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MODELING OF SPEECH ASSISTANT SKILLS:

PSYCHOLOGICAL AND PEDAGOGICAL ASPECTS

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«Speech assistants» that are able to support arbitrary oral dialogue in natural languages, both in everyday communication and in the context of educational practices, are becoming more widespread. As a result of communication with "speech assistants", they are personified by users (they are personified on the basis of attributing personal properties and features of the human psyche to them). It actualizes the problems of understanding the psycholinguistic foundations and consequences of this process, especially for the younger generation [1]. Goal: to offer technological and grammatical tools for valid discussion and understanding of the role and meaning of "speech assistants" in the educational process, and to counteract their personification.

The research materials are data from open linguistic corpora, statistical data on the spread of

communication bots in network communication, including educational communication. Development of training skills for the Alice voice assistant (Yandex. Dialogues platform) was realized on the basis of Verter network service technologies [2].

The modern communication environment is entering a period of radical transformations based on the use of deep learning technologies for new neural network architectures. A person finds himself in the world of "smart things" (writing, speaking, listening, recognizing, evaluating, able to maintain a random conversation at the level of "understanding" the semantics of speech, predicting the emotional state and cognitive intentions of the interlocutor). The inevitability of this step devalues its discussion in the binary opposition of the categories «good» or «bad». It is critical to prepare effectively and in a timely manner for the inevitable, and therefore to understand its essence and meaning, including in the psychological and pedagogical context. Psycholinguistic foundations for the personification of "speech assistants" are seen in compensatory mechanisms of transference (unconscious transfer of previously experienced in relation to one person, to another person or object) and projection (erroneous perception of the internal as happening from the outside). It should be mentioned that if a virtual actor warns a person about his virtuality, the person (especially a child) still very easily animates him and attributes human qualities to him. And this is probably a consequence of complex and non-removable biological mechanisms [3]. Psychologically, the loss of the ability to distinguish between a person and a virtual interlocutor in a dialogue partner is due to the fact that the human psyche is projective. People spontaneously and unconsciously transfer their own thoughts, feelings, and experiences to program speech agents and communication agents. The mechanisms of personification and projection are founded on the peculiarities of nominative languages, which fundamentally oppose the active subject and the passive object. Linguistically, this is expressed in the metaphorical nature of language as its universal. Reflection on nominative metaphor makes it possible to realize that within this language metamodel, a logical categorical error is committed, in which the object of consideration is transferred from one category to another.

Solutions to emerging problems should be sought in the same area where they occur. In this case, the means of changing the psycholinguistic metamodel are in the language itself. It is possible to make such a change based on an understanding of the mechanism of functioning of

«speech assistants». This understanding cannot be purely theoretical for two reasons:

- the scientific and technological structure of the modern «speech assistant» is very complex and its full understanding is extremely difficult even with significant mathematical, linguistic and technological training;

- even a clear theoretical understanding is not sufficient to overcome the deep unconscious attitudes of compensatory mechanisms (personification, projection, transference) of the human psyche.

A real change in the psycholinguistic model can be made on the basis of specific practical experience of participating in the construction of «speech assistants» based on the creation of individual thematic skills. For example, the Alice speech assistant skills are dialog scenarios that specify which words and phrases the voice assistant should respond to and how. A skill is an additional ability of Alice to perform a specific task, including an educational one [4].

Alice translates the semantic and syntactic constructions which were defined in the skills into text and sends them to the server, where the program processes the information and forms a response that is returned to the user in the form of text, voice, or image. To create a skill for Alice, you need to set the dialog structure, which can be linear or branched (each replica corresponds to several possible answers). Variability is used to enhance the similarity of the voice assistant to a human. The dialogue should be logical and meaningful.

The creation of the skills can be done by the user without direct programming. In this case, you can use network services and platforms for building skills (Verter, Alicebot.Pro, Aimylogic and etc.). To create an educational skill in English, the Verter constructor was used [4], which

provides an opportunity to use dialog templates that simplify the user's work. The created skill «Brest parks» can be recommended for direct use when learning English.

The successful development of «Brest parks» proved that dialog skills for speech assistants can be easily created not only by teachers (developing educational materials), but also by students (completing educational tasks). Independent creation of a skill involves active work with linguistic material, which in itself is significant in language development and can be used in language education. On the other hand, practical work with the skill helps to understand the linguistic technologies underlying «speech assistants», which allows you to overcome their personification.

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