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TRANSLATION OF ELECTRICAL TERMINOLOGY FROM ENGLISH INTO UKRAINIAN

The exponential growth of information technology that the world has witnessed at this point in time has led to mass publicity and the emergence of various ways of mass communication, which has facilitated and increased the world's direct access to knowledge and to scientific and technical progress. This raises the practical issue of transferring this flood of information and communication in order to serve people. Language for specific purposes within technology is especially complex and further divided into various technolects, covering more specific areas like building, electronics and engineering. Technical translation as a sensitive subject demands a high degree of consistency and accuracy in transferring the source text to the target language. Like many occupations, electricians have their own professional terminology and jargon. As a hands-on industry, these terms play an important role, allowing for precision and ease of communication between contractors and customers, teams and individuals. The purpose of this study was to investigate what strategies may be used when translating an electrical specialised vocabulary from English into Ukrainian. In this study, the methods of translating electrical terminology were analysed. The specific aspects of terminology chosen were general technical terms, industry (electrical) terms and contract terms. The findings of the current study show that that formal equivalence works well with systematised terminology such as the SI system, while industry terms and contract terms tend to be more ambiguous and therefore need to be approached in a different manner: with dynamic equivalence or oblique translation.

Technical translation is far more than just translating any specialised language and key terminologies accurately. Dealing with technical specialised translation is quite often a challenging task and may require much effort and creativity from the translator, as well as the profound knowledge of specialised terms in the source and in the target languages.

Keywords: electrical terminology, translation, language for specific purposes, direct translation, componential analysis, dynamic equivalence, oblique translation.

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ПЕРЕКЛАД ЕЛЕКТРИЧНОЇ ТЕРМІНОЛОГІЇ З АНГЛІЙСЬКОЇ МОВИ НА УКРАЇНСЬКУ

Мова за професійним спрямуванням у галузі технологій особливо складна й поділяється на більш конкретні галузі, такі як будівництво, електроніка та інженерія. Технічний переклад вимагає високого рівня послідовності та точності передачі вихідного тексту цільовою мовою. Як і багато інших професій, електрики мають свою професійну термінологію та професійний жаргон. Ці терміни відіграють важливу роль, забезпечуючи точність та легкість спілкування між підрядниками та замовниками, командами та приватними особами. Метою цього дослідження було дослідити стратегії при перекладі електричної спеціалізованої лексики з англійської на українську мову. Вибірку термінів склали загальні технічні терміни, галузеві (електричні) терміни та термінологія контракту. Результати нашого дослідження демонструють, що формальна еквівалентність добре спрацьовує при перекладі систематизованої термінології, тоді як галузеві терміни та термінологія контракту, як правило, є більш неоднозначними, і тому їх потрібно перекладати за допомогою динамічних еквівалентнтів або непрямого перекладу.

Ключові слова: електрична термінологія, переклад, мова за професійним спрямуванням, прямий переклад, компонентний аналіз, динамічна еквівалентність, непрямий переклад.

Relevance of research. Translation has played a significant role in communication between nations and cultures. Without translation, modern technology could never have been transferred worldwide. The act of expressing scientific concepts is extremely challenging as it requires accuracy, knowledge and understanding of the ideas behind the terms. Difficulties can arise from the fact that the language of science and technology has its own distinguished terminology. Terms are the key concept in the translation of any kind of technical text. In translating technical terms, one is often faced with the problem of neologism and non-equivalence. Such problems arise due to the rapid development of science and technology around the world which make it difficult for terminologists and specialists to keep pace with the huge numbers of terms that continually enter the language. Like many occupations, electricians have their own professional terminology and jargon. As a hands-on industry, these terms play an important role, allowing for precision and ease of communication between contractors and customers, teams and individuals. The job of an electrician is extremely varied. Spanning both domestic and commercial, the range of tasks required may include full electrical testing, re-wiring, fuse board upgrades, lighting systems, designed and installed, lighting repairs, emergency lighting, heating controls, boiler wiring, fire detection, home alarm systems, data cabling, maintenance and repairs, CCTV and access controls, testing and certification. Each and every job calls for the use of different tools, equipment and expertise, which is why electricians have their specific jargon with the extensive list of electrical terminology.

