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## COGNITIVE AND ECOLOGICAL APPROACHES TO THE STUDY OF LANGUAGE PHENOMENA

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The given article is an attempt to analyse cognitive and ecological approaches to the study of language phenomena. Language serves the object of investigation for many branches of modern linguistics. With the differences in the interpretation of natural language dominant directions converge that this phenomenon can be understood and explained only by considering it as an integral part of the cognitive system, i.e. all of the structures and mechanisms that combine to provide cognitive and intellectual person's activity. Within the cognitive approach category of knowledge is regarded the key one as it combines knowledge of the world and language system. This focus of linguistic research makes problems of solving linguistic semantics in terms of categorization and conceptualization of cognitive processes of surrounding reality particularly urgent. The significance of the concept «Ecology» and its important social role is undoubtful, though it is not quite a study in linguistics. An eco-centric model of consciousness is based on the assertion that Man shouldn't be esteemed as a core element of universe but a part of natural environment. Ecolinguistics as a scientific field that combines ecology and linguistics studies the interaction between language, human being as a language personality and his environment, which is the influence of the environment through the person and society on language, on the one hand, and the influence of language on the moral and spiritual level of society, on the other. Ecolinguistics examines the influence of language on the life-sustaining relationships of humans with each other, with other organisms and with the natural environment. Ecolinguistics tries to promote the peaceful coexistence of people in different social groups in society. Ecology of communication seems to be a promising paradigm of linguistics. The detection of the mechanisms of text influence on the addressee, methods of verbal representation of the referential situation image in textual forms seems to be prospective both in theoretical and practical values.

Key words: biolinguistics, ecolinguistics, ecological linguistics, language ecology.

## Приходько Ганна. Когнітивний та екологічний підходи до вивчення мовних явищ

Дана стаття є спробою проаналізувати когнітивний та екологічний підходи до вивчення мовних явищ. Мова є об'єктом дослідження в багатьох галузях сучасної лінгвістики. За відмінностей у трактуванні природної мови домінуючі напрями сходяться в тому, що зрозуміти і пояснити це явище можна, лише розглядаючи його як невід'ємну частину когнітивної системи, тобто всіх структур і механізмів, які в поєднанні забезпечують пізнавальну та інтелектуальну діяльність людини. У межах когнітивного підходу категорія «знання» вважається ключовою, оскільки поєднує у собі знання про світ і мовну систему. Така спрямованість лінгвістичних досліджень робить особливо актуальними проблеми вирішення мовної семантики з погляду категоризації та концептуалізації когнітивних процесів навколишньої дійсності. Значущість поняття «екологія» та його важлива соціальна роль безсумнівні, хоча це не зовсім лінгвістичне дослідження. Екоцентрична модель свідомості базується на твердженні, що людину слід розглядати не як стрижневий елемент всесвіту, а як частину природного середовища. Еколінгвістика як науковий напрям, що поєднує екологію та лінгвістику, вивчає взаємодію між мовою, людиною як мовною особистістю та її середовищем, що полягає у впливі середовища через людину та суспільство на мову, з одного боку, та впливі мови на морально-духовний рівень суспільства — з іншого. Еколінгвістика вивчає вплив мови на стосунки людей один з одним, з іншими

організмами та природним середовищем. Еколінгвістика поширює ідею мирного співіснування людей у різних соціальних групах суспільства. Екологія комунікації видається перспективною парадигмою лінгвістики як у теоретичному, так і в практичному значенні, адже дає змогу виявити механізми впливу тексту на адресата, способів вербальної репрезентації образу референтної ситуації в текстових формах тощо.

Ключові слова: біолінгвістика, еколінгвістика, екологічна лінгвістика, мовна екологія.

The anthropocentric and eco-centric lines may be distinguished as competitive modes in the development of modern humanitarian sciences for the reason that they introduce different approaches to investigating processes and results of human activity. Modern stage of linguistics is characterized by coordination of various scientific opinions, regarding its object – language. With all the differences in the interpretation of natural language dominant directions converge that this phenomenon can be understood and explained only by considering it as an integral part of the cognitive system, i.e. all of the structures and mechanisms that combine to provide cognitive and intellectual person's activity.

Within the cognitive approach category of knowledge is considered the key one. It combines knowledge of the world and language system. This focus of linguistic research makes problems of solving linguistic semantics in terms of categorization and conceptualization of cognitive processes of surrounding reality particularly urgent.

In spite of the significance of the concept "Ecology", its important social role, it is not quite a study in linguistics. This determines the *topicality* of this article.

An eco-centric model of consciousness is based on the assertion that Man shouldn't be esteemed as a core element of universe but a part of natural environment, eco-centric consciousness is associated correspondingly with the issues of diversity and harmony of Man's coexistence in natural environment rather than of intellectual domination and global convenience.

