КОГНІТИВНА ЛІНГВІСТИКА ТА ПРАГМАТИКА

УДК: 372.881.1; 81-114.2

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COGNITIVE SPECIFICS OF LINGUISTIC UNIT SEMANTIC MEANING DEMONSTRATION IN FOREIGN LANGUAGE STUDIES

This article reveals the cognitive specifics of demonstrating linguistic unit semantic meaning during foreign language studies. The meaning germinates in the mind based on somatic experience. The meaning of lexical units can be shown using material association, illustration, translation, definition, context, and augmented/virtual/mixed reality. The cognitive specifics are characterized by the reproduction of knowledge, the ascription of direct meaning to a new foreign word, the primacy of denotative meaning over connotative one, the interconnectedness of denotative and connotative meanings, the knowledge of both denotative and connotative meanings for actual discourse, the use of tropes, the modes and code of meaning presentation, direct and vicarious acquisition of meaning, the performance/ observation/ imagination/ naming actions aloud or to oneself, combinatoriality in the simplest way, the number of exposures, form presentation manner, the link of phonological/ syntactic/ conceptual domains, interaction, recursion, experience, context, body-based reasoning, gestalt perception, the domination of image over meaningfulness and the usefulness of a word. Semantization is divided into stages: demonstration, extraction, reproduction, anchoring and maturation.

Keywords: *meaning, demonstration, cognitive specifics, semantization, stage of semantization, experience, somatic experience, knowledge.*

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КОГНІТИВНА СПЕЦИФІКА ПРОЦЕСУ ДЕМОНСТРАЦІЇ СЕМАНТИЧНОГО ЗНАЧЕННЯ ЛІНГВІСТИЧНИХ ОДИНИЦЬ ПРИ ВИВЧЕННІ ІНОЗЕМНОЇ МОВИ

У роботі визначено когнітивну специфіку процесу демонстрації значення лексичної одиниці при навчанні іноземної мови. Значення лексичних одиниць зароджується у свідомості на основі соматичного досвіду та може демонструватися через матеріальну асоціацію, ілюстрацію, переклад, визначення, контекст, доповнену/ віртуальну/ змішану реальність. Когнітивна специфіка характеризується відтворенням знань, приписуванням прямого значення новому іноземному слову, первинністю денотативного значення по відношенню до конотативного, взаємозв'язаністю денотативного і конотативного значень, знанням обох денотативного і конотативного значень для протікання комунікації в реальному дискурсі, вживанням тропів, способами та мовою презентації значення, опануванням значення самостійно та шляхом спостереження за діями інших людей, виконанням/ спостереженням/ уявою дії або об'єкту та називанням їх уголос або про себе, комбінуванням слів найпростішим способом, кількістю звернень студента до слова, способами презентації форми, зв'язком фонологічного/ синтаксичного/ концептуального доменів, взаємодією, циклічністю повторення, досвідом, контекстом, мисленням на основі соматичного досвіду, сприйняттям цілісного образу, переважанням образу над змістовністю та корисністю слова. Процес семантизації слова поділяється на такі етапи, як демонстрація, присвоєння, відтворення, закріплення та визрівання значення.

Ключові слова: *значення, демонстрація, когнітивна специфіка, семантизація, етап семантизації, досвід, соматичний досвід, знання.*

The meaning of a word cannot be just given to the learner. The teacher should demonstrate a new meaning if the learner has no knowledge of a word.

This paper aims to reveal effective ways to communicate the meaning of a new lexical unit during foreign language learning activities. The object of this research is the demonstration of lexical unit semantic meaning in the course of foreign language studies. The subject of this research is the cognitive specifics of the demonstration of foreign language lexical unit semantic meaning. The research is of topical interest as it provides practical strategies for foreign language learners to derive the meaning of a word from a sentence, to acquire the relationship between a linguistic sign and the object this sign signifies and to anchor the meaning.

