SCIENTIFIC TRANSLATION AND BASICS OF GENETICS TERMINOLOGY
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Abstract: *this article highlights the study of analysis of terminology on molecular biology and the problem of ambiguity and structural analysis of terms. The study research explores a number of theories of different linguists, scientists and terminologists on scientific texts. It reveals structural and semantic peculiarities of English molecular biology terminology and looks through the theories of researchers related to word formation of molecular biology terms.*
Keywords: *genetics, DNA biology, molecular biology, biotechnological terminology.*

The second half of the twentieth century mankind saw a great number of remarkable advances in biology, particularly in DNA Biology and Genetics. Francis Crick and James Watson discovered the twisted-ladder structure of deoxyribonucleic acid DNA, the molecule that contains the hereditary information for cells in 1953. They definitely marked a milestone in the history of science and gave rise to modern molecular biology. Since that time, new information has arisen everyday on biotechnology industry, namely, on human DNA research, genetic engineering, rapid gene sequencing. Many incredible current advances in genetic fingerprinting, forensic DNA typing, the mapping of the human genome, all have their origins in Watson and Crick's work. Thus, above mentioned information has to be transformed into other languages. The work on the study of biological terminology has a worldwide scale. The significance of this work is very essential, since the terminology that serves Molecular biology and Genetics is one of the richest terminological systems. According to various sources, there are 100,000 terms in it, which is much more than in any other scientific discipline. Allocate up to 10 main areas of biology, such as biotechnology, DNA-related literature, biochemistry, biology, zoology, botany, geology, biodiversity, environment, health issues, food, virology, medicine and research studies related to understanding the interactions between the various systems of a cell, including the interrelationship of DNA, RNA and protein synthesis each of which has its own particular system of terms. Vast majority of challenges that the translator faces in the world of DNA Biology is that it is much specialized field. And with it comes much in the way of expert language that not everyone knows the specific biotechnological terms. Therefore, it is more advisable to call on DNA experts from a range of different biological institutions to help when it comes to translating molecular and cellular biotechnological documents. Since the translation process should be interpreted with the highest level of accuracy and DNA expert knowledge.

Molecular and cellular biotechnological terminology is one of the most complicated and challenging. The qualitative translation of DNA-related documents have a number of features, such as translating specific vocabulary, ambiguous abbreviations, formulas, clinical trial, scientific findings, specific data, facts, research and investigations on biotechnology industry. The most difficult part of the translation work has been to transfer the terminology specific to this field. As for general terminology as a discipline, Pozzi [1, c. 16] states that “the ancient process of naming concepts and objects belonging to a special subject or field constitutes an essential part of what is now known as the discipline of terminology”. The terms should be appropriate translation equivalents adapted in spelling and should be found in up-to-date parallel texts that are representative of the field. Cabré insists that it is essential to keep to the standardisation of terms to exclude the risk of naming the same concepts with variants of terms. “The ultimate goal is the achievement of accurate, modern and unambiguous professional communication”. Biotechnological terms distribute by their structure in this way: one-word lexemes and combination of words. Among one-word terms there are simple words, derivatives and complex.

Dominated word building suffixes are: ***-ion:*** *replication, reproduction, bioremediation, pollination, hybridization;* ***-ing:*** *cloning, splicing, sequencing, inbreeding, crossing mapping, profiling;* ***-ance (-ence):*** *dominance, inheritance, sequence, resistance;* ***-er:*** *transfer, marker.* Binomial expressions, that is, terms, composed of two full meaning words, are mainly the following structural types: ***N + N:*** *nucleotide sequence, pesticide resistance, resistance management, semantic codon, stem cell, radiation genetics, gene therapy;* ***A + N:*** structural gene, asexual reproduction, bacteriostatic agent, biological resourses, monoclonal antibody. We have looked through number of theoretical views of researchers, linguists and scientists in the sphere of scientific terminology and biotechnology industry. Translating biotechnological terminology, firstly, requires a background in DNA Biology and Genetics.

Secondly, biotechnological translation is an unequalled field in which foreign language expertise is not the only requirement for preparing a professional translation. The translator need to not only be a native speaker of the language the document is being translated into, but must also have subject matter expertise in the DNA

Biology and Genetics. Between shorthand and industry specific jargon, the biotechnology industry has a language of its own.

Thirdly, if a biotechnological translator does not have a basic background in biotechnology sciences, namely in DNA Biology and Genetics studies, then they are the wrong persons for the translation.

References

1. *Pozzi, Mariá.* Terminology today. In Terminology, LSP and Translation. Studies in language engineering in honour of Juan C. Sager, ed. by Somers, Harold, 2001. P. 15-33.