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MASTERY OF TECHNICAL TERMINOLOGY IN ENGLISH

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ABOUT ARTICLE	
Key words: Circumstances, science, machine- building enterprise, solicit, online, flashcards. Received: 06.03.2024 Accepted: 11.03.2024 Published: 16.03.2024	Abstract: Gaining a thorough grasp of the specific vocabulary utilized in a variety of professions, including science, technology, engineering, mathematics, medical, law, finance, and many more, is necessary to become proficient in technical terms in English. This article discusses ways to improve one's command of technical language, the characteristics of translating terms from English into Russian during the Repair Workshop (RMC) manufacturing process for well maintenance equipment repair, and various translation techniques.

INTRODUCTION

An interpreter is an uncommon but occasionally highly sought-after job in our territory when it comes to the oil and gas production process these days. Because of the current political and economic climate, oil continues to be the world's main energy source despite the dire circumstances and the globalization process. Even in the face of dramatic declines in oil prices, the imposition of quotas, and sanctions, international collaboration remains in the oil and gas production and processing sectors.

Nepomnyashchy E. G. notes that industrial production is a complex process of converting raw materials, semi-finished products and other labor items into finished products that meet the needs of the market. The production process is the totality of all the actions of people and tools necessary at a given enterprise for the manufacture of products. As the basic principles of the organization of the production process, 13 principles are highlighted, among which the main ones are the principle of proportionality (proportional productivity per unit of time of all production units of the enterprise (workshops, sites) and individual workplaces), the principle of differentiation (Separation of the production process from the- the division of products of the same name between separate divisions of the enterprise, the creation of production sites or workshops on a technological or subject basis), the principle of combination (Combining all or part of different processes for the preparation of a certain type of product within one

site, workshop, production), etc. At a machine-building enterprise, for example, the production process is carried out using the methods of mechanical engineering technology in the production of products. The main production unit of the enterprise, separated administratively and territorially, is a workshop – a set of production sites. The main workshops are designed for the production of products manufactured by the enterprise.

The production process at an international enterprise differs from the above general definition in that the enterprise initially has two or more co-founders who are legal entities of different countries. The huge capacity of the Uzbek market, diverse natural resources, and skilled labor are attractive factors for foreign investment in the Uzbekistan economy. A joint venture is an international firm established by two or more national enterprises with the aim of making the fullest use of the potential of each of the parties to maximize the beneficial economic effect of their activities. The chances of success of international joint ventures largely depend on the atmosphere of trust that is created by the management of parent companies and joint ventures. The role of translation performed in the production process of such an enterprise becomes clear. The translation is designed to ensure compliance with both the above-mentioned principles of differentiation and combination, as well as the principles of standardization (development, establishment and application of monotonous conditions that ensure the best flow of the production process), parallelism (simultaneous execution of the technological process in all or some of its operations), straightness (the requirement of straight-line movement of objects of labor during the technological process, that is along the shortest path for the product to pass through all phases of the production process without reversals in its movements by N. S. Gilmanov continuity (minimizing all interruptions in the production process of a particular product). Mastery of technical terminology in English involves developing a comprehensive understanding of the specialized vocabulary used in various fields such as science, technology, engineering, mathematics, medicine, law, finance, and many others. Here are some steps to enhance your mastery of technical terminology:

Identify Your Field: Determine the specific area or areas in which you want to improve your technical vocabulary. Different fields have unique terminologies, so focusing on a specific domain can help you delve deeper.

Build a Strong Foundation: Start by learning foundational terms and concepts relevant to your chosen field. Use textbooks, online resources, and specialized dictionaries to familiarize yourself with the terminology.

Use Contextual Learning: Understand terms in context by reading technical literature, journals, articles, and manuals related to your field. Pay attention to how terms are used and their meanings within different contexts.

Create Flashcards: Create flashcards or use digital tools to memorize technical terms and their definitions. Review these regularly to reinforce your learning.

Utilize Online Resources: Take advantage of online resources such as specialized websites, forums, and blogs related to your field. Participate in discussions and ask questions to clarify any uncertainties about specific terms.

Engage in Active Learning: Practice using technical terminology in writing and conversation. This could involve writing reports, papers, or summaries using the vocabulary you've learned, as well as discussing technical topics with peers or mentors.