This research methodology is based on the anthropocentric semantic-cognitive approach to language. According to the principle of anthropocentrism, a human being is the primary beneficiary. The semantic-cognitive approach to language, as some researchers state, is grounded on the following assumptions: a concept contains both a psychologically real meaning (in the consciousness of a native speaker) and a lexicographic meaning (in a dictionary); meaning is a unit of language semantic space, while a concept is a unit of reasoning; the structure of a concept comprises a sensory image, information content and an interpretative field; the concept is based on the field principle; no compulsory verbalization of some concepts is needed.

The concept, the main semantic notion of cognitive linguistics, resides in consciousness, is objectified in language and is determined in culture. The name of a concept is the linguistic unit that objectifies the central part of a concept. Lakoff and Johnson (1999) have found that concepts are embodied, not just symbols, thought is not linguistic and not just a matter of symbol manipulation. The concept is represented in the human mind using linguistic structure and mental representation.

The term mental representation has different meanings: 1) a purely internal representation of a concept within a given formal system in the form of a symbolic expression; 2) a symbol representation of something outside the formal system; 3) meaning that depends on how people meaningfully function in the world, making sense of it via bodily and imaginative structures (Lakoff & Johnson, 1999, p. 76–78). Lakoff and Johnson (1999, p. 495) posit that meaning "arises through the body and brain, not via the disembodied connection of symbols with the world". An assumption that sense has nothing to do with the body emphasises the fact that to "the higher-level parameters, the lower-level structure is "invisible" (Gallese & Lakoff, 2005). The cognitive science of the disembodied mind, as George Lakoff and Mark Johnson (1999) called it, shifted to the cognitive science of the embodied mind.

Danesi states that representation systems are not based on literal-denotative but rather on the subjective paths that connotative circuits entail (Danesi, 1999, p. 97–104). Mental representations, as some researchers believe, should be studied with the operations and procedures used to create these representations. Modal (visual, auditory, tactile, etc.) and amodal (symbolic, verbal) representations exist simultaneously.

The meaning of a word can be viewed either abstractly as a unit of language or concretely as a unit of speech. In the system of language, the meaning of a word is a virtual meaning, which is abstract and presented in an artificial situation, out of context. If the meaning of a verbal expression (word, clause) is concretely presented in verbal communication, it is called an actual meaning. A verbal expression consists of four types of meaning: denotative, significative, pragmatic and syntactic. One more meaning for morphemes and words, not for clauses, is a usage meaning, which is presented when a morpheme or word has the same meaning in different contexts.

The same word manifests itself differently in different people. If two individuals draw a picture of a car, the images may differ even though a concrete noun is characterized by sensory-perceptive experience. The pictures of evil (an abstract noun) vary considerably. It indicates mental differences in individual imagery of an object. The discovery and retention of meaning involve signs as mediators in these processes.

Linguistic signs refer to both the natural world and language. Gottlob Frege (1892, p. 40) states that we can express sense and designate reference by using a sign. Frege adds that "the mere thought alone yields no knowledge, but only the thought together with its reference, i.e. its truth value" (Frege, 1892, p. 43), underscoring the fact that high-imagery words can be learned and recalled faster than high-meaningfulness words (Corsini & Auerbach, 2006, p. 626).

The theory of meaning tries to elucidate points of meaning. Chomsky (1975) posits that "a theory of meaning cannot be based on the notion of reference to the world, as assumed by standard philosophy of language. Rather, it must be based on the character of human conceptualization – on the structure humans impose on their perceptions of the world". Noam Chomsky (1975) postulates that the primary function of the language faculty is not communication and that language is poorly designed for communication. He argues that people use language mostly to talk to themselves, in an inner monologue, so language is intended for thought; the externalization of language as sound is a later stage in the evolution of the language faculty. Jackendoff (2011) opposes this idea for two reasons: "...on the one hand thought exists without language, and on the other hand the inner monologue displays all the symptoms of what Chomsky calls 'externalization', except for the fact that one does not actually speak it" (Jackendoff, 2011, p. 612–613). Consciousness is linked with phonology and the other forms of perception and perceptual imagery rather than with thought. The experience of thinking is acquired through phonological, visual, haptic, proprioceptive and auditory imagery. The inner monologue is possible through words that people learn in the context. People can talk to themselves because they have learned to speak to others (Jackendoff, 2011, p. 613–614). Speech and inner speech enhance thought through its phonological proxies, providing an opportunity to use the combinatorial structure of thought; language is used for communication; the use of language for thought is a by-product; the semantic theory remains entirely programmatic (Jackendoff, 2011, p. 608). The syntax structure is moulded more closely to thought than to the externalization of the sensory-motor interface. So, the theory of meaning is grounded on thought, communication, reference, inner speech, inner monologue, phonology, conceptualization, imagery, perception and word.

