Linguistic and Extralinguistic Causes of Semantic Changes
Dilsel ve Dil Dışı Nedenler Semantik Değişiklikler

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Özet: Bir dilin dilsel ifadelerinin anlamı zaman içinde değişime tabidir. Dilsel ifadeler, dil kullanımı ve diller arasındaki temas gibi olgularla ilgili sosyolinguistik nedenlerle ve dillerin esnekliği ve edinim süreci gibi bilişsel nedenlerle anlamlarını değiştirir. Diyakronik anlamsal değişimler, sözcüksel öğelerden başlar ve metaforik ve metonimik uzantılar yoluyla zaman, görünüm, kiplik vb. ile ilgili yeni sözcüksel anlamlara veya yapısal anlamlara yol açar. Bu makale, çeşitli sözcüksel değişim türlerinin dilsel ve dil dışı nedenlerini dikkate alarak bu karmaşık olguyu araştırmaktadır. Sosyolinguistik yaklaşım, birçok dilin gelişimiyle ilgili dilsel sorunları incelemek için başarıyla kullanılabilir. Küreselleşme, yerel dilleri pratik olarak yok eder ve uluslararası bir dile doğru yeni dillerin ve lehçelerin ortaya çıkmasını yavaşlatır.

Çalışma ayrıca, bu konunun tarihsel ve karşılaştırmalı dilbilim veya sosyolinguistikle ilgilenen herhangi bir öğrenci veya araştırmacı için önemini vurgulamaktadır.

Abstract: The meaning of the linguistic expressions of a language is subject to change through time. Linguistic expressions modify their meaning for sociolinguistic reasons related to phenomena such as the use of language and contact between languages and for cognitive reasons such as the flexibility of languages and the acquisition process. Diachronic semantic changes start from lexical elements and give rise, through metaphorical and metonymic extensions, to new lexical meanings or structural meanings related to tense, aspect, modality, and so on. This paper investigates this complex phenomenon in consideration of the linguistic and extralinguistic causes of various types of lexical changes. The sociolinguistic approach can be successfully used to study linguistic issues related to the development of many languages. Globalization practically destroys vernacular languages and slows the emergence of new languages and dialects towards an international language.

The study also emphasizes the importance of this topic to any learner or researcher interested in historical and comparative linguistics or sociolinguistics.

Introduction

A living language is always determined by its function and is continuously reshaped through concrete linguistic activity - it is not only ergon but also energeia (potential), words that refer to the language as both a product and a result. The role of linguistic activity in shaping a living language empowers the audience and makes them feel influential. Language as a product has the potential to transform, a condition for subsequent linguistic acts that are not definitive. Communication is how language is at work and reflects reality. Thus, not only what is diachronic but also what is synchronic in language exists only through spoken and written expressions. All languages conduct variation processes. Human society, in the process of continuous evolution, continuously evolves, and it must inevitably be reflected in the lexicon and grammar. The factors behind semantic changes can be broadly divided into linguistic and non-linguistic causes. Extra-linguistic reasons for various changes in a speaking community refer to economic and social structure, changes in thoughts, scientific concepts, lifestyle, and other fields of human activity. In the case of loans, the rate of change is even higher. Borrowed words continue to change their semantic structures under the

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influence of the new extra-linguistic reality of a given language community, such as historical conditions, traditions, culture, or the development of science and technology.

This study reveals the connection between contrasting views of semantic change between iconicity and arbitrariness, encompassing how language develops and the ways meanings are linked to linguistic signs. In relation to semantic change, iconicity can affect how meanings evolve. For instance, when a term becomes increasingly iconic or adopts a clearer or more descriptive shape, it may be simpler for speakers to adjust or alter its meaning in ways that correspond with its phonetic or visual characteristics. This type of transformation could render a word more expressive or quickly comprehensible.

Unlike iconicity that highlights resemblance between form and meaning, arbitrariness indicates that the relationship between a word (signifier) and its meaning (signified) is typically conventional and does not inherently pertain to the word's form. However, over time, specific forms may transition from being entirely arbitrary to being increasingly iconic or the other way around, especially as meanings change. For example, a word that initially appears arbitrary might develop in such a manner that its form becomes more iconically connected to its meaning, indicating a transformation in both linguistic and cognitive associations.