Seek Feedback: Share your written work or engage in discussions with colleagues or experts in your field. Solicit feedback on your use of technical terminology to identify areas for improvement.

Stay Updated: Stay informed about new developments and advancements in your field to keep your technical vocabulary current. Follow relevant publications, attend conferences, and participate in continuing education opportunities.

Specialized Courses and Certifications: Consider enrolling in courses or obtaining certifications related to your field. Many educational institutions and online platforms offer courses specifically designed to enhance technical vocabulary and knowledge.

Practice Regularly: Like any skill, mastering technical terminology requires consistent practice. Make a habit of reviewing and expanding your technical vocabulary regularly to maintain proficiency.

By following these steps and remaining dedicated to continuous learning and practice, you can enhance your mastery of technical terminology in English and effectively communicate within your chosen field. In this article, we consider the features of translating terms from English into Russian in the production process of the repair workshop (RMC) for the repair of well maintenance equipment. The co-founders of the company are Russia and Canada, the company specializes in hydraulic fracturing. Hydraulic fracturing in the formation is one of the methods of intensifying the operation of oil and gas wells and increasing the intake capacity of injection wells. The method consists in creating a highly conductive crack in the central formation to ensure the inflow of the extracted fluid (gas, water, condensate, oil or a mixture thereof) to the bottom of the well. After hydraulic fracturing, the well flow rate, as a rule, increases sharply. The method makes it possible to "revive" idle wells where oil or gas extraction by traditional methods is no longer possible or unprofitable. In addition, the method is currently used for the development of new oil reservoirs, the extraction of oil from which by traditional methods is unprofitable due to low expected flow rates. It is also used for the extraction of shale gas and gas from compacted sands.

Recruitment of personnel from the local population is a mandatory requirement for international enterprises of this kind. Translator is a rather peculiar position. Not being an expert in the oil and gas industry and not having the full authority of a production employee, the translator of the repair workshop (RMC) of the production base in Khanty-Mansiysk, nevertheless, is familiar firsthand with both the specifics of the production process of well treatment and repair of equipment, and with the peculiarities of a national character (such as the local Russian contingent, as well as Canadian colleagues). We will focus on the requirements for the translator's level a little later, as they affect the features of the translation of terms.

Now let's turn to the consideration of the types of translation that are in demand in such a production. The traditional abstract linguistic approach to translation occupies a rather small place in the daily activities of the translator. In this article, we take into account the fact that the traditional approach is science-oriented. However, modern political and economic conditions require that the direct performers of language activities - translators, teachers, teachers, public lecturers, etc. - focus on the customer. Therefore, in the article we make an attempt to combine the classicism of considering the basic key concepts and some "modernism" of observing the real production process.

Translation is defined as "the replacement of text material in one language with equivalent text material in another language", "any case when a text created in one language is re-expressed by means of another language, re-expression, recoding, having a heuristic character", "an activity that consists in variation-re-expression, transcoding of a text generated in one language into a text in another language, carried out by a translator who creatively chooses an option depending on- depending on the variable resources of the language, the type of translation, the tasks of translation, the type of text and under the influence of one's own individuality; translation is also the result of the activity described above

[Alekseeva: 1, 7], etc. All researchers note that there are a great many definitions of translation as an activity, due to the high and the long-standing demand for this type of human activity. Features of the translation of technical terms in the production process.

The specifics of the RMC production process involve the implementation of serial transmission in about 70% of cases. That's what we're going to talk about here. Sequential translation is one of the types of interpretation in which the translator begins to translate after the speaker has stopped speaking, having finished the entire speech or some part of it. The speaker pauses from time to time in his speech, which are necessary for the translator to translate what he said. These pauses are usually small, since a professional translator usually formulates a translation during a speech and pronounces it during a pause. Subsequent translation requires that the content of significant fragments of the original be stored in the translator's memory for a long time before the translation begins. Sequential translation is usually used when conducting events with a relatively small number of participants, since sequential translation is very effective when the "mobile" nature of communication involves a large number of moves, movements: when working at industrial facilities, negotiations with subsequent excursions, etc. Also, for obvious reasons, the type of translation in demand in the RMC can be defined as technical. Technical translation is a translation used for the exchange of special scientific and technical information between people speaking different languages. In a simplified approach, technical translation is understood as translation of technical texts. Technical translation is based on a formallogical (collective) style, which is characterized by accuracy, unemotionality and impersonality. Many terms are used in the vocabulary, often of Latin or Greek origin. The grammar of technical translations is characterized by the use of specific and well-established grammatical norms: vaguely personal and impersonal constructions, passive phrases, non-personal verb forms are widely used. Logical allocation is carried out using inversion.

