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## THE CONNECTION OF LANGUAGE AND THINKING

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### *Abstract*

Thinking is one of the important forms of consciousness activity. Therefore, it cannot be adequately described and understood outside the language. Thinking as a conscious process can be understood as communication. And communication is impossible without language. The topic is still controversial in modern linguistics, which determines the relevance of our study. Language is the main, decisive, but not always only means of communication. People invent and create certain forms of speech and linguistic expression. The article compares the logical and linguistic features of language and thinking. Thoughts addressed to speech and language are called linguistic thinking. Thoughts are embodied in words consciously. In words, our thoughts become meaningful. In human speech, comprehension, awareness, sensation as a process of linguistic thinking develops, affecting the new system of language. Understanding speech is usually divided into speech recognition and speech understanding. An understanding of the meaning of what was said and how it is expressed. The close connection between language and thinking can be justified by the fact that structural and conceptual meanings are closely related. The purpose of the article is to show how thinking is associated with language and how thought is reflected in words, and how to analyse key points in this issue. Using a descriptive method, we tried to show the connections between language and thinking.

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## 1. Introduction

In the aspect of the connection between language and thinking, the term *logic* has a double meaning. Thinking reflects reality. Understanding logic is connected with the concept of dialectic logic, reflecting the objective dialectics of things. The external forms of logical thinking, the laws of development of all material things, are the doctrine of nature and spirituality, of the development and understanding of the specific content of the world.

The ancient Greek philosopher Aristotle (the 4<sup>th</sup> century BC) suggested that grammar is based on thinking. For the ancient Greeks, the *logos* was used simultaneously with words, consciousness, thinking, and speech. His followers, the abbots of the Por-Royal Monastery, the French scholars Arnault and Lanslo (1660), in the “General Rational Grammar”, stated that the goal of linguistics is to study logical principles based on all languages, since the laws and categories of thinking are the same for all thinkers people, but one grammar. Thus, logical and language categories are similar. Based on logic, there is a form of thinking that denies or confirms what is. The subject of thinking consists of S (subject of thinking) and the predicate P (relation or singularity), binders and quantum (all A and some E). The subject is the called subject, and the predicate is the action of the called subject. S is the singular, and P is universal.

According to the grammar of Por-Royal, ideas coincide with sentences. For example, the sentence “Man runs” is based on a thought. So everything in language is connected with logic. The remnants of such ideas are also reflected in the modern grammatical terminology of European languages. For example, in logical terms related to subject (English *subject*, German *Subjekt*, fr. *sujet*) and predicate (English *predicate*, German *Prädikat*, fr. *Prédictat*).

The great German linguist Humboldt (1984), his comrades-in-arms Leo Weisberger and American ethnologists Edward Sapir and Benjamin Whorf put forward the theory of linguistic relativity. According to this theory, people who speak different languages look at the world differently, so each language has its own logical thinking. Proof of this should be considered in scientific literature.

Humboldt notes that “language is a unique world between people and the objective world that surrounds it” (Humboldt, 1984, p. 94). Each language covers a certain circle of people, and then it can leave this circle to enter another circle. Imagination and activity of a person depend on his impressions, and his attitude to objects is fully reflected in the language.

## 2. Problem Statement

Imagination and activity of a person depend on his impressions, and his attitude to objects is fully reflected in the language. Thinking is usually dependent from language. In different languages the same subject is not a different sign, but a different appearance. More vivid examples are associated with words that define colors in different languages: *sinii* [blue] and *goluboi* [sky blue] in Russian, *blue*, *Blau*, *bleu* in English, German and French. Some African tribes have two words for colors: the word for “hot” (red, orange, yellow) and the word for “cold” (blue, purple, green). Tarasov (2004), specifying the basic functions of the language, highlights: 1) language as a means of organizing the process of using existing knowledge to form new knowledge in the perceptual perception of reality; 2) language as a means of

describing cultural objects in communication to distribute them, as a result of which the translation of culture occurs. The function of semantic contents assigned to linguistic signs in the memory of native speakers is to activate images of consciousness in communication, as well as in perceptual perception of reality, where the language organizes knowledge to categorize sensory information entering the brain (Kabaloeva, 2012).

Modern formal logic is far from the structure of natural thinking with axiomatic structures and does not accept the structure of theoretical thinking as its subject; the latter is an object of interest in logic (Narsky, 1967). Einstein (1965) also states: “Pure logical thinking does not provide any knowledge about the world of facts; perception of the real world is born from experience and ends with it. A purely logical situation does not say anything about reality” (p. 74). “We comprehend thoughts of already framed language frameworks”. Thinking can freely specify its categories, introduce new ones, while the categories of the language, being part of the system that each native speaker receives and retains, “cannot be changed at the will of the speaker” (Benvenist, 2002). The language expresses not only knowledge about the world, but our attitude to the external world, to other people and to ourselves, as well as our emotions and strong-willed motives (Garipova, 2009).