In historical semantics, one major factor of linguistic variation is time. There are linguistic expressions that modify their meaning over time. Diachrony in semantics is how the meaning of a linguistic expression changes. A period of time can be considered to analyse the semantic changes that occur in languages during it. Semantic variation studied throughout a period is investigated in diachronic studies, while the others are synchronous studies. The factors of semantic change are, undoubtedly, multiple. An essential aspect of it, without a doubt, is that language is embedded in the social and cultural manifestations. Therefore, extraordinarily complex structures may cause restrictions of selection. In many cases, syntagmatic relations are specific to each language and present translation difficulties.

Historical views

The history of a word has an evolution that can be traced, often, through the semantic processes, through which the transition from monosemantism to polysemantism. That is why the history of a word is the result of these general processes, as well as of some specific transformations determined by historical or other circumstances. Semantic processes have a logical, stable character and lead to changes in meaning along with changes in the morphological or syntactic nature that took place within the evolution of a word. The semantic evolution of words remains a topic that particularly arouses researchers' interest. The task of semasiology is to identify the causes of changes in meaning and to discuss semantic mutations: restriction ("husband" used to mean household; "meat" – used to mean solid food), expansion ("thing" used to mean a public assembly), transfer of meaning ("clout" used to mean clothing), ennobling ("nic"e used to mean ignorant or foolish), degradation ("bully" used to mean sweetheart, "hussy" used to mean housewife), and other mutations, with which they have contributed to a modern, scientific understanding of language facts.

Language tendencies appear unconsciously and initially start from a person or group. Initially considered deviations from the norm, all accept the innovations over time. Of all the language compartments, social life changes are reflected most directly and mediated in the lexicon, which, among the others, is the most mobile. So, the meaning of words is not immutable; they cannot be changed; on the contrary, they are among the more mobile elements of language. What especially characterises the lexical system is its mobility, the ability to be constantly subject to changes. However, these changes happen according to the specifics of the process development in the language over an extended period and in relatively small proportions, which is hardly noticeable as they do not affect communication between people who hardly realise that there have been changes in their speech.

Semantic changes can be more or less significant in that, over time, word usage becomes more or less general. During the historical development of the language, semantic restriction and extension are the most general phenomena a language may undergo. Linguists, however, asked themselves if there are no common trends in the semantic evolution of a larger or smaller group of terms and if at least a few general lines of evolution can be identified from comparing thousands of particular facts. By broadening meaning or extension, a word can arrive to name a more considerable number of objects, facts, or actions. It takes place in generalisation, in which one goes from one particular, more specific meaning to a generalised one. Semantic extension is characterised by simple displacement of meaning, made by speakers based on equivalences between two or more objects, phenomena, or actions. Semantic change, a dynamic and creative process, is a perpetual evolution in language. A language state is primarily the reconstitution of an earlier one - the change about a previous usage. This perpetual evolution keeps the audience engaged and intrigued. The perplexity in the face of semantic change is because it starts from language considered an ergon (product), abstract and therefore static. That is why the issue of change is posed in causal terms: it is not only about intentionality but also various external causes. Languages change to continue to function as such in their becoming. A historically dead language is precisely one that ceases to transform and function in the same dynamic as a current language. On the contrary, it is stabilised on a code of historicity.

What is called change is the making of language itself, which consists in establishing the ways and conditions of this making and opening the path to linguistic freedom to renew itself. This creation is further integrated into linguistic tradition. Thus, the rhythm of linguistic development is given by the interplay of functional innovations. Regarding the systematic nature of the change seen in a broad sense, it can be said that, long before a linguistic unit disappears from the system, there are elements in the language norm that will replace it in its functionality; this is possible because the old and the new may coexist in language for a while. According to Saussure, nothing appears in the system that did not previously exist in the norm - but also, conversely, nothing disappears from the functional system until an extensive selection is made by the norm in such a way that:

> It is useful to the historian, among others, to be able to see the commonest forms of different phenomena, whether phonetic, morphological or other, and how language lives, carries on and changes over time[1].

At the same time, any movement within the language norm is a historical realisation of a potential already existing in the system: "Thus, if we are confronted with the mental formation of structures in such wide fields of culture, then we must again ask about the essence of the symbolic relation specific to language"[2].