Analysis of recent scientific papers. For decades, a number of studies in the field of technical translation tried to explore methods of translating technical and scientific terminology [1; 3; 5; 7; 8; 12]. In our study, we use

different translation models described by Jeremy Munday in "Introducing Translation Studies" [9] with the main focus on Nida's equivalence and equivalent effect as well as Vinay and Darbelnet's model of direct and oblique translation with an overview of theories regarding terminology and language for special purposes (LSP) [2; 6].

Formulation of the problem. Technical translation as a sensitive subject demands a high degree of consistency and accuracy in transferring the source text to the target language. The translation of technical terms generally throws up many challenges. Although some terms can be translated without any difficulty, others are extremely difficult to translate. In technical and scientific translation, problems of terminology occupy a central position. The quality of scientific and technical translation hinges upon the accurate rendering of concepts and their terms. Judging from data in dictionaries of technical terms, the majority of terminology consists of more than one word; among these, the vast majority are noun phrases, which constitute the central part of multi-word terminological units in probably all fields [4; 11].

The aim of this paper is to investigate what strategies may be used when translating an electrical specialised vocabulary from English into Ukrainian. The main focus will be on translating general technical terminology, industry terms and contract terms.

In the discussion from the point of view of the science of translation the term "equivalence" plays a central role. It expresses the correspondence of pairs of terms from the source and target language as far as their contents are concerned. The functional equivalence of terms is aimed for. So the act of translation doesn't mean carrying out a word-for-word translation of terms from the source language into the target language; rather the contents of the terms must be transferred. The translation process is concerned with achieving functional equivalence between two terms. There are various degrees of equivalence. Ideally, the four levels of equivalence can be represented as follows:

1. Complete conceptual equivalence
2. Partial equivalence, overlapping
3. Inclusion; a term merges into another
4. No conceptual equivalence

The postulated ideal typical equivalence, one-to-one correspondence, can hardly ever be achieved in practice. Because unambiguous definitions are almost impossible, an unbridgeable gap between the source and language will usually remain. Because the meaning of a term can only be worked out completely from the context, it is always a case of interpretative translation, based on interpretations and judgements. Translating represents a process in which there is a great variety of possible interpretations. An adequate translation variant, therefore, means getting to the "heart of the matter".

Technical translation often includes translations performed in such diverse fields as law, business, religion, politics, etc. In scientific literature, technical translation and specialised translation are sometimes treated as synonymous. Aguado de Cea & Álvarez de Mon y Rego state that "technical translation refers to the process of translating those texts belonging to what are called specialised languages and is usually classified along with other varieties such as legal translation, scientific translation or the translation of medical texts" [1, p. 289]. Traditionally, specialised translation has been defined drawing on the dichotomous pair general language vs. specialised language or language for general purposes vs. language for special/specific purposes. Language for specific purposes came into being as a result of more specialised knowledge in a wide range of subject fields such as law, trade, technology and communication. Special language developed since there was a need for professionals to be able to communicate on different levels of specialisation and in different contexts. Ingo R. also points to the fact that LSP within technology is especially complex and further divided into various technolects, covering more specific areas like building and electronics. Ingo [6, p.101] also emphasises that in special language, or terminology, the term in question describes a concept, usually a reference to something outside the language such as a product or a mechanical part. In order to establish the correct term for the translation at hand, Ingo describes different systems that may be used [6, pp.101-103]. The logical system is based on similarities between concepts such as fluid – beverage – tea, where all levels have qualities in common. The ontological system is instead based on relations in time or place such as lamp – light bulb and thus describes parts of a whole. These structural systems can generate either hierarchical diagrams or systematic lists, which enable the translator to establish the correct corresponding term by comparing the levels on which the terms exist [6, pp. 103-105].