Chomsky states that language uses the simplest possible means to create combinatoriality, to merge two things into a larger unit: units a and b generate the set $\{a, b\}$. Merge means that units are recursively combined by their concatenation as a set. On the other hand, the constraint-based frameworks adopt a different essential computational operation, unification (Shieber, 1986), which creates the union of the features of two units, including their hierarchical structure (Jackendoff, 2011, p. 601). The "brain's characteristic combinatorial operation is Unification rather than Merge" (Jackendoff, 2011, p. 603). So, lexical units are unified most simply using recursive processes.

The principle of interconnectedness in language study reveals itself in denotative and connotative meanings as well as in cognitive metaphors the learner uses to create conceptual maps to keep discourse acts meaningful. According to Danesi (1999), learners set out to study foreign language on the basis of denotative models of meaning, initially have little or no access to connotative circuits, rarely participate in real discourse situations before the connotative circuits to map the flow of meaning in discourse are acquired. A connotative circuit consists of connotations that suggest one another. The ability to navigate mentally through these connotative circuits constitutes discourse fluency. The "meaning of a conversation is determinable in terms of circuits that are interconnected connotatively to each other" (Danesi, 1999, p. 103). So, to keep up a conversation, denotative and connotative meanings must be interconnected. A cognizing human being constructs models of meaning in the very process of making them.

Hauser, Chomsky and Fitch (2002) distinguish the broad language faculty (FLB) from the narrow language faculty (FLN). The FLB includes the FLN "plus whatever other mental machinery is necessary for the acquisition and use of language but also serves other cognitive purposes, such as an auditory system, a motor system, working memory, long-term memory, attention, 'general intelligence', a capacity for joint attention, a capacity for vocal imitation, a capacity for voluntary, fine-scale control of the vocal tract" and possibly a theory of mind (Jackendoff, 2011, p. 587). The FLN includes the capacity to learn words and to apply recursion to them. The basics of recursion itself come from the FLB. A recursive structure includes an objective, for example, to buy coffee, and further operationalisation, that is, a set of tasks, for example, take the car key, drive to the store, go into the store, take the coffee off the shelf, pay, leave the store, drive home. Therefore, language faculties confine the process of meaning construction.

Demonstrating semantic meaning presumes semantization, which is a continuing process of getting acquainted with verbal forms in their polysemous diversity within varying contexts (Beheydt Ludo, 1987). Students construct meaning grounded in their experience rather than simply reproducing knowledge transmitted from instructional materials (Newmann, Marks, & Gamoran, 1996). The construction of meaning is known as active learning. For example, the word 'meaning' in English is an equivalent of the word 'значення' in Ukrainian. The word 'meaning' in the King James Bible (KJB) is used two times as a noun, and it is translated as "значення". However, in the Bible in Ukrainian (переклад УПЦ КП), the word 'значення' is used 40 times, and its equivalent in the KJB is mainly the word 'interpretation'. Three examples from the KJB and the Bible in Ukrainian are provided below.

• "Therefore if I know not the **meaning** of the voice, I shall be unto him that speaketh a barbarian, and he that speaketh shall be a barbarian unto me" (KJB, 1 Corinthian 14:11). – "*Але якщо я не розумію* **значення** *слів, то я для того, хто говорить, буду іноземець; і той, хто говорить, іноземець для мене*" (Біблія, Перше послання до Коринф'ян святого апостола Павла 14:11).