Historical views on language can only be posed taking into account its dynamics by knowing the general conditions of change, more often than not through an examination of its causality and how it is constituted as a tradition (under what cultural and functional conditions it could be inserted into a system of already traditional ways). Semantic change does not always have a general or unique (a single generic cause) historically determined. On the contrary, there are multiple conditions for change. In other words, although language functions synchronically and is constituted diachronically, the two perspectives may provide different causes of the change, and they together account for the dynamic reality of a language when regarding the language as a system in the making and, at every moment of its development, as the actuality of the tradition.

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[1] Ferdinand de Saussure, Third Course of Lectures on General Linghuistics (1910-1911) (Pergamon Press, 1993), 77.
[2] Karl Bühler, Theory of Language. The representational function of language (Amsterdam/Philadelphia: John Benjamins Publishing Company, 2011), 25.

We may think of universal grammar as the system of principles which characterizes the class of possible grammars by specifying how particular grammars are organized (what are the components and their relations), how the different rules of these components are constructed, how they interact, and so on[3].

The Chomskian theory referring to innate knowledge of universal structures to explain language learning seems to be gradually replaced by a different perspective since linguistic content derives from the structure of mental processes rather than an underlying universal grammar that reserves arbitrariness at the level of communicative tools. According to this perspective, language cannot continue to be viewed as a universal abstract structure that makes all languages learnable. In other words, the idea of language as a static system already designed should be replaced by the notion of languages as dynamic and complex systems that unceasingly evolve at all levels. Change is renewal and reconstruction, thus ensuring the system's continuity and functioning. Not even in its synchronic aspect is language immutable, but it is a moment of realisation in its history. It is also known that when conventionalised, words undergo changes over time that gradually obscure their iconic motivation, so initially, more transparent words can later become barely translucent. Similarly, this iconicity becomes less noticeable in words combining iconic and arbitrary features.

If non-metaphorical blends can be accounted for in the current typology of iconicity, it needs to be made explicit how this can be done; and, of course, if it cannot be done, some other solution will be needed[4].

This potential for change and renewal in language should be seen as a source of optimism and hope for the future of linguistic studies.

Iconicity

This term reflects the relationship between the form of a linguistic sign (word or lexeme) and its meaning on the condition of an existent analogy between them. This stands in contrast to linguistic arbitrariness, where there is no intrinsic relationship between a word's form and its meaning, as is evident in the majority of words found in natural languages.

The iconic nature of the sign is dominant over the arbitrariness in the consciousness of the speaker. These two principles, however, can be seen as the poles between which the sign oscillates. It is possible to assume that both iconic and arbitrary procedures are rooted in human physiology and hence that attention should be given to the distinction between the two hemispheres of the brain, where analytical activity is located in the left side and the activity of synthesis in the right side.

Phonological iconicity is the link between sounds and their significations. For instance, onomatopoeic terms such as "buzz" (representing the noise of a bee) or "clang" (denoting a loud metallic noise) demonstrate phonological iconicity due to their sounds imitating the noise of the entity or event they characterize. It refers to the ability of linguistic sounds to participate in the representation of the meanings they express. Phonological iconicity is also called phonosymbolism and is the study object of phonosemantics. The highest iconicity is found in onomatopoeia and interjections. In linguistics, phonosymbolism indicates the ability of the sounds (phonemes) to interact through their acoustic qualities with the meaning they convey. Sound-symbolic words with direct similarity relationships with their meanings have been called ideophones, also considered expressive or mimetic. Sound symbolism has been widely confirmed in distinctive features of the visual-auditory modality, both at the articulatory and

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[3] Noam Chomsky, On Language: USA: The New Press, 2007), 180.

[4] David Glyn Wilson, Iconicity in Conceptual Blending. In Semblance and Signification (Amsterdam/Philadelphia: John Benjamins Publishing Company, 2011), 270.

morphemic level, at the level of more complex linguistic constructions and even in other dimensions such as syntax. They would be regular associations between linguistic forms (phonemic or graphemic) and meanings. These are iconic relationships by which acoustic signs reflect some property of the referent or experiences with their use.