The authors note the desire of any professional field for the conciseness of terminology. Sometimes multicomponent terms themselves represent a brief description of some material phenomenon, process, object, and this ability of such terms seems to be very ergonomic – descriptive translation, as a rule, is very cumbersome. At the same time, it is far from being equivalent. The term, as it appears from the relevant literature, is a very studied concept. We tried to summarize its main definitions and characteristics, which are important for our study [6]:

- a special word or phrase adopted in professional activity and used to denote one of the concepts included in the system of professional knowledge;
- is used to express concepts common to a number of branches of science or to various sub-languages of technology;
- a word or phrase denoting a certain and limited concept that is closely related to other terms in the terminology system of a given field of knowledge;
- a short, perfect scientific concept;
- a word or phrase denoting a concept (object, phenomenon, property, relation, process) specific to a given branch of science, technology, art or social life;
- differs from the words of everyday vocabulary by a clear semantic delineation of boundaries and the specificity of the concepts denoted by them;
- fixes the concept with a name and clarifies it, separating it from related concepts;
- must reflect the systematization of concepts, express the essence of concepts, be semantically (meaningfully) neutral, have unambiguity and brevity;
- terms are grouped around generic concepts.

The terms are thus systematic, which helps to clarify the connection of concepts, increases semantic accuracy, facilitates assimilation and lasting memorization. Terms within a single language have two types of meanings – literal and terminological. The first is the meaning of the language elements that formed the term, and the second is the content of the concept expressed by the term. Terminology represents either the sphere of a certain production, or a branch of lexicology and is interpreted as:

- a set of terms used in any field;
- the field of knowledge about the general patterns of education and the use of terms.

The researchers note that the translation of terms is a rather difficult problem. This is so, despite the fact that the terms are characterized by high semantic accuracy and independence. In order for the translation of terms to be adequate, they are divided into groups. There are certain principles of translation for each group.

Here the translator's creative potential is manifested, since for an adequate translation of the terms of this group will be created a new term that is organically included in the existing terminology system. It should be remembered that word combinations and complex words often have equivalent correspondences than simple words (air leak on back end - leak of the air line of the rear axle, air dryer valve – receiver, deck radiator – deck radiator). Requirements for the competence of the translator of the RMC KVS International LLC in the field of working with terminology (consecutive interpretation). The requirements are derived in accordance with our accepted interpretation of the concept of "production process". The professional duties of an interpreter at work, according to an employment contract, include a small number of actions, such as: translating correspondence, providing translation of oral communication at work. However, in fact, the range of responsibilities is much broader. You have to open an order for outfits in two languages, go to the bushes in unsuitable places Features of the translation of technical terms in the production process of repairing well maintenance equipment in weather conditions, working night shifts. We consider it appropriate to define the requirements for the translator in the form of some general professional and highly professional competencies. General competences of the RMC translator:

- Highly developed memory, the ability to retain in memory sufficiently large, voluminous layers of information that have to be isolated from completely illogical, unstructured speech; the ability to develop one's memory;

- the ability to work with terminology, that is, the willingness to constantly perceive new terms, evaluate its valence, applicability, successful command of operational and long-term memory, the ability to find words at the right moment. The ability to work with terms in context [Robinson: 5-135];

- the ability to acquire the missing experience in working with terminology, in particular, by deduction, that is, finding out from practical experience how a particular theoretical model works. Comparison of the official dictionary of the industry with a personally compiled glossary.

