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# RUSSIAN AS A SYSTEM LANGUAGE OF THE HUMAN BRAIN

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Article history:		Abstract:
Received: Accepted: Published:	24 <sup>th</sup> September 2023 20 <sup>th</sup> October 2023 28 <sup>th</sup> November 2023	Language is not just a means of communication, but also a key element in the formation and expression of thinking. This article examines the uniqueness of the Russian language in the context of its impact on the human brain. The distinctive features of the grammar, structure and vocabulary of the Russian language are discussed in the light of their influence on systemic processes in the human brain.

**Keywords:** Russian language, cognitive processes, language impact, grammar, vocabulary, cultural aspects, emotional intelligence, linguistic plasticity, international experience, business environment, cultural dialogue.

Language is an integral part of human culture and communication. In the process of evolution, language has become not only a means of transmitting information, but also a tool for forming and structuring thinking. The Russian language, as one of the richest and most complex, has features that affect the functionality of the human brain.

The Russian language is characterized by a rich grammatical structure. Verb aspects, cases, numbers and other grammatical categories create many variations in the expression of thoughts. Studies show that learning such a complex grammar requires the active participation of the brain, stimulating processes related to memory, analysis and abstract thinking.

The Russian language has an extensive dictionary, including many synonyms and words with different shades of meanings. This contributes to the development of imaginative thinking, allowing you to express subtle nuances and emotional states. Research links the diversity of words and imaginative thinking with the development of creativity and the ability to intellectual analysis.

The Russian language is famous for its ability to create multi-valued constructions. This requires the brain to constantly analyze the context and choose the most appropriate meaning. This process activates the areas of the brain responsible for making decisions and dealing with uncertainty.

The connection between language and thinking is manifested not only at the level of grammar and vocabulary. Different language structures can influence the ways of solving problems, the perception of time and the formation of concepts about the world. Thus, the Russian language forms not only the ways of expressing thoughts, but also the approach to thinking itself.

The Russian language, with its unique grammar and morphology, has a significant impact on thought processes. Various forms of words and grammatical constructions require the brain to actively process information. For example, the difference between the specific forms of verbs can stimulate abstract thinking and develop the ability to think analytically.

The Russian language is famous for its ability to express emotions accurately and richly. The abundance of verbal means to convey feelings creates a special mentality where emotions become an integral part of communication. Research shows that the expressiveness of the Russian language contributes to the development of emotional intelligence and understanding of the emotional states of other people.

In the modern world, where multilingualism is becoming the norm, learning Russian provides unique cognitive gains. Studies show that the brains of multilingual people work more actively, which is accompanied by increased concentration and the ability to quickly switch between tasks. The process of learning Russian not only expands linguistic skills, but also stimulates intellectual growth. Acquiring a new language requires enhanced brain activity, which can affect overall cognitive flexibility and the ability to adapt to new situations.

The Russian language is not only a means of communication, but also a system that influences the complex processes of the human brain. Its unique grammatical features, rich vocabulary and ability to create multi-valued constructions stimulate the development of various cognitive functions. Understanding this relationship can shed light on the mechanisms associated with language and thinking, and help in further research in the field of linguistics, psychology and neuroscience.

The cultural aspects of the Russian language also have a profound impact on thinking. For example, the presence of different forms of treatment depending on the level of proximity and formality reflects sociocultural norms. This forms a special approach to interaction and relationships, which in turn affects the formation of the image of the world and social perception.

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The idea that Russian is the "system language" of the brain is a hypothesis. The hypothesis suggests that the language a person speaks affects how he thinks and perceives the world around him. In other words, the language a person speaks can shape his cognitive processes and influence how he interprets information.

The study showed that native Russian speakers have a greater ability to distinguish between different shades of blue than native English speakers. This is due to the fact that there are more words in the Russian language to denote shades of blue, which can train the brain to be more sensitive to the differences between them. Similarly, it has been found that Chinese, which uses a system of symbols instead of the alphabet, improves the visual-spatial thinking skills of its native speakers.

The idea of the brain's "system language" is not limited to language alone, but can also refer to other cultural and social factors that shape people's way of thinking. For example, studies have shown that people from cultures with a strong emphasis on interdependence and social harmony are better at recognizing emotions in others than people from individualistic cultures. In general, the idea of the Russian language as the "system language" of the brain emphasizes the important role that language and culture play in shaping our cognitive processes and how we perceive the world. Although the hypothesis is still being debated and more research is needed to fully understand the relationship between language and cognition, it offers a fascinating insight into the complexities of the human brain and how it interacts with the world around it.

Learning Russian is also associated with language plasticity - the ability of the brain to adapt to new information. Learning a language requires improved attention, concentration and memory, which ultimately strengthens neural connections. This process can have a positive impact on cognitive abilities, such as learning, problem solving, and the ability to think abstractly. The Russian language is also a powerful means of expressing emotions and feelings. The richness of verbal expression of emotions not only enriches interpersonal communication, but also develops emotional intelligence. People who speak Russian can have a better understanding and control of their emotions thanks to a wide choice of words and expressions.

Learning Russian can have a beneficial effect on educational processes. For example, many schools use language learning to develop analytical skills and logical thinking. Teaching in Russian also requires careful analysis and understanding of the context, which can be useful for developing critical thinking in students. The Russian language is not only a means of communication, but also a complex system that influences various aspects of human thinking. His grammar, vocabulary, cultural characteristics and emotional nuances form a unique cognitive experience that contributes to the intellectual and emotional development of the individual. Understanding this connection not only opens up new horizons in linguistics, but also provides key insights for education, psychology and neuroscience.

Learning a language – both native and foreign – is a very complex process that involves various parts of the brain. In the process of learning a language, new information should not just be remembered, it must be reproduced orally and in writing. When learning foreign languages, additional speech centers are formed in the brain, which involve visual, auditory memory, and voice apparatus. Thus, the more languages a person knows, the more brain cells move from a passive state to an active one, the more connections between neurons are formed. And this is the most important condition for the preservation of memory and other functions of cognition. In recent decades, scientists from different countries have seriously studied how the study of foreign languages affects the aging processes of the brain. So, neurologists from the University of London (Andrea Machelia and others) have found that the more foreign languages a person knows, the greater the volume of the cerebral cortex.

With the worldwide increase of multilingual societies, learning Russian provides unique cognitive benefits. Bilingualism and multilingualism are associated with improved attention, problem solving, and thinking flexibility. Learning Russian can be an important component of multilingual education, expanding cognitive resources and promoting cultural exchange. Russian Russian language learning also opens the door for a better understanding of Russian culture and history. This cultural exchange promotes the development of cultural competence and a deep understanding of the diversity of worldviews. This perspective not only enriches intellectual experience, but also promotes global interaction and mutual understanding.

In the global economy, Russian language proficiency can be a valuable asset. Russia plays a key role in global trade and diplomacy, and knowledge of the language can create advantages for successful business. It also helps to strengthen international relations and improve communication in the professional environment. Learning Russian supports cultural dialogue and mutual understanding between people of different cultures. It helps to overcome language barriers, remove stereotypes and form deeper connections. The Russian language, becoming a bridge between different cultures, contributes to the creation of an open and inclusive society in the context of globalization.

**CONCLUSION:** Learning Russian is not only a unique opportunity to immerse yourself in a rich culture and linguistic heritage, but also a door to numerous cognitive and cultural advantages. The ability to think and communicate in different languages enriches personal and professional experience, contributing to global interaction and cooperation in the world.

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