Morphological iconicity is the formation of words or morphemes may be iconic in specific languages. For example, reduplication can signify plurality or repetition, which may reflect the notion of "many" or "repetition" within its formation. Morphological iconicity refers to the ability of morphological elements to participate in representing the meanings they express. For example, in most languages, the superlative degree of the adjective is generally longer than the simple degree, and the plural forms are typically longer than the singular forms (clear – clearer – the clearest).

Syntactic iconicity is the arrangement of words within a sentence can illustrate the temporal, causal, or spatial connections among concepts. For example, in certain languages, the ordering of words can indicate cause-effect relationships or highlight particular actions according to the structure of the sentence. Syntactic iconicity refers to the ability of sentence structure to express their meanings regarding the order of events or cause-effect sequences. Textual iconicity refers to the ability of the text and its parts to participate in rendering a specific meaning, such as the division into four paragraphs or its length or structure related to a particular literary genre.

Iconic coding may manifest itself at the concept or lexical level, as in pictographic writing. It may manifest itself at the propositional level in the coding of states and events or their sequential concatenations. Or it may manifest itself at the more complex, abstract level of various discourse-pragmatic functional domains[5].

The idea of iconicity was richly elaborated in Peirce's semiotic theory as a triadic relation at the beginning of the 20th century and taken up in linguistics by Jespersen and later by Wittgenstein and Jakobson, among others, in a clear contrast with the traditional Saussurean perspective. The first hypotheses appealed to spatio-temporal unity, but other factors and causal mechanisms have also been studied. From its beginnings, it was noted that spoken or written words are also among the stimuli as they function like auditory or visual objects of perception. The linguistic phenomenon was called sound symbolism, whose nature and varieties are still the subject of research.

Iconicity has often been defined in contrast to arbitrariness, and the opposition of the iconic vs. the arbitmry sign has frequently been associated with the dichotomy of the natural vs. the conventional sign: the icon is the natural sign. which issimilar to its object of reference. while the arbitrary sign is the conventionalsign. which evinces no similarity to its referential object[6].

Similarly, that refer to sensory properties or have experiential content are more iconic than those that refer to more abstract content, in a gradation that quantifies words between the most and least iconic. Referential ambiguity can be reduced when sounds are coupled appropriately with the appropriate reference. The same mental and affective connections can be reflected in word order or specific sentence patterns. Referential ambiguity should be reduced, and the sounds should be appropriately coupled with the appropriate reference. It is known that another factor that modulates the degree of iconicity in the lexicon is the type of distribution that words have in the semantic scope of a language. Indeed, words have a variable semantic density (meaning condensed in symbols); they have semantic content similar to each other to different degrees. The connotative links are, at the same time, conceptual and linguistic. In this way, it can

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[5] John Haiman (ed.), Iconicity in Syntax (Amsterdam/Philadelphia: John Benjamins Publishing Co., 1985), 189.
[6] Olga Fischer, & Max Nanny, (eds.) The Motivated Sign, Iconicity in language and literature 2 (Amsterdam/Philadelphia: John Benjamins Publishing Company, 2001), 18.

be explained that words with lower semantic density tend to be more iconic according to the established semantic congruencies among the stimuli and lexical meaning.

> […] the regular linguistic situation in which a portion of discourse received by an addressee provides two or more specifications for the same referent. These specifications can be in accord or in conflict. In the latter case, a range of cognitive operations for resolution of the conflict can come into play in the addressee[7].

Most authors agree that the phenomenon manifests gradual variations where objective or subjective elements and innate or acquired factors, among others, intervene in the degree of iconicity, as it concerns various aspects and involves multiple types of similarities. These correspondences, at the level of linguistic signs in general, have been characterised as iconic. According to Peirce a sign is iconic if it is motivated, directly or indirectly, by resemblance to what it represents: "An icon is a sign which stands for its object because as a thing perceived it excites an idea naturally allied to the idea that object would excite. Most icons, if not all, are *likenesses* of their objects"[8].

In that sense, it seems justified to subsume the various manifestations of the similarity relationships between signs of any linguistic modality and their meanings under the concept of iconicity. Therefore, iconicity is the property of specific linguistic forms or units of communication to possess some type and degree of similarity with specific sensory and cognitive properties of their referents, i.e. with what they mean, the affective or mental experiences evoked by them to the users. Additionally, variable degrees of iconicity are observed in the modalities, the semantic domains, and the lexical classes.

