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**PSYCHOLINGUISTICS AND SEMANTICS
IN THE LATE TWENTIETH AND TWENTY-FIRST CENTURIES:
INTERACTION AND INTERDEPENDENCE**

Розглянуто виникнення та розвиток психолінгвістики як окремого напрямку мовознавства. Потреба пояснювати лінгвістичні процеси: мотивацію виникнення, зміни відповідно до розвитку суспільства, перспективи еволюції та інші численні варіативні властивості внутрішньої форми слова змусили лінгвістів звернутися до екстралінгвістичних, а саме психологічних факторів, що є невід'ємною складовою семантичних змін. Висвітлені основні властивості оперування лексичними значеннями багатозначних слів через психологічне сприйняття потреби активізації того чи іншого значення під впливом внутрішньої семантичної «ієрархії» і контекстуального впливу.

Ключові слова: психолінгвістика, психологічний фактор, екстралінгвістичний контекст, багатозначне слово, доступ до лексичного значення, ідентифікація слова.

Introduction. In the 1920s, psychologists began to pay active attention to the nature of language. They considered purely linguistic factors to be insufficient to explain it. Speech reactions were considered by them to be much more complex than speaking or reading. They contain reasoning, desire, dreaming, planning, and, in general, the whole complex of human behavior.

The relevance of the theme is explained by immense activity in studying foreign languages in modern societies and the need to transfer new psychological linguistic categories to the norms of the learner's mother tongue.

Analysis of the research works and publications. Important and influential works on the issue that is considered in the article are the works of the linguists that have formed the basis of psycholinguistic works or who are working hard to highlight new perspectives of the development of psycholinguistics. The analyzed ideas are represented by J. R. Kantor, N. H. Pronko, V. A. Zvegintsev, A. Reber, E. Y. Ilyinova, R. M. Frumkina, D. A. Leontiev, I. Tauschik, R. K. Morris, G. Kambe, K. Rayner, S. A. Duffy, A. Garnham, S. Garrod, A. Sanford, A. A. Zalevskaya, M. G. Gaskell and W. D. Marslen-Wilson.

The theoretical value of the article is that the main tendencies of effective psycholinguistic research of lexical meaning given by representatives of different generations of linguistics and psychologists are considered and valued here.

The purpose is to reveal the views of the prominent linguists and psychologists of the XX – early XXI century on psycholinguistics as the tool for understanding lexical-semantic processes.

The tasks to achieve this goal are:

1. To highlight the views of European researchers of the language of the XX – early XXI century on the possibility of effective cooperation of semantics and psychology. 2. To reveal the principles of people's minds operating different lexical meanings

of ambiguous words. 3. To prove the scientific validity of psycholinguistics for researching semantic changes in different languages.

Main body. It is believed that for the first time the term *psycholinguistics* was used by the American psychologist J. R. Kantor in 1936 as an adjective *psycholinguistic*, and as a noun, *psycholinguistics* was used by N. H. Pronko in 1946 (Rieber 1980: 4).

In the 1920s, psychologists began to pay active attention to the nature of language. They considered purely linguistic factors to be insufficient to explain it. Speech reactions were considered by them to be much more complex than speaking or reading, but such that they contain reasoning, desire, dreaming, planning, and, in general, the whole complex of human behavior.

J. R. Kantor was convinced that anthropological language, which contains customs and traditions, forms the basis, which also contains potential phases of segments of psychological behavior for understanding language reactions. He criticized purely philological data and its interpretation, which dealt mainly with the established forms of social language that prevailed and its periodic variation (Kantor 1922: 268).

J. R. Kantor argued that philological data was not directly acceptable to the psychologist for several reasons: 1) Due to the lack of consideration of psychological facts, philological problems were fully investigated as historical facts. 2) In the first place of interest of philologists was attracted by the generally accepted reactions of language, but excluded new, unfixed reactions as evolutionary prototypes of a standard language. 3) In linguistic research, psychological factors were ignored because we would have to rethink and re-evaluate the “crystallized” products and results of historical reactions and pay close attention to the behavior of today (Kantor 1922: 269–270).

Science is always looking for an opportunity to create or find something new, but it is impossible to create something out of nothing. Therefore, rethinking the existing is the basis for the development of lexical meaning. The graphic and phonetic shell of the word, although they provide more opportunities for obtaining specific scientific results, at the same time limit the innovative linguistic potential, whereas the variability of lexical meaning is simply limitless.

