

THE ROLE OF AUDITORY PERCEPTION AND MENTAL MAPPING

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Abstract: The paper discusses the role of human perception of the environment and the auditory perception in understanding and interpretation of the reality. The relation of language and mind is considered.

Leading trends in linguistics are associated with different aspects of description of empirical data. Scientists focus on the relation of language and mind, the relation of language structure to things outside language: cognitive principles and mechanisms not specific to language, including principles of human categorization. One of the important assumptions is that meaning is so central to language that it must be a primary focus of study. A new cognitive approach allows connecting linguistic phenomena with the study of mental representations of reality and bringing new empirical evidence from other sciences.

The origins of cognitive science go back to what N. Chomsky called the creative aspect of the language and the acquisition of linguistic competence [1]. However, in Chomskyan linguistics meaning was "interpretive" and peripheral to the study of language. The central object of interest in language was syntax.

The cognitive approach deals with mental processes based on conceptualization and categorization of things outside language. Human cognition of the world is boundless and limitless. Semantic space develops simultaneously with the process of human cognition of the world. Therefore, we might talk about infinity and immensity of both conceptual and semantic space.

Recent studies conducted by cognitive linguists suggest more detailed analysis of the interaction of language and mind. Since one of the functions of the language is to store and transfer information and knowledge about the world, cognitive linguistics sees language as embedded in the overall cognitive capacities of man.

A person in the process of mental activity creates the concepts and establishes a connection between them, i.e. creates the mental space ("mental space" is a term proposed by G. Fauconnier and M. Turner) [2]. Mental spaces are formed during the speech and mental activity as a reflection of our perception of reality. According to J. Lakoff and M. Johnson, "basic-level categorization suggest that our human experience is preconceptually structured", "they consist of basic level kinesthetic image

schemas, the kinds of sensorimotor experiences that begin at the earliest age, and involve the most central objects and actions in our lives [3, p. 20].

With the development of human experience generalization went beyond the direct perception of the world, people moved from direct contemplation of nature to the understanding of what is not observable. On the basis of sensory experience, i.e. as a result of the perception of the world people develop the concepts of human mind [4]. At the same time the language provides access to all the concepts. Some scientists emphasize that physiology of perception does not depend on ethnic group differences as the core vocabulary in many languages constitute words that express the universal concepts [5]. Linguistic diversity suggests that not only lexicon but all categories and distinctions of each language enshrine a way of perceiving, analyzing and acting in the world. More recent studies have provided new evidence, which appears to indicate that language structure and vocabulary can influence other mental processes. For example, Davidoff et al. have reinvestigated color naming in a different language in New Guinea, Berinmo [6]. This language has five color names, which do not map onto the way English maps color names onto colors.

Today cognitive scientists are finding that people's mental maps, their theories, expectations, and attitudes, play a more central role in human perception than was previously understood. From the standpoint of modern science, the mental map is not a mirror image, but some interpretation of reality. Language is the main tool of this interpretation. It doesn't reflect the world as a whole, but only its most relevant elements. The principle of value orientation acts as the main principle of hierarchization of objects.

Mental maps or cognitive maps have two basic functions: interpretive (to implement the vision of the world) and regulatory (to provide guidance in the world). They are used to construct and accumulate spatial knowledge, allowing the "mind's eye" to visualize images, focusing on essential properties of the world as they are understood by people.

Over the past decades linguists noted the need to change the visibility of "images" into the visibility of "model", "matrix", etc. S.G. Shafikov proposes to use the term "cognitive model of the world" as the model assumes the most significant internal and external characteristics of the object modeling. The researcher believes, that cognitive model of the world is a conceptual representation of reality in a variety of its internal and external relationships that exist in a certain system of concepts [7, p. 13].

Cognitive model includes the general representation of the surrounding reality. Every natural language reflects a certain way of perceiving and organizing the world. Speakers of different languages can see the world differently through the prism of their languages. Language world model is an extensive and multilevel concept, which plays a major role in human cognitive activity and has many options, repeatedly crossing into different linguistic units that belong to different levels of language. "Projected" in the semantics of natural language, the reality in the resulting "projected world" (the term was introduced by R. Jackendoff) is different from the world reality [8]. Both the language world model and the auditory world model as its part, reflect the reality and distort it by the same rules: we perceive only definitely "significant" or "salient" properties of the surrounding world.

Auditory perception is one of the main channels of information about the world, a process that can vary from psycho-physiological perception to complex mental activity, reflecting the perception of reality. The brain is constantly monitoring the acoustic environment for information it can use to make sense of the auditory world and to create a mental map of the environment. The brain's task is to organize the sound, to identify and select the sound of interest, and to be able to follow this sound over time.

Cognitive activity of an individual is subject-oriented, purposeful, meaningful, and directly related to the process of perception of the world. As a result of the interpretation of information received from the outside, the individual has the opportunity to create a fairly complete picture of the structure and characteristics of the surrounding world. It becomes available by virtue of the highest level of mental apparatus and complex system of information receptors, which indirectly influence the formation of the cognitive potential of individuals, creating an overview of the surrounding world.

Organs of perception, therefore, is the instrument that binds the living organism with the surrounding space, provides detailed information and conscious interpretation, promotes the ability for self-location in the surrounding world. Perception of an individual, endowed with self-consciousness and capacity for introspection and analysis of obtained information, is largely determined by the initial perceptual abilities that are genetically inherent in the human nature.

The study of perception as category, pledged in the biological structure of the individual, is highly relevant to the current level of cognitive science and, in particular, for understanding the development of individual language skills.

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Особенности слухового восприятия в формировании картины мира

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Ключевые слова и фразы: восприятие; звуковая модель мира; когнитивный подход; когниция; ментальное пространство.

Аннотация: Рассмотрены особенности восприятия окружающей действительности в целом, а также специфика слухового восприятия для понимания и интерпретации действительности, в частности. Обсуждаются вопросы соотношения языка и мышления.

Besonderheiten der Hörauffassung in der Formierung des Weltbildes

Zusammenfassung: Es sind die Besonderheiten der Auffassung der Wirklichkeit im Ganzen und auch die Spezifik der Hörauffassung für das Verständnis und die Interpretation der Wirklichkeit in Einzelheit betrachtet. Es werden die Fragen der Korrelation der Sprache und des Denkens besprochen.

Particularités de la perception auditive dans la formation de l'image du monde

Résumé: Sont examinées les particularités de la perception de la réalité en général ainsi que la spécificité de celle auditive pour la compréhension et l'interprétation de la réalité. Sont discutées les questions de l'interrelation de la langue et de la pensée.

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