• "*Тоді відповів Даниїл, і сказав цареві: дари твої нехай залишаться у тебе, і почесті віддай іншому; а написане я прочитаю цареві і* **значення** *поясню йому*" (Біблія, Книга пророка Даниїла 5:17). – "Then Daniel answered and said before the king, Let thy gifts be to thyself, and give thy rewards to another; yet I will read the writing unto the king, and make known to him the **interpretation**" (KJB Daniel 5:17).

• "*Ось і* **значення** *слів: мене – обчислив Бог царство твоє і поклав кінець йому*" (Біблія, Книга пророка Даниїла 5:26). – "This is the **interpretation** of the thing: MENE; God hath numbered thy kingdom, and finished it" (KJB Daniel 5:26).

So, there is no rigid correspondence between the words 'meaning' in English and 'значення' in Ukrainian. These examples reveal that the meaning is derived from the sense of a sentence and discourse. In the theological discourse, the equivalent of the Ukrainian word 'значення' is 'interpretation' rather than 'meaning'.

Schaff (2010) stresses the ambiguity of the term 'meaning'. Meaning can be understood as the whole of definite interpersonal "relations which make up the sign-situation (the process of semiosis), or a fragment of those relations (the relation between the sign on the one hand and the object or the thought about the object on the other), or the designatum or the denotatum of the sign (i.e., an object of communication regardless of whether it actually exists or not, or such an object existing in reality), or the relations between the sign and the system of signs (language) or between the sign and the signs or another language, etc." (Schaff, 2010, p. 268–269). The meaning as a unit of language semantic space can refer to designata, denotata, the interpretant, what a sign implicates, the process of semiosis as such, and often to significance or value (Morris, 1938, p.43). So, there is a wide range of objects that semanticize a sign.

In the theory of concepts, "the same circuitry that can move the body and structure perceptions also structures abstract thought" (Gallese & Lakoff, 2005). For example, the extension of spatial language to nonspatial domains is mentioned in Jeffrey Gruber's pioneering study (Gruber, 1965, p. 607). There is no duplication of the sensory-motor system in the brain, according to Gallese and Lakoff (2005).

According to Johnson and Lakoff (2002), experience is an interactive process that results in embodied sensory-motor and cognitive structures, generating meaning in and through our ongoing interactions with environments. The meaning comes from the recurring patterns of interaction between a human and the environment rather than from the subject and objects. The meaning is grounded in sensory-motor experience, and this embodied meaning uses such imaginative mechanisms as "conceptual metaphor, metonymy, radial categories, and various forms of conceptual blending to shape abstract conceptualization and reasoning" (Johnson & Lakoff, 2002). An adequate understanding of language and human cognition is possible on grounds of "an embodied account of syntax, semantics, pragmatics, and value" (Johnson & Lakoff, 2002). Therefore, experience, tropes, engagement between the learner and environment, syntax, semantics, pragmatics and value are bound together in the meaning.

Sensory modalities of "vision, touch, hearing and so on are actually integrated with each other and with motor control and planning" (Gallese & Lakoff, 2005). Sensory multimodality denies the existence of separate modules for action and perception. To perform actions, to observe actions, to name them silently, or to imagine them can activate the same brain region. To see, hear and do are interrelated because the neural substrate is the same. An imagined effort is as effective as a motor effort to signify lexical signs. The evidence from studies shows that imagination, action observation, hearing, and silent naming can be as efficient as actions in an educative process because the same brain areas are activated. However, "the activation of pre-SMA [Supplementary Motor Area] or the primary motor cortex is present only when one executes the action, but not when one is observing it being performed by someone else" (Gallese & Lakoff, 2005). Imagining pushing is different from imagining shoving because different motor programmes are enacted. An action can augment the degree of learning. A particular modality does not limit verbs. The researchers explain it by modality neutrality and multimodality.

Knowledge of a language "consists of (a) a set of stored structures in the phonological, syntactic, and conceptual domains, plus (b) stored links among pieces of those structures, plus (c) the capacity to combine them by the operation of unification. Acquisition of a language requires, at the very least, a predisposition (a) to treat vocal signals (or gestures) as linked to concepts (i.e. to treat them as symbolic), (b) to organize vocal signals in terms of phonological structure, and (c) to learn to organize sequences of symbols into a syntactic structure that helps signal the relations among the associated concepts" (Jackendoff, 2011, p. 614). The inventory of these units and principles enables the learner to connect thoughts, sounds and meanings.