E. Y. Ilyinova writes about the limitation of the material world by biological and physiological possibilities, while mental and linguo-cognitive possibilities, she believes, contribute to the rethinking of the material and the creation of the spiritual (Ильинова 2008: 59).

The psycholinguistic concept of language research was adopted by the vast majority of linguists, and from the middle of the XX century till now psycholinguistics has been considered one of the main areas of research of lexical meaning.

Considering speech as a spiritual activity, V. A. Zvegintsev also attributed linguistics to the psychological sciences. “... speech, ..., which is happening now, or is considered as a manifestation of language, that is happening now, can be the subject of linguistics, as long as psychology, of course, in different relationships” (Звегинцев 1964: 129).

The American cognitive psychologist A. Reber wrote in his article “The Rise and (surprisingly rapid) Fall of Psycholinguistics” about the involvement of a group of young scientists in the Social Sciences Research Council in 1951 to embody the idea

of cooperation between different sciences in psycholinguistics. They planned conferences with "... engineers interested in communication theory, anthropologists with a focus on comparative linguistics, linguists with their applied and theoretical interests and, of course, psychologists with a wide range of interests..." (Reber 1987: 326).

And it worked – psycholinguistics became a new popular field. But after a long time, because of the involvement of various sciences, it became more difficult to distinguish clear boundaries and research methods. From the second half of the 1970s, according to A. Reber, psycholinguistics began to lose rapidly its scientific popularity. Among the main reasons he sees the isolation of psycholinguistics from the rest of psychology, in particular from cognitive psychology, and the prevalence of theory over specific data (Reber 1987: 329).

Due to the unjustified prospects of its development as an effective, well-organized unifying direction, the study of language through psychology began to acquire more individual psychological or linguistic (semantic, grammatical, phonetic) direction.

The interaction of semantics and psycholinguistics is determined by a range of common interests: linguistic, social, and psychological. R. M. Frumkina, saying that psycholinguistics should not be considered as partly linguistics, partly – psychology and partly – the theory of social communications, at the same time refers it to the range of linguistic, psychological and social disciplines (Фрумкина 2004: 6).

This, to some extent, contradiction can be explained by the lack of a single axiom. Due to the reluctance of linguists in the middle of the XX century to study language as a product of psychology, a certain gap was formed between linguistics and psychology, which, according to R. M. Frumkina, was filled by psycholinguistics. Criticizing the blurring of its facets, she notes the weak structure and chaos of psycholinguistics, and being in a certain "gap" between the sciences. "It is mainly a mixture of quality psychology and mediocre linguistics (USA), or mediocre psychology and quality linguistics (Russia)" (Фрумкина 2004: 5).

Much attention in psycholinguistics is paid to the relationship between the concepts of the meaning of a word and its understanding. D. A. Leontiev, analyzing this opposition in the works of psychologists, linguists, philosophers of the late twentieth century. (G. Frege, N. Muskhelishvili, J. A. Schreider, K. Lewis, M. Dammit, G. P. Schedrovitsky and many others), notes the difference of approaches, but also singles out a common feature which everyone agrees with: "... in contrast to the meaning, understanding always indicates the idea, task, intention of the author of the statement, the extra lingual context, the situation of the use of a sign" (Леонтьев 2019: 14).

With the undeniable importance of psycholinguistics in the study of the lexical meaning of "live" languages, the analysis of its achievements for "dead" languages is rather difficult, due to the fact that we have only texts. Attempts to restore the psychological world of such languages will inevitably have a large number of inaccurate assumptions. Thus, psycholinguistics has focused its attention on "active" in the modern world languages, which provide an opportunity to explore the fullness and complexity of the psychological world that surrounds the linguistic form of their existence.

The directions of the development of psycholinguistics are regulated by the needs of modern society. One of the most important directions is international communica-

tion. Understanding what is encoded in the word is the primary guarantee of the development of international society. Mastering the lexical meanings given in dictionaries does not always lead to mutual understanding. To do this, you need to master not the language but speech, and the disclosure of the driving forces of lexical semantics through psychology is one of the tasks of modern psycholinguistics.

