

COGNITIVE ASPECTS OF SIMULTANEOUS INTERPRETING.

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Abstract: This article presents a comprehensive analysis of the cognitive aspects of simultaneous interpreting and the cognitive mechanisms underlying simultaneous interpreting, a complex and demanding task.

Key words: simultaneous translation, cognitive approach, linguistics, extralinguistic information, language, speech, translator.

Among the developed countries, we hope to add our native language to the ranks of international languages, translating from other foreign languages into our native Uzbek language and vice versa from Uzbek to a foreign language directly, that is, without any foreign language intermediary activity is progressing rapidly with pictures. In particular, the field of written translation has been doing extensive work in our country for a long time. However, in recent years, the importance of interpretation, including simultaneous translation, has been increasing with the demand of the times. Simultaneous translation is the formation of a student's ability to translate quickly, accurately, adequately and logically from Uzbek to a foreign language, and from a foreign language to Uzbek. In this way, the tasks of the subject are, first of all, to familiarize students with high oral translation skills with simultaneous translation, its principles, strategies, theoretical concepts, and give practical instructions. The subject of the science is expressed in simultaneous translation and the theoretical and practical issues related to it. First of all, as for the concept of "simultaneous translation", which is the subject of the science, simultaneous translation is the most complex of the types of oral translation. in the type of translation, the translation is carried out using a special device. This is a method of oral translation to deliver the content of the speech to the listeners without the need of an interpreter during the speaker's speech.

Contemporary psycholinguistics has approached the study of simultaneous interpreting through various methodologies. Researchers have long been interested in understanding the psycholinguistic mechanisms involved in simultaneous interpreting in order to improve translation efficiency and training. In this literature review, we provide an overview of research on the psycholinguistic mechanisms of simultaneous interpreting.

Albl-Mikasa and Zimmermann analyzed the eye movements of translators and found that translators rely on top-down processing and use their knowledge of the source and target languages to predict upcoming words. Christoffels, deGroot, and

Kroll found that the process of lexical retrieval is more difficult for simultaneous translators than for monolinguals. Bajo, Padilla, and Padilla found that interpreters with high working memory capacity performed better on simultaneous interpreting tasks than those with low working memory capacity. Moreno, Bialystok, Barak, Schellenberg, and Cepeda found that bilinguals who switch languages frequently have cognitive control, which increases interpretation efficiency. Hervais-Adelman, Moser-Mercer, Michel, and Golestani used fMRI to study the neural correlates of simultaneous interpreting and found that interpreting involves the activation of multiple brain regions. However, the role of stress in the performance of simultaneous interpreters has not been sufficiently studied. This research work aims to fill this gap by investigating the effects of stress on the cognitive mechanisms involved in simultaneous interpreting. The scientific work is aimed at describing the cognitive system of simultaneous translation, its individual elements, and presenting strategies for ensuring stress resistance in each cognitive mechanism. The main goal of this research is to present the psycholinguistic foundations of simultaneous translation.

To achieve this goal, the following tasks are set:

- 1) Description of the cognitive system of simultaneous translation;
- 2) Description of individual elements of the cognitive system;
- 3) To provide strategies for stress resistance in each cognitive mechanism.

This research work uses a qualitative approach, which includes the analysis of scientific literature and the generalization of the results of previous studies on the cognitive system of simultaneous translation. Research materials include print and online resources that focus on the cognitive mechanisms of simultaneous interpreting. The results of this study can be used to further study the cognitive mechanisms involved in simultaneous interpreting and the training of simultaneous interpreters. The research shows that simultaneous interpreting leads to a change in the state of the interpreter's linguistic consciousness, primarily due to the stress load. The stress load is caused by objective factors such as speed of speech, specific features of pronunciation and knowledge of vocabulary, as well as subjective factors such as personal attitude to stress and readiness to overcome it. In order to help simultaneous interpreters in the future to eliminate stress and optimize their work, this research paper emphasizes the element of psychological preparation. The scientific article recommends the production of frequency parameters of brain biorhythms, which helps people to work effectively. This research work emphasizes the importance of studying the effects of stress on the cognitive mechanisms of simultaneous translation. It describes the cognitive system of simultaneous translation, identifies the individual elements of the cognitive system, and provides a strategy for ensuring resilience to stress in each cognitive mechanism. The results of this research work have practical significance for training simultaneous interpreters and improving performance under

stress. Interpreting activity is closely related to the theory of speech activity, which includes motivation, purpose, action plan development and implementation through a specific language. contains elements. The main purpose of translation is to facilitate communicative actions between communicators through the intervention of the translator. Depending on the type of translation, communication takes place over time (literal translation), with fixed intervals for real-time translation (consecutive, paragraph-by-phrase, visual-oral translation) or without time intervals (simultaneous translation). Unlike other forms of interpreting, simultaneous interpreting requires the interpreter to make informed interpretation decisions almost instantaneously, without the opportunity for the interpreter to think in detail and then translate.

Due to severe time constraints, a simultaneous interpreter must have extensive experience and stress tolerance. Therefore, it is very important to study the cognitive mechanisms activated by the simultaneous interpreter and to identify approaches to increase their resistance to stress. was carried out. The cognitive mechanism is the main element of the cognitive system in this type of translation, it ensures its continuous operation and includes cognitive structures and operations. Each cognitive mechanism of simultaneous translation is responsible for a certain segment of the process, in which the translator must engage in specific mental processes. These mechanisms can be influenced by internal and external factors, such as cognitive load and task complexity. It is worth noting that the cognitive mechanisms of simultaneous translation usually work simultaneously with each other due to the specific characteristics of this type of speech activity. In some cases, they can complement each other to improve performance.