There is a strong correspondence between syntactic and semantic forms that Jackendoff calls "the grammatical constraint" (Jackendoff, 2011, p. 607). The researcher states, "phonology, syntax, and semantics/conceptual structure are independent generative

systems linked by interfaces" (Jackendoff, 2011, p. 608-609). In the framework of the parallel architecture (phonological structure – syntactic structure – conceptual structure), "a word can be thought of as part of the interfaces linking the three structures" (Jackendoff, 2011, p. 609). So, phonology, syntax, semantics and conceptual structures focus on a word.

The theory of embodied realism postulates that the mind "is embodied, meaning is embodied, and thought is embodied" as there is no separation of mind and body (Johnson & Lakoff, 2002). Human infants first learn the meaning through their bodily interactions. The locus of experience, meaning and thought is the concatenation of organism-environment interactions. Humans conceptualize and reason about abstract concepts using embodied meaning from the spatial and corporeal source domains. Corporeal and spatial logic comes from bodily experience, which provides the basis for an abstract reason. The theory of embodied realism can be the foundation for the modes of meaning demonstration and construction.

Gallese and Lakoff (2005) come to the conclusion that language directly uses the same brain structures engaged in perception and action; there is no 'language module' in the human being; grammar uses the neural connections between concepts and their phonological expression, that is, grammar is constituted by the connections between conceptual and phonological schemas; the semantics of grammar is formed by structuring circuits used in the sensory-motor system; neither semantics nor grammar is modality neutral; neither semantics nor grammar is symbolic, in the sense of the theory of formal systems, which consists of rules for manipulating disembodied meaningless symbols. Lakoff and Johnson (1999), having investigated the mechanism of the understanding between people based on motor schemes, surmise that the subject (an individual), using his\her motor scheme of movement, recognizes the movement of the other person through the imitation of their movement. So, the mastering of meanings vicariously is a productive process.

The people who have spent some time imagining successful movements can improve their results much better than those who do not train movements mentally (Corsini & Auerbach, 2006, p. 626). According to the hypothesis of Gallese and Lakoff (2005), "understanding requires simulation". So understanding concrete concepts – physical actions, physical objects, and so on – requires sensory-motor simulation carried out by the sensory-motor system of the brain, as suggested by contemporary neuroscience. The "sensory-motor system is required for understanding at least concrete concepts" (Gallese & Lakoff, 2005). A neural theory of conceptual metaphor shows that "imaginative simulations can carry out abstract conceptual reasoning as well as actions and perceptions" (Gallese & Lakoff, 2005). If abstract concepts "arise via metaphorical projections from more directly embodied concepts (e.g., perceptual and motor concepts)" (Lakoff & Johnson, 1999), the best way to set out to semanticize words is their direct meaning. The mechanism of metaphor formation is based on thinking rather than on the arrangement of words. Metaphors are conceptual rather than linguistic.

The meaning of lexical units can be demonstrated through material association, illustration, translation, definition, and context (Palmer, 1937, p. 107–108, 248) as well as through augmented, virtual and mixed reality. A denotational scheme can be the best choice to semanticize a word by material association. Illustration as a mode of semantic demonstration means the learner can use pictures or draw a picture of an item to be learned. To communicate word meaning through L1 equivalents, translation as a mode of semantic demonstration refers the student to a bilingual dictionary. Every new word in the learning course can be accompanied by its translation. To teach the student a word by L2 definition is time-consuming. If the word's meaning is demonstrated by definition, the objective can be to learn the word without an accurate native equivalent word. Studies "have reported an advantage for L1 over L2 meaning presentation in intentional learning" (Barclay, 2021, p. 166). "Although excessive L1 use can limit opportunities for target language input and use (Hall & Cooks, 2012), research has shown that judicious use of the L1 can positively impact vocabulary learning" (Barclay, 2021, p. 153). The meaning can be extracted from text or context. The habit of guessing is inherent in studying text when words can be understood in context.