Private, highly specialized competencies of the RMC translator:

- the ability of some kind of "falsification", that is, the ability to translate terminology, not being a specialist in the field of oil and gas, in some way "imitate" work experience, studying the subject, compiling glossaries, reading special literature. This includes a special flair (there is always an element of guesswork in translation) and some basic psychological knowledge – the ability to turn to specialists of both nationalities to verify – in the case of oral translation - the directly generated oral discourse. The translator of the repair shop is an attentive listener and a rather subtle observer;

- high motivation and openness to continuous learning. Among other things, the RMC translator is highly motivated, since a young translator is always given a short time to adapt, and after that,

managers conclude that the translator is qualified and trainable. Conclusions are drawn about the behavior of a young specialist in an intense stressful situation of misunderstanding that is constantly present at the beginning of work. It arises for 100% of those who come to work, and a novice translator has a choice - to "survive", "hold out" until the end of the day and forget about work until the next morning as a "terrible dream" – or, putting aside emotions and fear, work on glossary, study processes, directly to the equipment (literally from the observation pit), communicate with the staff, study Internet materials (access to them is almost always available).

- a high level of psychological mobility, which is associated with a high level of stress at work, with the shift method of work, with the existence of night shifts. The climatic conditions of the district complicate the production process, despite the high adaptability of the staff. The hydraulic fracturing process has a fairly strict schedule approved by the customers.

Characteristics of the technical terms for the repair of hydraulic fracturing equipment in terms of their reproducibility. We believe that the translation of technical repair terms, as well as the translation of any oil and gas terms, is necessarily influenced by their characteristics, both general and specific, that is, local, specific to this type of production process.

Common:

- using an ordinary word of the language, endowing this function using only a small part of the semantics of the word (nut - "nut", cold end – "cold end", power end – "mechanical part", sample catcher – "sampler", tub – "mixing bath").
- the meaning of the term is regulated by its definition, based on the definition, the term is included in one or another term system (blender - "mixing plant for hydraulic fracturing chemistry", Blender tub – "mixing bath", tub bearing – "mixing bath bearing");
- it is designed according to the laws of logic of a certain industry (in the repair industry, shear is a heater, a shire, while the general oil and gas one is a "shift");
- the term of the designated sphere is unambiguous (blower "blower", auger "auger");
- the term is accurate from a semantic point of view (winch "winch", fifth wheel "hitch");
- the term is stylistically neutral, practically devoid of expressiveness, except in cases when professional jargon is locally fixed in the role of the term (liv- ing shack – "residential wagon", headache rack – "cabin enclosure");
- the term is nominative, that is, it is only a noun or a phrase in which the leading syntactic member is a noun (first aid kit – "first aid kit", frame bolts – "frame bolts", windshield wiper blades – "wiper blades");
- the term is systematic, that is, it is included in the term system (exhaust system "exhaust system", exhaust muffler "exhaust system muffler".

This is the possibility of an adequate translation of the text into another language. The presence or absence of translatability is a problem of language contacts, which exists due to the specificity of the worldview and mentality of different peoples (which is reflected in their languages and due to purely technical difficulties). Since the term is unambiguous and systematic, and because of its other characteristics, all the terms used have this characteristic.

Private (local) characteristics of technical terms in the industry. Due to the influence of the communicative process in the subject area on the terminology system, particular characteristics of oil and gas terms arise in the field of equipment for servicing wells at the Priobskoye field, 72 kilometer of the Khanty-Mansiysk-Tyumen highway. This is due to the emotional characteristics of those using the terms, the non-use of general concepts in specific situations, as well as due to the fact that short-term

borrowings in the team of the repair shop of KVS International LLC have the international character of a retention plan. The social and labor process in the locality is developing very rapidly, which is characterized by the active development of speech and language. It is possible that the terms are retained for quite a short time, only for the period of the existence of the collective, since they may simply not have time to acquire systemic properties. In other words, if the collective exists for more than several decades, new terms will close their valences with connections and relationships within the local term system. Then the general terminology system of this branch of the oil and gas industry will not show resistance and immunity rigidity in relation to local terms.

However, the particular characteristics of the terms are naturally related and follow from the general ones. They can be applied to terms of any industry with a certain modification. So, we have identified the following particular characteristics of the terms of the RMC production process:

- importation is the process of transferring a term from one language to another following the borrowing of a corresponding concept that has not yet been designated in the literature in the borrowing language (blender "blender", an installation for mixing chemicals during hydraulic fracturing, the term was imported due to the fact that the equivalent explanation is too cumbersome and does not correspond the principles of the production process; suction pump "suction pump", suction pump the importation was made, most likely, for the same reason);
- private consistency, that is, many terms used in the process of repairing equipment have homonymous terms in the general oil and gas business, but do not form one system with them, but form their own, private one.