This theoretical approach to terminology also corresponds well to the suggestions regarding componential analysis made by Nida [9, p. 38]. Terminology can be divided into different levels of specialisation depending on situation and user. The highest level would be that at which communication takes place between experts, and the lowest level when information is aimed at a layman [2, p. 64-65]. Focus in the present study is on three aspects of special language used in electrical field: general technical terms, industry terms and contract terms.

Technical terms can be described as a set of words used when communicating information concerning technical subjects. For the purpose of the present study, a set of words shared by different subject fields such as physics or mathematics is considered as general technical terms. Terms like "alternating current", "voltage", "resistance", and "frequency" can be regarded as general since they can be found within a wide range of subject fields. In order to facilitate communication and minimise misunderstandings, a great number of terms are standardised, both officially by organisations and unofficially by so called end-users. The international nature of

science demands standardisation of nomenclature and units of measurement to simplify international communication. A system of importance to our study is the International System of Units (SI) that is a structured list of units of measurement such as length, weight, and time, no matter where in the world measurement is performed. The units used in this system are referred to as the "SI units".

When the terminology in use is no longer general but is instead connected to a specific field, such as electrical installation, the specific vocabulary will be referred to as industry terms. This type of vocabulary is specialised, provides terms on different levels of specialisation and occurs in a specific field. It is also is described by Cabré as "a necessary medium of expression and professional communication" [2, p.11]. Terms such as "ground fault", "circuit interrupter", "recessed lighting", and "light-emitting diode" exemplify the suggested scope of industry terms in the area of electrical installation. Many of them are multi-word units such as earth leakage circuit breaker, neon voltage tester, or small Edison screw.

The job of an electrician also involves contracting, which in turn creates the need for translation of some legal terminology. Terms like "electrical installation condition report", "local authority building control", "commissioning", "handover", "management", and "fees" are examples of terms that occur in connection to contract writing.

General technical terms could often be translated using Vinay and Darbelnet's strategies for direct translation [9, pp. 56-57]. Regarding industry (electrical) terms, the analysis shows that the number of synonyms increased, thus making the choice of correct translation more difficult. The importance of componential analysis in the form of timelines, as well as dividing the process into parts, was evident. This method was applicable also regarding contract terms, but here the structural analysis was more focused on the hierarchical relationship between the terms.

One of the challenges of translating electrical terms is the presence of neologisms that complicates the work of the translator due to problems like the lack of equivalence, the lack of consistency in the translations, and the low circulation of terminology. In such cases, translators may need to offer explanations rather than translations of some terminologies. The other issue is the local names which do not exist in target language/culture such as "Federal Energy Regulatory Commission" or "Western Underground Committee". Abbreviations constitute an additional challenge for translators and require reformulation of English abbreviations to Ukrainian (GFCI – Ground Fault Circuit Interrupters; DMM – Digital Multimeter; SCR – Solid State Relay). In most cases the order of initials change due to difference in the grammatical structure of the two languages.

Conclusions. The success of technical communication in an international context depends on translation. Increasing internationalisation raises the question of the status of the transfer of meaning and the act of translating with a new urgency. Technical terminology is extremely rich, and is constantly updated. Technical translation is far more than just translating any specialist language and key terminologies accurately. In fact, dealing with terminology in specialised translation is quite often a challenging task and may require much effort and creativity from the translator. The most important in technical translation is achieving functional equivalence between two terms. It requires an astute translation of technical terms to develop much specialised terminology, and to accomplish this task, technical translators must be equipped with the profound knowledge of the specialised terms of the particular field, both in the source and in the target languages to give meaning to the text.

The findings of the current study show that that formal equivalence works well with systematised terminology such as the SI system, while industry terms and contract terms tend to be more ambiguous and therefore need to be approached in a different manner: with dynamic equivalence or oblique translation.

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