Leveraging educational technological advances, augmented, virtual, and mixed reality can afford language learning through semanticizing words and phrases. The teacher can simulate the environment to interact with visual objects safely. Students can use smartphones, tablets, augmented reality glasses and augmented reality contact lenses that are being developed to create augmented reality. AI systems can put proper digital information on top of the user's surrounding scenes. The emotional connections and memorable experiences afforded by augmented and virtual reality have significant potential to boost learning outcomes (Storchak & Sydorenko, 2023).

Form presentation modes can be bimodal (spoken and written) or unimodal (spoken or written). Lado, Baldwin and Lobo (1967), who investigated the effect of unimodal and bimodal form presentation on intentional vocabulary learning, show that the spoken condition is least effective and the simultaneous spoken and written condition is most effective.

The acquisition of foreign language vocabulary can be facilitated or debilitated. Both facilitating and difficulty-inducing factors have been generalized (Barclay, 2021) and divided into four types – intralexical, interlexical, contextual and moderating learner-related. Facilitating factors are as follows: intralexical (concreteness, more imageable, less structurally complex, congruent sound-script relationship, inflexional regularity, derivational regularity, morphological regularity, one meaning – one form, nouns, shorter words), interlexical (cognateness, orthographic word likeness, phonotactic typicality, high L1 frequency), contextual (high frequency of occurrence, informative context, presentation with semantically dissimilar items, L1 meaning presentation code, bimodal form presentation mode), moderating learner-related (higher language learning aptitude) (Barclay, 2021, p. 291).

Difficulty-inducing factors are as follows: intralexical (abstractness, less imageable, more structurally complex, incongruent sound-script relationship, inflexional complexity, derivational complexity, deceptive morphological transparency, polysemy, verbs, longer words), interlexical (non-cognateness, orthographic non-word likeness, phonotactic atypicality, low L1 frequency), contextual (low frequency of occurrence, uninformative context, presentation of items in semantic sets, L2 meaning presentation code, unimodal form presentation mode), moderating learner-related (lower language learning aptitude). Perceived usefulness seems not to affect learning (Barclay, 2021, p. 291).

Some factors affect lexical loss. The factors associated with less lexical loss are nouns, concreteness and imageability. Conversely, verbs, abstractness and non-imageability are associated with more loss. Word length has no apparent effect in terms of the loss of vocabulary (Barclay, 2021, p. 292).

The results of the research by Berlin, Rosch and their co-workers (Berlin, Breedlove, & Raven, 1974; Rosch & Lloyd, 1978) testify that words "for basic-level categories tend to be recognisable via gestalt perception, be learned earlier, to be shorter…, to be more frequent, to be remembered more easily, and so on. Rosch observed that the basic level is the level at which we interact optimally in the world with our bodies" (Gallese & Lakoff, 2005). The body-based reasoning is behind human concepts.

The code of meaning presentation and parts of speech affect both lexical burden and decay. Lexical items that are presented with an L2 definition and verbs are more burdensome and more likely to decay than items presented with an L1 equivalent and nouns. More learning burden is associated with a higher likelihood of decay, which is not directly proportional to the retention interval length. Form recall knowledge is more susceptible to decay than form recognition (Barclay, 2021, p. 4).

The keyword method can also be used to semantisize a lexical item. "By a keyword we mean an English word that sounds like some part of the foreign word" (Atkinson, 1975). The keyword is similar in sound to the foreign word. A similarity in sound links the spoken foreign word to the keyword (the acoustic link), which is linked to the translation by a mental image (the imagery link).

Therefore, cognitive specifics of foreign language lexical unit meaning demonstration can be derived from contributory factors. We will mention some of them:

1. Learners study foreign languages on the basis of denotative models of meaning and initially have little access to connotative circuits. The meaning tends to extend from denotation (the main meaning) to connotation (the additional meaning).

2. The principle of interconnectedness discloses denotative and connotative meanings as well as cognitive metaphors.

3. Embodied concepts precede abstract conceptual reasoning.

4. Embodied meaning is extended via conceptual metaphor, metonymy, radial categories and various forms of conceptual blending.