We have already given examples of this kind, but here are a few more: tub - "mixing bath", the general oil and gas glossary (NGG) gives the option "tank"; spline – "spline part of the gimbal", NGG - "key" (for the special translation of technical terms (from English to Russian) in the production process of repairing well maintenance equipment, the designation of the value "key" in the repair shop uses the option "keyway"; spacer – "washer for clearance", NGG – "filler", etc.

Features of the translation of the terms of the well maintenance repair process (based on the principles of the production process, on the characteristics of these terms and on the requirements for the translator that we have highlighted). We believe that the process and result of the consistent translation of technical terms in the conditions of the RMC production process have the following features.

- 1. Mandatory accuracy of translation. As a possible violation of all the principles of the production process, and, accordingly, the potential economic negative consequences characterize an inaccurate translation.
- 2. Speed, the speed of their consecutive translation, bordering on synchronicity (this characteristic has a reliable "basis" a developed memory and translator's experience). A large role in the speed of translation of terms is played by the glossary compiled earlier, experience, familiarity with the process, and translator's internship.
- Localization of the material depending on the production site and workshop. Crosslink is a crossbar, in the general oil and gas glossary (NGG) – "thickening with a crosslinked polymer". Crosso- ver – "watch transfer, report", in NGG – "adapter". Coupling – coupling, NGG – "adapter". Gun (grease gun, Air gun) – sprayer (lubricant, air), NGG – "downhole puncher".
- 4. The use of translation transformation substitution in translation, due to the difference between the original language and the target language. The most common transformations in the transfer of terms are lexical (logical thinking techniques, with which we reveal the meaning of a foreign word and find a Russian match for it that does not coincide with the dictionary: air bag "air compressor",

transformation-concretization), as well as grammatical ones of some kind (forklift mast load roller – "forklift mast roller", permutation transformation – technical terms in English are very often characterized by- They are used as a prepositional attributive formulation of the noun, while in Russian this requires the genitive case).

- 5. Application of the transfer. J. Catford notes [Catford: 85] that it is possible to perform an operation in which the text of the target language, or, more precisely, parts of the target language, will have to have the meanings established in the source language, in other words, have the meanings of the source language. He calls this process transference. The transfer can occur at all levels of the language, starting with the morphological one, and the elements of the target language acquire formal and contextual meanings from the systems and structures of the source language. Cold end "cold end", two way air valve "two-way valve".
- 6. Prohibition on the use of borrowing by transcription and transliteration (lubricator is a "lubricant distribution unit", not a "lubricator"; flowmeter is a "flow meter", not a "flowmeter", etc.), since this, apart from clogging the Russian language, will not bring, from the point of view of production, significant results, but, on the contrary, will slow down the process and it will contradict the principles of standardization, straightness and others. Unfortunately, this requirement for translation is often violated at work, which, in all likelihood, is explained by the translator's insufficient training and ignorance of the glossary.

Thus, we have identified the main features of the translation of technical terms used in the production process of the repair shop of the production base of KVS International LLC in Khanty-Mansiysk. Since, as already noted in the introduction, the economic profitability of international cooperation in the oil and gas industry is not falling, we hope to continue our research in this area and to carry them out with an abundance of illustrations from authentic material.

REFERENCES

- Alekseeva, I. S. Introduction to Translation studies: textbook. the manual [Text] / I. S. Alekseeva. St. Petersburg: Faculty of Philology of St. Petersburg State University; M.: Academy, 2004. – 352 p.
- Alimov, V. I. Theory of translation. Translation in the field of professional communication [Text] / V. I. Semenov. – M.: Com. The book, 2006. – 160 p.
- **3.** Catford, J. K. Linguistic theory of translation [Text] / J. K. Catford. Moscow: URSS, 2004. 208 p.
- Latyshev, L. K. Translation technology : textbook. the manual [Text] / L. K. Latyshev. M. : Academy, 2005. 320 p.
- **5.** Robinson, D. How to become a translator. Introduction to the theory and practice of translation [Text] / D. Robinson. M.: Kudits-Obraz, 2005. 304 p.
- Semenov, A. L. Fundamentals of the general theory of translation and translation activity [Text] / A. L. Semenov. – M.: Academy, 2008. – 160 p.