Based on practical experience and scientific research, the main cognitive mechanisms that are crucial for the successful functioning of the cognitive system in simultaneous translation include:

- (1) the mechanism of perception and understanding, which includes the interpretation of the incoming speech signal and the understanding of the message;
- (2) incoming data, which includes the processing engine receiving and organizing relevant data from the source language;
- (3) a probabilistic prediction mechanism that allows the interpreter to anticipate and predict the content and structure of the upcoming speech;
- (4) a language switching mechanism that allows the translator to quickly switch between source and target languages;
- (5) translation variant generation mechanism, which involves generating a semantically and grammatically appropriate translation in the target language; and (6) a synchronization mechanism that allows the translator to coordinate the output with the incoming speech signal and maintain translation fluency and consistency.

Given the demanding and stressful nature of simultaneous interpreting, it is important

to identify ways to increase resilience to stress and improve the performance of cognitive mechanisms. Possible options may include training and practice to improve cognitive skills such as attention, working memory and executive control, as well as the use of technological tools such as machine translation and speech recognition to reduce cognitive load.

Perception and Comprehension Mechanism The Perception and Comprehension Mechanism is a crucial cognitive mechanism activated by the simultaneous interpreter as the first step in the simultaneous interpreter's cognitive system. The successful operation of this mechanism is very important for the overall success of the simultaneous translation activity. Perception of the speech message is a subjective mental process of reflecting the objects and events of reality mediated by language under the influence of subjective factors such as motives, goals and mood. Deverbalization of information occurs as a result of this process. Comprehending a speech message is the mental process of deriving the meaning of a word and re-expressing it in another form of consolidation, working at the levels of words, sentences and text. The level of language competence of a person affects the process of understanding that occurs at all language levels and allows the translator to create an image of the information conveyed by the speaker. Which can be important stressors. An interpreter may need to use several sounds of neighboring words to create an image of the information conveyed by the speaker, which provides a basis for interpreting a large part of the speech and the speaker's intent. Interpreters can benefit from developing strategies to adapt to the speaker's speed and intonation, as well as from improving their language skills, in order to increase their resilience to stress. Also, the use of abbreviations that are familiar to a certain audience can create special difficulties for the translator to perceive and understand. As a result of not knowing these abbreviations, a lexical break occurs in the translator, and as a result, the word is omitted. This, in turn, causes the failure of the mechanism of understanding in translation. In order to increase the stress resistance of this cognitive mechanism, simultaneous interpreters must have the ability to work with representatives of different groups and audiences used in their activities. should know. Therefore, continuous training to listen to different pronunciation forms of speech characteristic of certain speakers and expanding knowledge of special terminology helps to simplify cognitive operations of perception and understanding of speech in a foreign language by a simultaneous interpreter, and allows for a more accurate interpretation of the data.

In conclusion, this research study investigated the role of stress in the cognitive mechanisms of simultaneous interpreting, which is understudied in modern psycholinguistics. The study aims to describe the cognitive system of simultaneous translation, its individual elements, and to present strategies for stress resistance in each cognitive mechanism. Through a qualitative approach, this research paper analyzed the scientific literature and summarized the results of previous studies on the cognitive

system of simultaneous interpreting. The results of the study indicated that simultaneous interpretation causes the interpreter's linguistic consciousness to change due to stress and pressure. The stress load is caused by objective and subjective factors, and scientific work recommends that each translator create his own strategies to help translators work effectively. Cognitive mechanisms of simultaneous translation are the main elements of the cognitive system responsible for mental processes, internal and external, determined as the influence of factors. Research has shown that cognitive mechanisms work concurrently with each other, and in some cases, they can complement each other to improve performance. The processing mechanism and the perception and comprehension mechanisms are crucial for the successful functioning of simultaneous interpreting. The results of the research are of practical importance for training simultaneous interpreters and improving performance under stress. Further research may focus on developing more effective strategies for stress resilience and optimizing the cognitive mechanisms of synchronous interpretation. Overall, this study contributes to the understanding of the psycholinguistic underpinnings of simultaneous interpreting and highlights the importance of stress tolerance in optimizing performance.

References:

1. Gafurov I., Mominov O., Kambarov N. Theory of translation study guide - T.: Tafakkur bostoni, 2012 - B.167
2. Yusupov U. Hybrid linguistics of English and Uzbek languages. - T.: Akademnashr, 2013. – B.122.
3. Kh. Hamidov, N. Ismatullayeva, S. Ergasheva Simultaneous translation (tutorial). - Tashkent: TDSHI, 2017 - B.8.
4. Mannopov J., Kholmatova A. Formation of the competence of the teacher of vocational education for independent pedagogical activity // Problems and prospects of development of professional-pedagogical competence of teachers in the continuing education system: Resp. materials of the scientific-practical conference. — Tashkent: TDPU named after Nizomi, 2013. — 209 p.
5. www.ziyonet.uz
6. Educational-methodological complex on the module "Innovative educational technologies and pedagogical competence". — Tashkent, 2017. — 230 p.