The basis of the conceptual content of the linguistic ecology as a scientific field constitute the basic value orientations related to ethical standards, concepts of morality, spirituality. The subjects of linguistic ecology are the culture of thinking and speech behavior, formation of linguistic taste, protection and improvement of the literary language, identification of ways and methods of its enrichment, the purity of speech habitat.

The popularity of the eco-centric line and its implantation into some branches of modern linguistics may be explained undoubtedly by the global ecological changes in the 20<sup>th</sup> cen. thought to be caused mainly by human activity.

Axiological aspect of natural environment preservation has contradicted the anthropocentric outlook, as a result the principles of ecological ethics are thought to be much more important for the issue of human survival than anthropocentric ideals of value. Many sociologists and linguistics are worried on the issue of cultural diversity and preservation, stating that under the pressures of global economics' demands lots of minor languages and cultures are at the level of extinction. Moreover, by them, it menaces literacy levels of modern generations in civilized world as it may lead to the death of the writer and reader.

Ecolinguistics as a scientific field that combines ecology and linguistics studies the interaction between language, human being as a language personality and his environment, which is the influence of the environment through the person and society on language, on the one hand and the influence of language on the moral and spiritual level of society, on the other.

Ecolinguistics examines the influence of language on the life-sustaining relationships of humans with each other, with other organisms and with the natural environment. Research ranges from the impact of advertising discourse in encouraging ecologically damaging consumption to the power of nature poetry to encourage respect for the natural world.

Language is regarded as an integral component of the chain relationship between man, society and nature. Functioning and development of the language appears as an ecosystem, and the world – as a linguistic concept. In recent years there appeared many investigations devoted to the consideration of cognitive and linguistic aspects of phenomena of surrounding world, the essence of conceptualization and categorization as basic cognitive processes.

Thus, Ecolinguistics considers the language in interaction. Ecolinguistics represents an act

of interaction between individual languages or acts of interactions that occur between people and nations through language. For Ecolinguistics object is the natural environment for natural languages. Development of ecolinguistics as a new scientific field of linguistics allows us to consider the problem of interaction of language and society, drawing knowledge from various scientific disciplines: psychology, sociology, philosophy. Ecolinguistics tends to purify the environment purely linguistic means. Helping to realize the mechanisms of exacerbation of conflicts and disputes, ecolinguistics trying to promote the peaceful coexistence of people in different social groups in society. Écological linguistics studies the processes of replacement or survival between the competing languages in a certain space, whether the consciousness of the individual or any society.

The fundamental principles of cognitive field of the first generation were questioned and main principles of cognitive science of the second generation (as it is conventionally called by G. Lakoff and M. Johnson) [1] were worked out. Cognition is seen by scholars as the activities of the human body, carried out in the course of interaction with the environment in order to adapt to the environment for survival and reproduction.

The term "cognitive style" is employed in this context as a relatively stable mechanism of mental apprehension and thought verbalization in a form of a text. In other words, it means the modus of information presentation that reflects peculiar ways of allocating information in the text, the phenomenon is associated with an intentional choice of cognitive operations in text structuring mechanism.

Cognitive styles represent people's ability to implement activities targeted at text construction, in particular, to build it in accordance with the commonly accepted genres model (text types), or norms for the narration, description, argumentation presentations.

It is very important to note that this thesis and other postulates formulated by G. Lakoff and M. Johnson were reflected in biocognitive theory developed by Chilean neurobiologists H. Maturana and F. Varela. Researchers proposed an interesting conception of living systems, based on the principle of living systems are studying systems, and life is a process of cognition. In other words, an attempt was made to find an explanation for the phenomenon of knowledge

as an effective action, which enables a living organism to continue its existence in certain environment. In addition, scientists emphasize that the center of any knowledge is observer.

Observer is defined as a living system with a circular organization (for such system U. Maturana uses the term "autopoetic") [2]. All aspects of the living system are imposed on this fundamental circularity and maintained it, ensuring its continuity in successive interactions in the continually changing environment. The living system exists as long as it retains the ability to self-reproduction and adaptation. Thus, reproduction and adaptation are the basic conditions for a single organism's life and for the whole species.

Subjects surrounding the individual are an integral part of his niche, so interactions with them serve his adaptation within niches. These interactions tend to have the orientation character. One organism can modify the behavior of another one, first, when they are connected with each other in such a way that the previous behavior of one determines the subsequent behavior of another, such as courtship or in a fight, (such behavior is the basis of friendship and enmity).

Secondly, one organism can orient the behavior of another organism on part of his fieldwork, which is different from the part that includes this interaction. This happens only if the interaction spheres of organisms coincide. The second type of orienting interaction is the basis for any language behavior.

