

Hron
Victoria Vitaliivna
Senior Lecturer,
Department of the Language
Training,
National University of the Civil
Protection of Ukraine,
Candidate of Historical Sciences

COGNITIVE-LINGUISTIC ASPECTS OF POLYGRAPHY RESEARCH: ON THE QUESTION OF THE EFFECTIVENESS OF THE METHOD

The polygraph examination method is, first of all, a method. And in this context, it can be considered both from the point of view of subject-object relations and from the position of functional efficiency. At the same time, each of these parameters is closely related to cognitive processes and the function of language as the main mechanism for structuring human consciousness.

Let us take as a starting point for our reflections one of the many definitions of the concept of "polygraph" that the Internet is full of, and which, nevertheless, boil down to a simple conclusion: "A polygraph (lie detector) is a technical device designed to record certain psychophysiological reactions of the human body to stimuli, with subsequent processing of these reactions and their presentation in the form of polygrams" [4].

It's no secret that stimuli should be understood as special questions, and reactions should be understood as answers accompanied by various psychophysical manifestations. So, we are talking about the so-called second signaling system, which, unlike the first, is unique to humans. And again the definition: the second signal system is "a system of conditioned-reflex connections that are formed under the action of speech signals... It characterizes a generalized reflection of the surrounding reality in the form of concepts, the content of which is recorded in words spoken aloud or to oneself, heard or seen while reading, mathematical symbols, images of artistic works, etc." [1].

So, the idea of polygraph research is based on the assumption that within a common cultural field, certain linguistic signals are capable of producing, to a greater or lesser extent, typical reactions from the emotional sphere of the interviewee. However, a number of scientists, based on practical experience and some theoretical generalizations, think the results of polygraph procedures to be insufficiently objective evidence of the presence or absence of guilt of the suspect.

Considering the outlined situation from the standpoint of cognitive linguistics, it should be emphasized that the skeptics' doubts are justified, since they stem from an understanding of the very nature of the second signaling system, or, more simply, language. It is worth noting here that when we turn to language as a means of communication, we are actually faced with a rather complex phenomenon. Thus, listening consists of the brain's ability to recognize articulated sounds, combine individual sounds into words, and by searching for analogies in an updated

"database", correlate words with corresponding terms, and terms with images, that is, the representation of objective reality in the individual consciousness of the subject. Speaking is accompanied by the reverse process: a unique image – a term – an articulated form – a word. (Reading and writing are even more complex in this sense).

So that the above arguments do not seem unfounded, let us rely on the authoritative opinion of the famous Ukrainian linguist, philosopher, ethnographer, teacher, and public figure Oleksandr Opanasovich Potebnia. Back in the century before last, this prominent scientist concluded that “in addition to the “core”: the delineation of the subject and the connection with it, which was formed in antiquity, has a unique meaning, which each speaker adds” [3]. Dividing the speech act into external form (articulated sound), content (meaning, thought) and internal form (image), O. Potebnia emphasized: “If the image (internal form) correlates with the “closer” meaning of the word that arises in the minds of the addresser and the addressee, since they belong to the same community, then the “remote” personal meaning of the word, being semantically dispersed, is not the same for the speaker and the listener” [2]. Therefore, communication as a creative process always carries a share of misunderstanding, which in the case of polygraph interrogation can significantly complicate the search for indicative information.

By the way, a little later, namely in 1923, English linguists Charles Kay Ogden and Ivor Armstrong Richards formulated ideas related to our topic in the form of a textbook, which became quite popular in Great Britain. Its title, "The Meaning of Meaning," speaks for itself. The main content of the textbook revolves around the so-called "semiotic triangle", which at first glance resembles O. Potebnia's scheme: "symbol - thoughts or references (ideas, stereotypes) - referent (object)." However, the authors have embedded a slightly different meaning in the contextual theory of signs, encoded in the outlined scheme: words and things are connected by the context of their common occurrence. Therefore, word symbols can influence reality and are “the sources of all power over the external world” [5]. In other words, language is a tool of manipulation and can be used to model the behavior of other people. Despite the cynicism of such a conclusion, it should not be ignored when analyzing the results of a polygraph examination.

List of sources used

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