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Human Factor in Translation of Aviation Scientific and Technical Literature

The article deals with a phenomenon of human factor in translation of aviation scientific and technical literature, aviation terminology in particular. Human factor is extremely important in the field of aviation, because even a slightest mistake of a translator/interpreter can lead to fatal consequences.

The pace of development of science and technology in modern process of globalization is growing every day, enhancing international relations and bringing international scientists and technologists together in international projects to demonstrate technological advances. The technological revolution has led to increased information and communication processes, resulting in a rapid increase in the number of scientific texts in different fields.

Aviation is one of the youngest fields of technology. Modern aviation vocabulary is subject to the general law of language: its formation is a complex of quantitative growth and qualitative change, it is a system in motion. It covers the names of aviation concepts that appeared before, derives from other languages those elements which it lacks, adding new, those that relate to concepts that have just emerged [2, p. 17].

Aviation sublanguage of the English language is rich and varied. First of all, this is due to the fact that this language was chosen as international language of aviation. A great part of the scientists' studies, recommendations to organizing interaction of aviation specialists, which are developed by international aviation organizations concern the English language.

The translation of aviation literature differs significantly from the translation of belles-lettres, newspaper articles, etc. Scientific and technical texts are characterized by a special style that sets them apart from other types of texts. In translation process of such texts this feature creates additional difficulties.

Language of scientific and technical literature differs from everyday language or languages of belles-lettres by certain lexical, grammatical and stylistic features. V.N. Komissarov claims that the defining features of scientific text are its information content, consistency, accuracy, objectivity, and clarity [3, p. 112].

Thus, translation of aviation scientific and technical literature is a difficult and challenging task for a translator, and even a slightest mistake here can lead to fatal consequences. So, here comes a human factor. The concept "human factor" is used in many sciences: philosophy, sociology, psychology, pedagogy, medicine, management science, etc. And although the concept of "human factor" acts as an interdisciplinary concept, there is still no unanimity in its interpretation. The term "factor" in scientific research is used in the meaning of the cause, the driving force

of any process or phenomenon that determines its character or one of its characteristic features. In a generalized form, the human factor is defined as a complex of the basic social qualities of a person historically formed in society, namely: value orientations, moral principles, norms of behaviour, life plans, level of knowledge and awareness, the nature of labour and social skills, settings and perceptions of personally significant elements of social life - social justice, human rights and freedoms, and civil duty.

Considering human factor in terms of linguistics, it is the main concept in pragmatics. Pragmatics examines all the conditions in which a person uses language signs. Here it means the conditions of adequate choice and use of linguistic units in order to achieve the ultimate goal of communication - the impact on the recipient.

There is also the notion of "pragmatic factors of translation", which covers the facts in both linguistic and extra-language order. Often pragmatic factors of translation include genre-stylistic features of the texts of the original language and the language of translation, their unequal pragmatic value, the functional role of the verbal sign in a particular message, the pragmatic task of a translator. These factors also include the national and cultural specifics of the recipients of the original and the translation, the background knowledge of the participants in the communication, their socio-psychological characteristics.

Safety in aviation transport concerns not only passengers. This concept also applies to the safety of air carriers, the population in a zone of possible air accidents, cargoes, vehicles and facilities, the environment that can suffer as a result of such accidents.

The term "human factor" has grown increasingly popular as the commercial aviation industry has realized that human error, rather than mechanical failure, underlies most aviation accidents and incidents. If interpreted narrowly, a human factor is often considered synonymous with crew resource management or maintenance resource management. However, it is much broader in both its knowledge base and scope. Human factors involves gathering information about human abilities, limitations, and other characteristics and applying it to tools, machines, systems, tasks, jobs, and environments to produce safe, comfortable, and effective human use. In aviation, human factors is dedicated to better understanding how humans can most safely and efficiently be integrated with the technology. That understanding is then translated into design, training, policies, or procedures to help humans perform better [1].

It should be noted, that the ways of taking into account the human factor are traditionally related to the work of the flight crew and to a lesser extent - the work of air traffic controllers. Unfortunately, less attention is paid to the quality of translation of aviation documents, technical papers, service instructions, and other aviation-related writings. This is a significant disadvantage, since it is clear that every human error in translation of the abovementioned documents may affect flight safety.

Misunderstanding is the most common and widespread phenomenon that is caused by mistakes in translation of aviation literature. One of the main problems in the translation of scientific and technical texts is the homonymy of terms - a phenomenon in which lexical elements are identical in form, but quite different in

their meaning. The term "homonymy" is very common because the semantic form of word formation is widely used in terminology systems of various branches of science and technology, aviation in particular, when the existing form of the word obtains another specific meaning. In order not to mix the terms up, a translator should possess a considerable wealth of knowledge, taking into account all the information needed to understand the term, and thus the meaning of a phrase or a sentence, accurately and correctly and to avoid misunderstanding.

Moreover, different terms in aviation field may reveal the sustainability of their meanings differently in various microcontexts. In most cases the translation of such words can hardly depend on the context and be the same in different word combinations, such as in the case of the term **engine**: *jet engine* – *реактивний двигун*; *engine types* – *типи двигунів*; *gas turbine engine* – *газотурбінний двигун*; *engine shaft* – *колінчатий вал двигуна*. Sometimes, however, aviation term may be translated differently in different combinations (compound terms). Thus, the Ukrainian equivalent of the word **strut** is **сміюка**, but in the following compound terms it is translated differently: *folding strut* – *складна опора (шасі)*; *landing gear strut* – *стояк шасі*; *compressed shock strut* – *обтиснутий амортизатор*. Translating such difficult terms, it is necessary to look up their translation in a dictionary and take into account the peculiarities of the concepts that the term describes.

Conclusion

To sum up, in order to avoid misunderstanding and serious consequences, it is necessary for a translator in the field of aviation to know this branch of science well, to understand the meaning of the term in a source language and to know the terminology of a target language, to have a sufficient amount of background knowledge, as well as the ability to search for new concepts, lacking in dictionaries, to be able to use various encyclopedic reference books, the Internet, to develop professionally, and the last, but not the least, to have the opportunity to consult a specialist in this field.

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