Nowadays, the problem of logic has become urgent for the development of cybernetics and logic, and it is widely discussed at various symposia. In particular, the importance of synthesis logic is discussed. From this point of view, it is impossible to contrast mathematical logic of content with forms of logic.

### **3. Research Questions**

In a broad sense, logical categories are mental categories that represent real objects. This understanding of the problem is proved on the basis of the theory of Espersen (1958). Espersen writes:

*It should be borne in mind that, depending on the structure of each language, in addition to syntactic and derived categories, independent of random facts existing in language, there are intra-language categories. These categories are universal because they can be applied to all languages and rarely precisely spelled out in these languages. Some of them relate to the facts of the inner world as gender, and some to logical and intellectual activity. Due to the lack of a proper term, these categories will be called categories of understanding. The question of grammars is to examine the relationship between syntactic and conceptual categories in each case. (as cited in Garipova, 2009, p. 1485)*

These categories are reflected in syntactic categories in a mediocre and complex way. Speaking of the narrow meaning of logic, Panfilov (1957) notes that logical categories belong to categories at the logical and grammatical level. He compares them with grammatical categories that have certain meanings, but are not directly related to thinking (Panfilov, 1957).

The least stressed problem is the result, where logical forms of thinking and language forms of its expression are correlated. It is worth noting that among all these limited problems, an extraordinary variety of concepts and views should be noted.

The relationship of word and concept is also one of the most controversial issues in logic and linguistics. The basis of the discussion is the relationship of meaning and concept. Summarizing the above, two main points can be emphasized: 1) the meaning of a word is a synonym for a concept; 2) the meaning of the word is interpreted as the linguistic catechism of the content plan. The second view seems more correct. It is important to note that the concept of the relationship between the meaning of a word and a concept is accepted not only by linguists, but also by logicians and philosophers.

#### **4. Purpose of the Study**

The article aims at describing the close relationship between thinking and language in a new way and to analyze the reflection of judgment and thought in language categories.

#### **5. Research Methods**

In the study, a descriptive method of linguistics was used.

#### **6. Findings**

Mentioning two possible aspects of the word's content, we can see the same opinion by Schaff (1963): "We perceive this mental-linguistic structure as the understanding or meaning of a word depending on the mental process or linguistic process" (p 73).

Regardless of many definitions of a word and the denial of its existence, a word exists objectively. It is impossible to imagine communication without words. Of course, we cannot name concepts that are in our minds as objects and events of the material world.

*Words are studied in linguistics, because it is a category of language, since a concept is a category of thinking, it must be studied in logic. The inseparable connection between language and logical thinking is manifested, first of all, in the interconnection of words and concepts. Because we express the perception of the world of objects and events in the human brain in verbal form and convey to others only in words. (Racabov, 1993, p. 109)*

There are three main questions of language and logical thinking: 1. words and understanding, 2. sentence and judgment, 3. relationship between grammatical and logical categories.

Researchers point out that the creation and existence of the concept of a word is based on the opposition of language and thinking (Thinking and Language, 1957). The interaction of words and concepts is formed in minds. Materialistic philosophy teaches us that the concept reflects the objects and events of the objective world in human minds. According to the general opinion, "we see the image of the real thing in human understanding, and not the image of the absolute concept, which is at a certain stage of development. Before people could come to understand figures and compare their forms, they had to be formed into an image from consciousness" (Galkina-Fedorchuk, 1956, p. 47).

Thinking is closely related to imagination. But the imagination cannot create a complete, comprehensive and accurate understanding of the objects and events of the objective world. Thinking

correctly and accurately reflects the objects and events of the objective world. Such a reflection, or rather a verbal expression of objective reality, is called a concept.

*As long as there is no reflection of sounds of images in language, it cannot be called a concept. Therefore, when we look at the objective world, we see different things. A concept that has verbal expression matters. Otherwise, an object or event belonging to the objective world could not have a unit of thought, that is, its own expression. The fact is that we cannot comprehend our feelings, that is, they do not have independent consciousness in our minds. For example, atoms, electrons, neutrons and so on, but it is quite possible that these objective realities can be understood as they have concepts in mind. (Axundov, 1979, p.37)*

Shcherba (1947) points out that “the concept of a word is primarily connected with the concept of an object, which is the result of an analysis of the reality of an object under the influence of our active relations with it” (p. 83).

In the languages of the modern world there is an inextricable link between words and concepts, regardless of whether they are expressed in motivated or unmotivated words. As already shown, although the concept of reality is expressed by words in human mind, words and concepts are not the same things, there are many differences. There are the following differences:

1. “All concepts are expressed in words, but not all words are expressed in a concept, that is, in all languages of the world there are words that do not express a concept. Even a part of words that have a lexical-semantic meaning, for example, special nouns, especially a person’s names, as well as his substitutes, do not matter” (Racabov, 1993, p.77). For example: I am only for myself. For someone else, I can be you or her. A tree is everywhere a tree. Trees in one place cannot be a flower, but in another tree. As you know, the concept is an expression of the characteristic features of an object in words.