Close attention of psycholinguists today in the study of the meaning of the word is paid to the combination of elements of the psychological and social environment of people. Their age, gender, profession, activity, even psychological states are taken into account. By the same linguistic sign, writes the American psycholinguist I. Tauschik, natural language reveals to us how people process information and interpret it into words to combine thoughts (Tauschik, Pennebaker 2010: 35).

That is why at the present stage of research semantics so actively and, it seems, already irrevocably turns to the discourse, which is seen as a form of embodiment of human experience, put in lexical units.

Psycholinguistics of the XXI century actively helps people learn foreign languages not through the traditional grammar and translation method, but through the disclosure of psychological processes of understanding speech ability.

One of the successful modern psychologists of language is I. M. Rumyantseva, who, as a doctor of philology and doctor of psychological sciences, combined her many years of experience in teaching a foreign language with scientific linguistic and psychological research. Speaking five foreign languages, she has developed an Integrative Linguistic and Psychological Training for Learning Foreign Languages. She understands the mastery of foreign speech as “the development of language and speech ability, the processes of perception and generation of speech through special psycholinguistic and psychological means that have a communicative basis and affects all psychological processes, properties and states of personality” (Румянцева 2004: 13).

Thanks to her Integrative Linguistic and Psychological Training, adults with an already formed lexical base of the native language and a certain conceptualization of semantic relations understand the new psychological perception of the internal form of the word by studying not only new graphic and phonetic forms but also new ways of thinking realities of the world with their internal psychological design of lexical units.

That is why to master another language, it is not enough to study a sufficient set of signs – you need to add to your psychology another, to your culture another culture.

Examples of the importance of perceiving a different way of thinking are the use of prepositions, such as in English or German, which reflect a different direction of psychological understanding of physical actions by people of different cultures. In Ukrainian, we play “in sports” (*зрину у/в зру*), and the use of prepositions is determined by the psychological perception of the process. The English, or Germans play sports games, and prepositions are not needed. It can be studied automatically and thoughtlessly as a given, but people who speak a foreign language fluently must accept certain psychological realities of another society that is not typical of them and make them an integral part of their thinking.

Since the 1980s, the study of polysemantic word models has become popular in psycholinguistics. The aim is to reveal the mechanisms by which the human mind pro-

cesses polysemantic words, activating the lexical meaning required by a particular situation, and to determine the correlation of time required by consciousness to process such words with a certain hierarchical arrangement of their lexical meanings.

An important role in this process is given to the context, which when reading can equate the processing time of a polysemantic word, the values of which are approximately equivalent to the processing time of a singular word.

At the end of the twentieth century, the American researcher R. K. Morris divides psycholinguistic studies of the lexical semantics of ambiguous words into two dominant points of view: 1 – models of exhaustive access – all meanings of polysemantic words are activated regardless of the context in which they occur; 2 – selective access models – in the appropriate context, a certain meaning of the word is activated much faster.

Given the existence of these models, R. K. Morris uses the term *meaning dominance* to refer to a range in which one value is more likely to occur than another. She calls words with relatively identical interpretations of lexical meanings *balanced words*, and those in which one interpretation is more likely than others – *biased words* (Morris 2006: 382).

The study of access to lexical meanings of ambiguous words in psycholinguistics is also conducted through different sized contexts. G. Kambe, K. Rayner, and S. A. Duffy consider the analysis of the influence of contexts consisting of one or two sentences to be a disadvantage of most previous studies and suggest considering the effect of the global context to activate the lexical meanings of ambiguous words.

When a local context, given immediately before or after an ambiguous word, is neutral, the one who receives the information singles out one of several lexical meanings based on the general (global) context of the given discourse.

The result of their study is the conclusion that the global context also immediately influences the decision to choose the appropriate lexical meaning of an ambiguous word. When both contexts are used equally, globally contextual information has no additional impact on the local context. In the case of neutrality or inconsistency of the local context, the global context is activated as the dominant factor in determining a certain lexical meaning of an ambiguous word (Kambe, Rayner, Duffy 2001: 370).

The efficiency of psycholinguistic researches has always been valued from different points of view. Three modern psychologists and language researchers A. Garnham from Sussex University, Britain, S. Garrod from the University of Glasgow, Scotland) and, A. Sanford from the University of Maryland, USA joined their forces in the publication “Observations of the Past and Future of Psycholinguistics”. They believe that the generative semantics of the 1980s, which undoubtedly has a penchant for psychology, did not inspire psycholinguistic research. There is still a debate about the connection between linguistics and psychology, and to what extent should language psychology be psycholinguistics? They believe that most psycholinguists are dissatisfied with the excessive complexity of questions about the semantics of words and how they represent information in the individual mind.