The states of activity of the nervous system, resulting from the interaction with an object is qualified as elementary representations. Representations of all possible interactions with a particular object or with similar objects as well as interactions with different objects (but at the same time and in similar situations) are combined into complex representations.

This complex representation is considered as a structural unit of the experience / memory, or concept. In other words, ecological concept is a set of representations of interactions with the object or objects (non-linguistic and linguistic), characterized by the causal dependency and promotes effective adaptation of the organism to its environment.

Ecology of communication seems to be a promising paradigm of linguistics, a vital part of the theory of speech that studies the ways personal communicative intentions are enforced during communication without weakening the opponent's communicative position or humiliating him by inappropriate speech acts. The detection of the mechanisms of text influence on the addressee, methods of verbal representation (relevant or not) of the referential situation image in textual forms seems to be prospective both in theoretical and practical values.

The findings by this approach will allow to balance several issues of human environment instability and extend the facilities of ecosystem by integration of special notions, methods and ways of linguistic analysis and giving them status of universal instruments for humanitarian tasks implementation. Application of them into various spheres of modern communication will help to set principles of well-balanced information policy, reduce tension in interpersonal and cross-cultural communication, lessen conflicts and improve relations in the global community of the future.

During all his life a person cognizes surrounding reality, gains new knowledge about the world, organizes this information in a certain way and correlates it with the already known facts. Thus, the processes of conceptualization and categorization are of particular importance for systematization and updating the obtained knowledge, for its successful application in different situations.

Specific character of conceptualization is to understand the information received the construction of mental objects and events leading to the formation of certain beliefs about the world (concepts), while the categorization is a psychical act, that organizes, systematizes and sorts representations of interactions in the person's mind, which reduces the infinite variety of the individual to visible number of units. Together they represent a complex mental process, aiming at the effective incorporation of a human being into the surrounding environment.

Each person has a unique experience of adaptation to the environment; hence, the set of representations and concepts of causal relations is also to some extent unique. In this connection, it is lawful to talk about the individual level in the structure of the concept. However, a man lives in a certain society, which is a part of his niche. The existence of an individual directly depends on the interactions with other individuals, as they orientate him on his effective behavior in a specific situation.

In this regard, it is possible to speak about social and national levels of concept. Despite the great variety of niches, some entities are common to all, such as macro-niche "Earth". Concepts-universals are the result of interactions with such entities.

Cognitive patterns that exist in the person's mind, are diverse according the channels of incoming information, or, in terms of the biological approach, they are formed because of different kinds of interactions with elements of the niche. Therefore, we can distinguish the concepts of sensory perception of the world and concepts of mediate knowledge.

The main feature of the human's mind is an ability to react not only to direct stimulation, but also to the sound stimulus – a word. Due to the language, a person perceives and feels the world differently than an animal – he studies it in the process of communication. From the point of view of the biological conception of language, its main function is to broaden the cognitive domain or the area of human's interacts.

Meaning – is the causal links connecting the representations of interaction with the linguistic and non-linguistic objects in the mind of the individual. Linguistic behavior of people forms part of the environment, being the existential domain.

Relation of mutual causality between the individual and the environment requires causal connections between the state of his nervous system (consciousness) and language as a social adaptive behavior. Therefore, analysis of the meaning of language units helps to identify relatively authentic structure of concept.

According to the unified biocultural theory of meaning, an inherent characteristic of living systems is the ability to create meaning. Meaning is the relationship between organism and environment, defined by the value that some aspects of the environment have for this very organism. Such meaning can be defined as an ecological one, in the sense that it is not entirely subjective or objective, but is determined by the interaction between the organism and the environment.

From the standpoint of biocognitive approach, conceptual picture of the world can be defined as the totality of concepts or complex representations present in the mind of the individual reflecting collective experience of the

direct and indirect (in the process of upbringing and education) interaction with the environment. This conceptual system itself is the object of interaction.

Linguistic ecology dynamically reflects natural changes of linguistic conceptualization of the world, the relationships between social, cultural and linguistic processes. In this regard, it should be noted that this field has vividly marked interdisciplinary character, integrating diverse knowledge of humanitarian nature.

In linguistic ecology functions a number of interdisciplinary phenomena and their respective terms, which are in a state of constant interaction and intersect with different linguistic fields of terms. Thus, linguistic ecology relates to the field of complex and multifaceted phenomena of culturological and humanitarian character.

## References:

- 1. Lakoff G., Johnson M. (2003). Metaphors we live by. London: University of Chicago Press, 276 p.
- 2. Maturana H., Varela F. (1987). The Tree of Human Understanding. Boston, 224 p.