> I propose that there is also an affect system for emotions and feelings; there is what I call a culture system, a part of the brain dedicated to structuring our cultural patterns; and there are what I propose as an understanding or reasoning cognitive system[9].

Until relatively recently, it was believed that iconic words were only a tiny proportion of the total lexicon in a language and that, for that reason, they served all to confirm the thesis about the arbitrary links between signs and meanings in the vast majority of the remaining words in a natural language. Unlike iconicity, arbitrariness is any combination of sounds that can have any sense in random association. Consequently, given the sound of an unknown word, it is impossible to infer its meaning. According to Saussurian formulation, arbitrariness would be a defining characteristic of language. Although, for many, arbitrariness is an obvious or intuitive property if various words are taken as examples, this has gradually and partially been disproved as a defining feature. For this reason, iconicity has gained a more critical role than what was attributed to it. Still, it should also be considered a general property of language, or that, along with arbitrariness, it should be viewed as a feature of natural languages. Recent linguistic studies favour this new vision of language as possessing both arbitrary and iconic characteristics in balance. This changes the focus on linguistic expressions and mental images constituting meanings at the phonological, morphological and syntactic structure level.

> On the view I have argued for, this notion of "object" equivocates: if it is meant to correspond to the representation in the subject's mental state, then indeed every state has an object, but this is never what the state is about. If it is meant to correspond to what intentional states are about, and "object" is used in the ordinary way, not every state has an object[10].

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[7] Leonard Talmy, Toward a Cognitive Semantics, vol.1, (London: MIT Press, 2000), 323.
[8] Charles Sanders Peirce, The Essential Peirce, Volume 2 (1893–1913): Selected Philosophical Writings (USA: Indiana UP, 1998), 24.
[9] Leonard Talmy, Ten Lectures on Cognitive Semantics (Leiden / Boston: Brill, 201), 263.
[10] Mark Sainsbury, Thinking About Thing. (UK: Oxford University Press. 2018), 79.

However, as we have already pointed out, it should not be assumed that all words or only words are iconic. Also, it should not be assumed that their iconicity is related to the same type of information or semantic content. These precise distinctions are reflected, among others, in Peirce's sophisticated semiotic theory where, in the same sign or significant set of signs and a language in general, three semiotic types are integrated according to the different relationships with their referents. This is how all linguistic signs have iconic, indexical, and symbolic features in various proportions. The similarity is never identity, and it admits several types – images, symbols, or metaphors - and degrees of resemblance; therefore, by Peircean definition, iconicity is a non-homogeneous and gradual property. Therefore, iconicity is not a binary property but manifests in variable degrees. Peirce's ideas include many other subtleties collected in different paradigms to study iconicity.

> The sign may resemble what it stands for (an iconic relation), it may be connected to what it stands
> for (an indexical relation), or it might have the meaning it has because people in a community agree
> that it does (a symbolic relation)[11].

Although linguistic signs frequently depend on arbitrariness (notably in spoken languages), iconicity offers a means for language to establish direct links between form and significance. It is especially prevalent in domains like onomatopoeia, sound symbolism, and sign languages. The phenomenon of iconicity in language itself can be regarded as continually undergoing an evolutionary change towards specific linguistic associations that may be universal or cultural. When signs are iconic, it is possible to build a bridge between the experience of the world and the ability to communicate it based on the referential role of speech. The lexicon that is more linked to specific referents and contexts, as they become more fully incorporated into the culture, reduces ambiguity. Arbitrariness is usually associated with abstract words because the reality they reflect cannot be experienced directly. For semantically related words, arbitrariness can prevent semantic similarities from generating confusion when similar signs carry them; that is, it allows words with similar meanings to be phonologically different. However, given the various functions that arbitrariness and iconicity play in language, another topic of great interest is what would be the appropriate model to explain the semantic knowledge of both types. This aspect has been raised at the most general level of conceptual representations as embodied cognition in terms of the characteristics of the format of the concepts. Still, it can also be approached by considering the knowledge aspect of linguistic meaning. In cognitive theory, there is an isomorphism between the format of a conceptual representation and its content; the representational format is not arbitrary, and, therefore, the concepts are represented using sensory-mot and perception information: "I will argue against the dominant view of language that sees the linguistic sign as primarily non-iconic or arbitrar"[12].