They see the theory of mental models, developed in the 1980s and early 1990s by Philip Johnson-Laird and Ruth M. J. Byrne, as revolutionary for rethinking the meaning of a text.

The co-authors note that even without clear answers to the key division of principles of linguistic-psychological concepts in describing the mechanisms of language functioning, sentence research in psycholinguistics was active in the 1990s and continues to be in the 21st century (Garnham, Garrod, Sanford 2006: 7–8).

One of the problematic issues of interest to today's psycholinguistics is expressed by A. A. Zalevskaya who considers "... parallel or sequential search for possible meanings of the polysemantic word and other cases of ambiguity; especially features of understanding of phraseological units..." (Залевская 1999: 73–174).

She uses the term *word identification* as the final stage of its comprehensive analysis (comprehensiveness, again, in different studies will be different depending on the goals and range of research techniques). The identification of the word means "... a complete set of processes occurring in the linguistic and mental activity of people, the product of which is the subjective experience (understanding) of what we are talking about, taking into account emotional and evaluative nuances, the interaction of conscious and unconscious, can and cannot be verbalized ..." (Залевская 1999: 174).

A. A. Zalevskaya borrows the terms *доступ к слову* (*lexical access*) and *узнавание слова* (*lexical recognition*) from the work of the British researcher A. Garnham "Psycholinguistics: central themes", which focuses on its central cognitive aspects of language comprehension. He defines them as *lexical access*, respectively, and *word recognition* (Garnham 1985: 43).

A. A. Zalevskaya arranges the stages of a comprehensive word processing in the following succession: *access to the word* – *word recognition* – *word identification* (Залевская 1999: 174).

M. G. Gaskell and W. D. Marslen-Wilson believe that the parallel activation of lexical ideas is an active modern phenomenon of speech perception in modern psycholinguistics. They are convinced that fragments of an ambiguous word facilitate the recognition of words that are compared with these fragments, just as semantically and associatively related words are compared. The frequency of use is also considered an important condition for the activation of a certain lexical meaning. "Factors such as relative frequency affect this transient (unstable) activation, and the activation of commonly used words and words that fit well with the previous context predominates" (Gaskell, Marslen-Wilson 2002: 222).

Conclusions. Once linguistic processes are explained with the help of psychology the cooperation has no chance to stop. Understanding the principles of peoples' thinking when operating different lexical meanings of ambiguous/polysemantic words gives us a wide range of opportunities to develop ways to help people of different languages and cultures merge into a big international society. Psycholinguistics is an essential part of the knowledge needed for the successful development of methodologies of studying foreign languages and making international cooperation more efficient which is essential for the modern world. The obvious advantages of psycholinguistics make it a prospective science as the food for thinking and discussion here seems endless.

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PSYCHOLINGUISTICS AND SEMANTICS IN THE LATE TWENTIETH AND TWENTY-FIRST CENTURIES: INTERACTION AND INTERDEPENDENCE.

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Abstract

Background: Since the beginning of the XX century psycholinguistics has captured the minds of the researchers who are not satisfied with pure linguistic or pure psychological explanation of how people build up their communication. Speech reactions are considered by them to be much more complex than speaking or reading, but such that they contain reasoning, desire, dreaming, planning and, in general, the whole complex of human behavior.

Purpose: The purpose of the research is to reveal the views of the prominent linguists and psychologists of the XX – early XXI century on psycholinguistics as the tool for understanding lexical semantic processes.

Results: Linguistic laws should take into account a variety of psychological factors which include historical, cultural, and a lot of other factors influencing our way of thinking and reflecting it in the language. Understanding principles of peoples' thinking when operating different lexical meanings of ambiguous/polysemantic words gives us a wide range of opportunities to develop the ways to help people of different languages and cultures merge into a big international society.

Discussion: Obvious advantages of psycholinguistics make it a prospective science due to multiculturalism of the language audience and flexibility of communicating conditions. So, the food for thinking and discussion here seems endless.

Key words: psycholinguistics, psychological factor, extralinguistic context, ambiguous word, lexical access, word identification.

Vitae

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