5. Metaphor formation is based on thinking rather than on the arrangement of words.

6. Foreign language learners rarely participate in real discourse situations.

7. The direct meaning of words is the best way to semanticize foreign words.

8. A real process of language study can flow from an abstract virtual meaning to a concrete actual meaning and vice versa.

9. High-imagery words are learned and recalled faster than high-meaningfulness words.

10. The meaning can be mastered directly and vicariously, etc.

Cognitive specifics of foreign language lexical unit meaning demonstration are as follows:

1 – the ascription of a direct meaning to a new foreign word;

2 – the primacy of denotative meanings over connotative meanings;

3 – the interconnectedness of denotative and connotative meanings;

4 – the knowledge of denotative and connotative meanings for a real discourse situation;

5 – the impact of cognitive metaphors, metonymy and other tropes on conceptualization;

6 – the domination of the image over the meaningfulness of a word;

7 – direct and vicarious acquisition of meaning;

8 – the performance, observation, imagination and naming of actions aloud or in the inner speech;

9 – gestalt perception to facilitate meaning construction;

10 – combinatoriality of words in the simplest possible way;

11 – written and spoken modes of meaning presentation;

12 – simultaneous presentation of form and meaning to facilitate word learning;

13 – the more exposures of a target item, the better the outcome;

14 – the learner's experience;

15 – the reproduction of knowledge;

16 – body-based reasoning;

17 – the embodied sensory-motor experience;

18 – the link of phonological, syntactic and conceptual domains;

19 – interactions between the learner and changing environments;

20 – the manner of form presentation;

21 – recursive structures;

22 – varying contexts;

23 – stages of semantization: demonstration of meaning, extraction of meaning from a word, extraction of meaning from a sentence, reproduction of meaning, anchoring the meaning, maturation of meaning;

24 – the code of foreign word meaning presentation (native language in translation, foreign language in definition);

25 – the usefulness of a foreign language lexical unit.

Thus, the meaning of a word is not fixed but instead extracted from the text or context. The meaning of a word is derived from the sense of utterance. The function of the word in an utterance significantly influences its meaning. This meaning is a complex interplay of linguistic, structural, cognitive and pragmatic components. As learners, we play an active role in modelling the meaning of verbal signs during our learning activities. The seed of meaning germinates in the mind, nourished by corporeal experience. Many contributing factors determine the cognitive specifics of demonstrating linguistic unit semantic meanings.

The perspective of further research is to investigate the meaning of intertextuality.

References::

1. Біблія. (2004). Переклад Патріарха Філарета. К.: Видання Київської Патріархії Української Православної Церкви Київського Патріархату.

2. Atkinson R. C. (1975). *Mnemotechnics in second-language learning*. P. 391–398. URL: 12_Mnemotechnics in second language learning.pdf (ucsd.edu)

3. Barclay Samuel Christopher. (2021). *Examining the Learning Burden and Decay of Second Language Vocabulary Knowledge* (A thesis submitted to UCL Institute of Education in fulfilment of the requirements for the degree of Doctor of Philosophy). UCL Institute of Education. 410 p.

4. Berlin B., Breedlove D., & Raven P. (1974). *Principles of Tzeltal plant classification*. New York: Academic Press.

5. Chomsky Noam. (1975). *Reflections on language*. New York: Pantheon.

6. Corsini Raymond J, & Auerbach Alan J. (Eds). (2006). *Concise Encyclopedia of Psychology* (2nd ed.). John Willey & Sons, Inc.

7. Danesi Marcel. (1999). The Interconnectedness Principle and the Semiotic Analysis of Discourse. In *Applied Semiotics / Semiotique appliqué* (pp. 97–104). Vol. 3. No 6/7.

8. Frege Gottlob. (1892). *On Sense and Reference*. 56 p. URL: https://www.scu.edu.tw/

9. Gallese Vittorio, & Lakoff George. (2005). The Brain's Concepts: The Role of the Sensory-Motor System in Conceptual Knowledge. In *Cognitive Neuropsychology*. 21 (3/4). P. 455–479.