An approach like this could better explain the knowledge of concrete and iconic concepts based on sensory and affective experiences. However, it should try to explain the rest based on those or through the combined intervention of other mechanisms. This assumes that the cognitive system participates in processing the meaning of linguistic signs: "The first criterion for a meaning representation is that statements in the representation should be unambiguous — they should have only one possible interpretation"[13].

According to this approach, the semantic processing system is at a different level than phonological processing, constituting two parallel and independent systems. In principle, this perspective would be more suitable with abstract concepts that maintain an arbitrary relationship with their contents. This open

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[11] Völkel Svenja and Nico Nassenstein (eds.), Approaches to Language and Culture, Anthropological Linguistics (Berlin/Boston: Walter de Gruyter GmbH, 2022), 479-480.
[12] Masako K. Hiraga, Metaphor and Iconicity. A Cognitive Approach to Analysing Texts (New York: Palgrave Macmillan, 2005), 3.
[13] Jacob Eisenstein, Natural Language Processing (The MIT Press, Cambridge: Massachusetts, 2019), 286.

discussion is directly linked to the questions regarding the relation between linguistic signs and their meanings, extended to higher and more complex linguistic constructions. They show various degrees of iconicity, as Wecott argues:

> 'iconism is a relative rather than an absolute characteristic of any communication system, language included. As regards iconism, then, the only realistic question we can ask about a given form is not "Is it iconic?" but rather "How iconic is it?"[14].

The presence of iconic features, in various varieties and degrees, but in greater quantity and variety than traditionally recognised, justifies the affirmation that iconicity is a general language property. However, this conclusion does not state that there is more iconicity in language than arbitrariness, but there is more iconicity than it had been traditionally considered for a long time. On the other hand, there are more iconic features than those evident to speakers; in other words, these are traits that, beyond the semantic sensitivity, are easy to detect; there may be others not identified without reflective effort and specialised knowledge. This idea is complemented by the aspect that iconicity and arbitrariness, as general properties of language, perform distinct functions. In this sense, they indicate specific adaptations to different language constraints. While iconicity seeks to form a connection between the linguistic form and an outside experience, arbitrariness can discriminate between linguistic signs and various grammar patterns in language use. Therefore, both coexist and complement each other through the logic of their functionality at all levels. As for iconicity, it tends to overcome its status as a marginal feature. As evidenced, it fulfils a variety of semiotic and cognitive functions with significant effects on communication in terms of semantic content.

Conclusion

The above considerations about arbitrariness and iconicity suggest a motivated interest in the changed perspective. The growing volume of empirical research on this topic has highlighted the importance of iconicity versus arbitrariness in language. Therefore, semantic changes are clear indicators of a language evolution through ages and how it is shaped by cognitive as well as contextual, extralinguistic factors, which leads to a better understanding of today's lexical constructions.

Arbitrariness is a key feature of most linguistic systems. However, as semantic change occurs, words may evolve in ways that make their relationship to meaning less arbitrary and more transparent. For example, some expressions or words may shift toward iconicity over time, leading to a closer relationship between linguistic forms and their meanings. The evolution of meaning can sometimes lead to more iconic forms. As words undergo semantic shifts, the form might start to reflect the meaning more clearly, enhancing the iconicity. For example, a word might begin with an arbitrary form, but as it undergoes semantic change, it may adopt a more descriptive or evocative shape that better aligns with its new meaning.

Modern English period saw many significant changes in the language, due to various factors, including technological advances, globalization, and changes in culture and society. One of the most significant changes was the standardization of the language, which was achieved through the development of dictionaries and grammars that helped establish a uniform system of spelling, grammar, and punctuation. The vocabulary of the English language has continued to expand during this period, with new words being introduced from a variety of sources, including scientific discoveries, technology, and cultural exchange. The English language continued to evolve and adapt to changing circumstances, thus ensuring its continued relevance and importance in the world today.

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[14] Roger W. Wescott, Language, Vol. 47, No., (The Linguistic Society of America, 1971), 426.

That is why further studies can expand the analysis of semantic phenomena from linguistic and extralinguistic perspectives in order to reveal the processes underpinning the historical development of vocabulary at a deeper level.

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