If a person’s name was a concept, then a person whose name is Alim (scientist) should have been a scientist. With the exception of the words of this group, words included in all auxiliary parts of speech do not express meaning. In linguistics, a number of researchers suggest that auxiliary words are expressed by a concept.

Gurbanov (1977) in *General Linguistics* shows that those who advocate the use of auxiliary words to understand relationships are based on the interaction of words and relationships. The idea that auxiliary words are expressive because of their connection and relationship is incorrect. This is because the concepts of the material world reflect objects and events in human brains. Despite the fact that such auxiliary words in our language have a sound guise, they are not reflected in thinking.

2. One word expresses several concepts, that is, word is phonetically the same, but its expressions are different, therefore the semantic system of the language is unlimited. For example, the word “qaz” in the Azerbaijani language means the name of bird and the name of fuel. Homonymous words have the same or different origin. Examples of the same origin are the word “gas” (bird species, “qaz-fuel”, “qaz-verb”), the word “bal” (bal is the product of bee, bal is a dance) are language units.

3. A few words express concepts, and synonyms arise in the semantic system of language. For example, the words *dünya*, *cahan*, *aləm* represent one concept. Although synonyms express the same

meaning, they do not coincide with semantic meanings. In some cases, these words are not used interchangeably. Thus, while “dünya müharibəsi” is possible, it is impossible to say “cahan müharibəsi”. However, the type of synonyms called duplicates overlaps in all styles.

We suggest that options available to solve these problems lead to the fact that this ratio is usually interpreted in a direct way. The role of language and thinking contradicts the expression of logical categories. However, the complexity of language and thinking, their specific cognitive and communicative components are specifically entwined, and the features of their functioning in various areas of human activity are ignored.

Whorf (1977) believed that human behavior is explained by linguistic factors. He began his career as a security inspector and therefore gave an example from this industry. For example, workers smoked near the vat with the inscription *Empty gasoline drums*. The bottom of these tanks contained residual gas and hazardous gas. People looked at the schedule with reassuring words. This also applies to the adjective *inflammable*. The prefix *in* is the prefix of negation. This word was later replaced by the word *flammable*.

From these observations, the scientist concluded that the concepts of time and matter were not transferred to everyone in the same form. They depend on the nature of the language. Grammar and logic do not reflect reality; they change from language to language. According to Whorf (1977), if Newton’s laws were used in the Hopi language, the world would be different.

“The word in the period of the origin of folklore was not yet a sign that awakens a corresponding thought in mind; people have not yet been able to think abstractly. Their thoughts, like words, are pictures” (Krushevsky, 1998, p. 25). Owing to the law of association by similarity, words must fit into language systems or nests in mind, and according to the law of association by adjacency, form rows (Akimova, 2012). The word expresses understanding about the subject, but it does not define specific objects. For example, botanical concepts like Uncraut (weed), Obst (fruit) and Gemus (vegetable) are pure ideas created by human ыштв. If there is no special name, it is not reflected in language. The names of objects and events in different languages are also different. For example, the leg is expressed in many European languages in two words: *leg – foot, Bein – Fuss, pied – jambe*.

It is assumed that the Eskimo language contains 100 words for snow and 500 words in Arabic for horses and camels. Nowadays, linguists consider it as an exaggeration. In many cases, this diversity is the name of object, depending on how it is reflected in society.

Supporters of the theory of language relativity call for the uniqueness of different peoples and their national identity. Advocates of the idea of identical grammatical and logical categories combine the logical thinking that underlies national grammar. Apparently, the truth is somewhere in the middle.

The language can be compared with glasses with multi-colored lenses. If a person has a pink or blue lens, he or she will see everything in pink or blue, but the size of objects will be the same for everyone.

## 7. Conclusion

The author can draw the following conclusions:

The existence of word is objective. In different languages, the motivated expression of words differs from each other in character and meaning.

A sentence is a materialization of judgment in speech. Despite the fact that many philosophers deny the close connection between judgment and proposition, it should be noted that it is unlawful to deny this connection. A sentence is based on a statement, and a statement is the core of a sentence. If a statement exists, then it should be in a sentence or vice versa.

A word is a sign, as well as a special essence of man between his inner world and external events. Learning foreign languages is a new perspective, a new worldview.

In fact, grammar and logic do not reflect material reality. They are characterized differently depending on the structure of languages of different peoples of the world. In other words, the logic and grammar for each language is directly dependent on the mental thinking and cultural worldview of peoples.

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