10. Gruber Jeffrey. (1965). *Studies in lexical relations*. Cambridge, MA: MIT dissertation.

11. Hall G., & Cooks G. (2012). Own-language use in language teaching and learning: state of the art. In *Language Teaching*. 45(3). P. 271–308.

12. Hardwick Charles S. (Ed.). (1977). *Semiotic and Significs: The Correspondence between Charles S. Pierce & Victoria Lady Welby*. Indiana University Press. Bloomington and London.

13. Hauser Marc D., Chomsky Noam, & Fitch W. Tecumsen. (2002). The faculty of language: what is it, who has it, and how did it evolve? Science, 298 (5598), pp. 1569–1579. doi: 10.1126/science.298.5598.1569.

14. Jackendoff Ray. (2011). What is the human language faculty? Two views. In *Language* (pp. 586–624). Vol. 87, Number 3.

15. Johnson Mark, & Lakoff George. (2002, Sept. 23). Why cognitive linguistics requires embodied realism. *Cognitive Linguistics*, *Vol. 13*(*3*), 245–263.

16. KJB – The King James Bible. URL: http://www.bartleby.com.

17. Lado R., Baldwin B., & Lobo F. (1967). *Massive Vocabulary Expansion in a Foreign Language Beyond the Basic Course: The Effects of Stimuli, Timing, and Order of Presentation*. U.S. Department of Health, Education, and Welfare. 173 p.

18. Lakoff George, & Johnson Mark. (1999). *Philosophy in the Flesh: the embodied mind and its challenge to western thought*. Basic Books. 624 p.

19. Ludo Beheydt. (1987). The semantization of vocabulary in foreign language learning. In *System*, Vol. 15, Issue 1, p. 55–67. URL: https://www.sciencedirect.com/

20. McNeill D. (1987). *Psycholinguistics: A New Approach*. New York: Harper and Row. 290 p.

21. Morris Charles W. (1938). Foundations of the Theory of Signs. *International Encyclopedia of Unified Science, Vol. 1, Number 2* (59 p.). Chicago: The University of Chicago Press. URL: https://pure.mpg.de/rest/items/

22. Newmann E. M., Marks H. M., & Gamoran A. (1996). Authentic Pedagogy and Student Performance. *American Journal of Education, 104*(*4*), pp. 280-312.

23. Palmer H. E. (1937). *The Scientific Study and Teaching of Languages*. Oxford University Press, London. (first published 1917). 328 p. URL : https://archive.org/details/in.ernet.dli.2015.90560/page/n9/mode/

24. Peirce's Theory of Signs. (2022). In *Stanford encyclopedia of Philosophy*. URL: https://plato.stanford.edu/entries/peirce-semiotics/

25. Rosch E. (1977). Human categorization. In N. Warren (Ed.), *Advances in cross-cultural psychology* (Vol. 1). London: Academic Press.

26. Rosch E. (1978). Principles of categorization. In E. Rosch & B. B. Lloyd (Eds.), *Cognition and categorization* (pp. 27–48). Hillsdale, NJ: Lawrence Erlbaum Associates Inc.

27. Rosch E. (1981). Prototype classification and logical classification: The two systems. In E. Scholnick (Ed.), *New trends in cognitive representation: Challenges to Piaget's theory* (pp. 73–86). Hillsdale, NJ: Lawrence Erlbaum Associates Inc.

28. Rosch E. (1994). Categorization. In V. S. Ramachandran (Ed.), *The encyclopedia of human behavior*. San Diego, CA: Academic Press.

29. Rosch E., & Lloyd B. B. (1978). Cognition and categorization. Hillsdale, NJ: Lawrence Erlbaum Associates Inc.

30. Schaff Adam. (2010). *Introduction to semantics*. Retrieved from URL: https://archive.org/

31. Shieber Stuart. (1986). An introduction to unification-based approaches to grammar. Stanford, CA: CSLI Publications.

32. Storchak O., Sydorenko K. (2023). New Affordances of Augmented Reality in Education. *Питання сучасної модернізації науки та освіти* (збірник наукових статей) (pp. 136–139). Харків: ХНАДУ.