural world, the same family structures, the same spectrum of colour can yield radically different taxonomic configurations in different languages — and these configurations are rarely arbitrary. They tend to reflect the values, priorities, and lived practices of the communities in which the languages are embedded. This is precisely the claim of linguoculturology, the discipline that investigates the interaction between language and culture as inscribed in lexical meaning [Wilhelm von Humboldt, 1836/1988, p. 54].

The present article addresses this question through a contrastive analysis of hyponymic and hyperonymic structures in English and Uzbek — two typologically distant languages separated by family affiliation (Germanic versus Turkic), morphological type (analytic versus agglutinative), and cultural background (broadly Anglo-Saxon versus Central Asian). The aim is not simply to catalogue differences, but to interpret them: to ask what the divergences in lexical taxonomy reveal about differing conceptualizations of the world.

2. Theoretical Framework: Defining Hyponymy and Hyperonymy

The foundational definition of hyponymy in modern linguistics is most clearly articulated by John Lyons. Lyons defines hyponymy as a relation of unilateral semantic inclusion: if *x* is a hyponym of *y*, then the sense of *x* is included in the sense of *y*, but not vice versa[J. Lyons., 1977, p. 291]. The classic illustration is *rose : flower*, where the former entails the latter but the reverse entailment does not hold. This directional, asymmetric character is what distinguishes hyponymy from synonymy, where inclusion operates bidirectionally.

Cruse refined this view considerably. In *Lexical Semantics*, he distinguished between taxonomic hyponymy — where the relation is governed by a strict kind-of hierarchy — and looser forms of inclusion that he terms micro-hyponymy and nano-hyponymy[A.D. Cruse., 1986, pp. 88–90]. He also drew attention to the polyhierarchical nature of some lexical items: a word like *knife* can stand as a hyponym simultaneously under *cutlery*, *weapon*, and *tool*, depending on the frame of reference activated in context [A. D. Cruse., 1986, p. 136]. This plurivalency complicates any simple tree-structured account of the lexicon.

William Croft and D. Alan Cruse later situated hyponymy within a dynamic construal framework, treating sense relations not as stable properties of isolated words but as products of the way words are conceptualized in particular discourse contexts. On this account, the hyponymic status of a term is not fixed in advance but emerges from the interaction between lexical meaning and contextual framing — a move that has significant implications for cross-linguistic analysis, where framing conditions may differ systematically across cultures [W. Croft & A.D. Cruse., 2004., pp. 167–169].

The cognitive turn in semantics also brought Eleanor Rosch's prototype theory to bear on the analysis of hyponymic hierarchies. Rosch established that within any taxonomic category, membership is graded: some instances are more central, more typical, than others [E. Rosch., 1978., pp. 30–36]. A robin is a more prototypical BIRD than a penguin, even though both fall under the same hyperonym. This insight has two important consequences for cross-linguistic research. First, the cognitive salience of a basic-level category — the level at which humans most naturally and efficiently operate — may differ from one speech community to another, since salience is shaped by cultural frequency of interaction. Second, prototype structure implies that the boundaries of a hyperonymic category are gradient, and that different languages may draw those boundaries at different points.

A third theoretical pillar is Anna Wierzbicka's program of cross-cultural semantics. Her natural semantic metalanguage approach proposes that only a small set of universal semantic primes underlies all human lexicons, while the vast majority of lexical content is culturally configured [A. Wierzbicka., 1992., pp. 7–9]. Wierzbicka states explicitly that the lexicons of different languages suggest different conceptual universes, and that not everything expressible in one language can be expressed in another with equivalent lexical economy [A. Wierzbicka., 1992., pp. 15]. This claim bears directly on contrastive hyponymy research: if cultural configuration shapes lexical meaning, it will inevitably shape the hierarchical organization of the vocabulary as well.

3. The Linguoculturological Dimension of Lexical Taxonomy

Linguoculturology proceeds from Wilhelm von Humboldt's foundational intuition that language is not merely an instrument of communication but a form of inner spiritual activity through which a nation constitutes its view of the world[W.von. Humboldt., 1836/1988., p. 54].. The diversity of languages, Humboldt insisted, is not a diversity of sounds and signs but a diversity of world-views. This Humboldt's inheritance, mediated through the Sapir-Whorf tradition and later refined within cognitive linguistics, provides the philosophical grounding for asking why lexical taxonomies differ across languages.

In the context of hyponymy and hyperonymy, linguoculturological analysis draws attention to three distinct phenomena. The first is *lexical elaboration*: the tendency for a speech community to develop a richer, more finely differentiated set of hyponyms in domains of cultural importance. The second is *lexical neutralization*: the use of a single undifferentiated hyperonym in domains that hold less cultural salience, where another language may maintain several hyponyms. The third is the *lexical gap*, or lacuna, which refers to the absence in one language of a lexicalized concept that another language expresses through a single word [A. Wierzbicka., 1992., p. 15].

The linguocultural dimension of Uzbek lexical taxonomy has been foregrounded in recent Uzbek scholarship as well. Researchers have noted that the semantic potential of Uzbek vocabulary cannot be fully understood without accounting for the cultural, historical, and social contexts that shaped it, and that the anthropocentric approach to language — language as encoding human cognitive activity rather than simply reflecting an objective world — is particularly productive for Uzbek lexicological analysis (Z.R. Kadirova et al., 2022, p. 6101). All three phenomena — elaboration, neutralization, and gapping — can be observed in systematic fashion when English and Uzbek are placed in contrastive perspective.

4. Case Study I: The Semantic Field of Kinship Terminology

The domain of kinship offers perhaps the most instructive illustration of how cultural organization shapes hyponymic structure. English maintains a relatively flat, lineally organized kinship taxonomy, in which a single hyperonym — *uncle* — subsumes paternal and maternal brothers of one's parents without distinction. The hyponymic level is correspondingly sparse: English does not routinely lexicalize the difference between a father's brother and a mother's brother, nor between a husband's brother and a wife's brother.

Uzbek, by contrast, maintains a highly elaborated hyponymic network beneath the superordinate concept of kinship by blood or marriage. The terms *amaki* and *tog'a* are not synonymous variants for *uncle*: they encode fundamentally different social positions within a patrilineal kin network. *Amaki* designates a father's brother, while *tog'a* designates a mother's brother — a figure whose cultural role and social obligations toward the speaker differ markedly. A comparative-typological study published in the Multidisciplinary Journal of Science and Technology [2026] demonstrates that this distinction reflects the hierarchical and paternalistic character of Uzbek family structure, in contrast to the more

linear and functionally neutral categorization typical of English, and confirms the existence of genuine inter-linguistic lacunae at the level of kinship hyperonymy between the two languages.

From a hyponymic standpoint, the English *uncle* functions as a base-level term with no obligatory differentiation by lineage, while in Uzbek, *amaki* and *tog'a* are themselves the base-level terms, and there is arguably no conventionalized single-word superordinate that collapses them. The conceptual hierarchy is structured differently at both ends: Uzbek elaborates downward while English generalizes upward. This is not a deficit in either language — it is a record of what each culture has found worth marking linguistically.

The same logic applies to the system of terms for cousins and siblings-in-law. Uzbek maintains distinctions of generation, lineage, and relative age that the English vocabulary does not grammaticalize at the lexical level. The single English hyperonym *cousin* accommodates a degree of semantic underdetermination that would be communicatively insufficient in Uzbek discourse about family relations, where specifying the exact relational position carries social weight.

5. Case Study II: Colour Terms and Superordinate Categories

The domain of colour terminology offers a different kind of evidence for linguocultural influence on hyponymic structure. The crosslinguistic study of colour categories has a long tradition, beginning with Brent Berlin and Paul Kay's influential survey, which proposed a universal hierarchy in the acquisition of basic colour terms. English maintains eleven basic colour terms — white, black, red, green, yellow, blue, brown, purple, pink, orange, and grey — each of which functions as a superordinate hyperonym over more specific hyponyms [B. Berlin & P. Kay., 1969., p. 2]. The hyperonymic level is thus fairly stable across European languages.

Uzbek colour terminology presents an interesting case of partial divergence. The term *ko'k* serves in Uzbek as a superordinate covering what English differentiates as *blue* and *green*, though in contemporary standard Uzbek, *yashil* is increasingly established as the term for green under the influence of Persian and Russian contact. This means that the Uzbek hyponymic structure below the colour domain has historically been organized differently from English: two regions of colour that English treats as governed by distinct hyperonyms have, in traditional Uzbek usage, been subsumed under a single superordinate. This is a case of hyperonymic neutralization — Uzbek generalizes at the level where English maintains distinction.

From a Roschian perspective, this configuration reflects a different prototype organization [E. Rosch., 1978., p. 36]. The most salient exemplar of *ko'k* in traditional Uzbek usage is sky colour — a prototypical instance that grounds the category cognitively. English, by contrast, anchors *blue* and *green* through separate prototypes (sky and grass, respectively), thus sustaining the categorical separation at the lexical level. The linguocultural implication is that communities whose primary conceptual anchor for the relevant colour region is a single salient environmental stimulus tend to maintain unified hyperonyms, while communities with multiple strong anchors develop taxonomic differentiation.

6. Case Study III: Natural Kinds and Agricultural Vocabulary

A third domain where linguocultural factors visibly shape hyponymic architecture is that of natural kinds, particularly plants, animals, and the vocabulary associated with agricultural or pastoral life. Uzbekistan's agrarian and nomadic heritage has produced a semantically elaborate vocabulary in areas directly connected to land use, animal husbandry, and grain cultivation, while English has developed elaborate taxonomies in domains tied to maritime culture, common-law legal categories, and technology.

In the field of animal husbandry, Uzbek maintains a more finely differentiated set of hyponyms for categories of livestock organized by age, sex, and function than the corresponding English vocabulary typically provides. A young male lamb of a certain age, or a female goat that has not yet given birth, may have specific lexicalizations in Uzbek for which English would require a descriptive phrase rather than a single word. This is lexical elaboration driven by cultural relevance: the vocabulary encodes distinctions that matter to the community in its everyday practice.

Conversely, English maintains an elaborate hyponymic vocabulary in domains such as horse breeding — distinguishing *colt*, *filly*, *foal*, *stallion*, *mare*, and *gelding*, among others — while Uzbek, though possessing its own set of horse-related terms rooted in the Central Asian equestrian tradition, organizes some of these distinctions differently. The cultural prestige attached to horses in both Anglo-Saxon and Central Asian contexts generates hyponymic elaboration in both languages, though the specific distinctions encoded do not map onto each other directly.

This asymmetry is what lexical typologists call a lexical gap: not an absence of the concept, but the absence of a lexicalized word for a sub-concept that another language routinely names. As Temuulen Khishigsuren have shown through large-scale typological research, kinship terminology alone reveals tens of thousands of such gaps across the world's languages, with each gap pointing to a cultural choice about what level of the taxonomic hierarchy deserves lexical representation[T. Khishigsuren., 2022., p. 1].

7. Prototype Structure and Basic-Level Asymmetries

Rosch's notion of the basic level — the level of categorization at which cognitive processing is most efficient, gestalt perception most immediate, and lexical labelling most natural — is relevant to the contrastive study of English and Uzbek hyponymy in a specific way[E. Rosch., 1978., pp. 30–32]. The basic level is not a universal fixed position in a semantic hierarchy; it is determined by the intersection of cognitive accessibility and cultural frequency of interaction.

For a speaker of English whose primary encounter with the category of watercraft is through leisure sailing or news coverage, *boat* may function as the basic-level term, with *yacht*, *dinghy*, *canoe*, and *kayak* as downward hyponyms and *vessel* or *watercraft* as upward hyperonyms. For a speaker of Uzbek whose community has historically interacted with specific types of riverine or Central Asian craft, the basic level may be anchored at a term that English would classify as specific but that functions psychologically as the default category.

This kind of basic-level asymmetry has direct implications for translation and cross-cultural understanding. When an English hyperonym is rendered in Uzbek by a term that Uzbek speakers experience as a basic-level category, the pragmatic weight of the utterance may shift. Conversely, when a culturally marked Uzbek hyponym is rendered by a generic English hyperonym, the cultural specificity encoded in the original is lost. This is not a problem that formal equivalence can solve; it requires the kind of culturally-informed semantic analysis that linguoculturology provides [A. Wierzbicka., 1992., p. 9].

8. Lexical Gaps and Their Linguocultural Significance

The concept of the lexical gap, or lacuna, deserves particular attention in any linguoculturological study of hyponymy. A lacuna exists where a language lacks a lexicalized item for a concept that another language expresses through a single word. In hyponymic terms, a lacuna may occur at the level of the hyperonym — a language lacks a superordinate covering a set of concepts it lexicalizes only at the

subordinate level — or at the level of the hyponym, where a language lacks a specific term for a sub-category that another language routinely names.

Research on hyponymy in English and Uzbek has shown that the cross-linguistic study of lexical semantic characteristics must account for both linguistic structure and cultural context in explaining why specific terms have or have not been grammaticalized in each language. As the comparative lexical study published in the *American Journal of Research in Humanities and Social Sciences* [2023., p. 5] concludes, the differences in hyponymic density between English and Uzbek reflect not a poverty of conceptual resources in either language but the distinct priorities that each speech community has encoded in its vocabulary.

Wierzbicka made a related point in arguing that the lexicons of different languages suggest different conceptual universes, and that not everything that can be said in one language can be said in another with equivalent lexical economy [A. Wierzbicka., 1992, pp. 15–16]. The asymmetries between English and Uzbek hyponymic systems are, on this view, not deficiencies but expressions of conceptual priorities. The Uzbek system's elaboration of kinship distinctions encodes a world in which lineage and relational position carry high communicative salience; the English system's elaboration of technological and scientific subcategories encodes a world organized differently.

9. Theoretical Implications for Contrastive Lexical Semantics

The evidence surveyed above points to several theoretical implications for the contrastive study of lexical semantics. First, hyponymy cannot be adequately described as a purely logical relation of class inclusion abstracted from cultural context. While the formal definition — if *x* is a hyponym of *y*, then everything that is an *x* is also a *y*, but not vice versa — holds universally, the distribution of lexicalized items across taxonomic levels is language-specific and culture-dependent[J. Lyons., 1977., p. 291].

Second, the linguoculturological framework provides a principled explanation for asymmetries that a purely structural approach would register as arbitrary vocabulary differences. The Uzbek system's richness in kinship hyponyms and the English system's richness in certain technological and scientific taxonomies are both rational responses to different cultural priorities — rational from the standpoint of what each community needs to communicate efficiently.

Third, prototype theory and basic-level analysis suggest that even where two languages share the same hierarchical architecture — the same hyperonyms and hyponyms — the cognitive salience of terms at different levels may differ, producing divergences in pragmatic use invisible at the purely lexical level. A full linguoculturological account of hyponymy must, therefore, encompass not only the inventory of terms but the prototypical exemplars and frequency patterns governing their deployment in discourse [E. Rosch., 1978., p. 36; Croft & Cruse., 2004., p. 169].

Fourth and finally, the study of lexical gaps offers a productive methodological complement to positive analysis. Mapping what is absent in a language's hyponymic system — the distinctions it does not lexicalize, the superordinates it does not provide — reveals the conceptual choices embedded in its lexical architecture as clearly as mapping what is present [T.Khishigsuren et al., 2022., p. 1].

10. Conclusion

This article has examined the linguocultural peculiarities of hyponyms and hyperonyms in English and Uzbek from the perspective of cognitive semantics, prototype theory, and linguoculturology. The analysis of three semantic domains — kinship, colour, and natural kinds — has shown that hyponymic and hyperonymic structures are not neutral logical scaffolding but culturally saturated systems that encode the conceptual priorities of their speech communities.

English and Uzbek differ in the location and density of their lexical elaboration: Uzbek develops more finely differentiated hyponymic systems in domains tied to lineage, community identity, and agrarian life, while English has built extensive hyponymic networks in domains associated with technology, law, and the natural sciences. These differences cannot be explained by structural typology alone — they require the kind of cultural interpretation that linguoculturology makes available [W. Humboldt., 1836/1988., p. 54; Wierzbicka., 1992., p. 9].

The theoretical significance of these findings extends beyond the English-Uzbek comparison. They support the broader argument that lexical taxonomy is one of the primary sites where language and culture intersect, and that a genuinely contrastive lexical semantics must take cultural context into account alongside formal semantic description. For the study of the linguistic picture of the world — the mental representation of reality encoded in a language's lexical and grammatical resources — hyponymic and hyperonymic structure is not incidental but central.

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