

The importance of terminological knowledge in specialized translation

Liana MUTHU

Babeş-Bolyai University

Romania

liana.muthu@ubbcluj.ro

<https://orcid.org/0009-0001-8489-240X>

Abstract: This paper focuses upon the translator's role as a language mediator in professional communication. During the translation process, terminological knowledge is essential since the information conveyed by a scientific and technical writing is encoded in terms which give access to more elaborate knowledge structures. Additionally, the translator faces situations in which a term is borrowed either from the general language or from a field of knowledge and utilized in another field. Therefore, the main challenges encountered by a translator are: identifying the terms, understanding the terms' meaning, finding the suitable terms' correspondents in the target language.

Keywords: concept, scientific and technical writing, specialized translation, term, terminology documentation.

Résumé: Cet article se concentre sur le rôle du traducteur en tant que médiateur linguistique dans la communication professionnelle. Dans le processus de traduction, les connaissances terminologiques sont essentielles, car les informations transmises par un texte technico-scientifique sont codées dans des termes qui permettent d'accéder à des structures plus élaborées de la connaissance. De plus, le traducteur est confronté à des situations où un terme est emprunté soit au langage général, soit à un domaine de connaissance et utilisé dans un autre domaine. De ce fait, les principaux défis rencontrés par le traducteur sont: identifier les termes, comprendre la signification des termes, trouver les termes correspondants dans la langue cible.

Mots-clés: concept, texte technico-scientifique, traduction spécialisée, terme, documentation terminologique.

Introduction

The translator has always played a significant role in the contact between different peoples and different cultures and this role becomes more important in our globalized world. This professional is not just a simple sender of the source-text message to a target language but a text

producer in a target culture who embraces an author's intention "to produce a communicative instrument for the target culture" (Nord 2005, 13). A translator is not just a linguist who knows more than one language but a specialist in the source culture and in the target culture as well. In fact, s/he is a language mediator whose task is to analyze a source text and to recreate it as another one that exists independently in a target language. This process implies the decoding of a message from the source language and its rewording in the target language while maintaining the same impact on the target audience. For this reason, the translator is perceived as a "bilingual mediating agent between monolingual communication participants in two different language communities" (House quoted by Bell, 1993: 14).

The translation of scientific and technical texts requires substantial knowledge not only about the morphosyntactic structures but also about the topic of the text to be translated. Being a subdomain of translation studies, specialized translation deals with non-literary texts produced within or referring to a specialized field of knowledge: scientific descriptions, articles in academic journals, maintenance and operating manuals, brochures, newspaper articles related to a particular topic, etc. Any non-literary text depicts an objective reality where the author's main purpose is to convey information, to teach or/and to express an argument. This fact should give birth just to one interpretation and should leave no room for equivocality, as it happens in case of literary texts. For this reason, three criteria should be taken into account: concision that "reduces the possibility of distortions in the information" (Cabre, 1998: 47); precision due to "the nature of scientific and technical topics and the functional relations among specialists" (*Idem*: 47); appropriateness to the communicative situation in which the text in question is produced so that "every text is adapted to the characteristics of the interlocutors and their level of knowledge about the topic" (*Idem*: 47). In fact, concision, precision and appropriateness are not only important stylistic goals in scientific and technical writings but also in their translation.

The primary focus of this paper is on the contextual analysis of a few terms that may pose difficulties during the translation process. Nowadays, due to the "increasing interdisciplinarity, the demarcation lines between subject fields are becoming blurred; there is often considerable overlap between subject fields" (Pearson, 1998: 16). Many terms are no longer monosemous, fact that makes them semantically ambiguous. Therefore, the translator's task implies documentation and research. As a language mediator this professional ensures the correct perception of the terms' meaning and implicitly of the source-text message for its proper rendering into the target language.

The importance of specialized knowledge acquisition

A good translator firstly requires linguistic competences both in the native language and in the foreign language as regards the aspects of vocabulary and grammar, register and style, language varieties, text-type conventions. Nowadays, when we confront with the information overload, some additional skills are demanded: attention to detail as long as a small error (*e.g.* the misunderstanding of a term meaning) has serious consequences; excellent writing capabilities since a skillful translator is a skillful author as well. Moreover, the translator must know how to search for a concept designated by a term in the source language if the correspondent in the target language is not obvious.

Communicative competences are connected to linguistic ones since a translator must perceive what is formally possible in a language, *i.e.* when a sentence conforms to the grammar rules. In other words, a good translator must know “what is feasible” (Cook, 2008: 43). Grammar rules allow us to extend the content of a noun phrase: for instance, “the competition” can be detailed by adding a compound adjective, “the *ever-stronger* competition” that shortens the relative clause “the competition *that becomes stronger*”. Since every language has a different set of rules¹, a word-for-word translation is not possible in most situations. For this reason, the translator has to “mould what is said in one language to the conventions of another” (Cook, 2008: 55). If the text segment in question is rendered into Romanian, another morphosyntactic structure emerges, namely “concurența *din ce în ce mai puternică*”. The message found in English is kept in Romanian since both the adverb *ever* and the locution *din ce în ce mai* are used for emphasis.

This general knowledge is not enough when it comes to specialized translation. In this subdomain, a translator must be proficient in the use of specialized languages. In order to reach this skillfulness, the translator must know how to access different terminological resources and then s/he must be able to interpret the terminology of the source text to be translated. This fact that requires specific competences:

(1) *terminological competences*: these do not imply just the simple acquisition of a list of terms but rather the ability “to acquire the knowledge represented by these terms” (Montero Martinez & Faber Benitez, 2009: 92). This task could be difficult enough since a single term, in one language, may have several correspondents in another language. For this reason, it is advisable that the translator should check

¹ Ionescu (2000, 47) brought into discussion a similar idea: “languages are not isomorphic, that is, there is no one-to-one correspondence between them as regards lexical elements (words, idioms) or linguistic structures associated with rules of grammar”.

the terminological phrases where the term in question is present or even larger contexts such as sentences or paragraphs.

(2) *documentary competences*: these are related to the search for the suitable resources to acquire information about terms and then to find their correspondents in the target text. In this context, knowledge of computer-assisted translation (CAT) tools, based on translation memories (TM), is useful in specialized translations only if they comprise predominantly short sentences and the terms are monosemous. Translation memories provide previously translated text segments (phrases, sentences) and may improve and speed up the translator's work. However, even if the benefit of reusing previous human translations has been largely accepted the translator should utilize these databases with caution. The professional should think over the choice of the text segments suitable in other contexts as long as a translation memory may create “a *sentence salad* effect when sentences are drawn (without adequate contextual information) from various translation memories created by different translators with different styles” (O'Hagan, 2011: 50; *our emphasis*).

The translator's level of understanding required to interpret the meaning of highly specialized terms and to find their suitable correspondents in a target language cannot be every time compared to the knowledge possessed by a domain expert. In these circumstances, the translator should get in touch with the author of the source text and with the domain experts; they are the ones who may provide the necessary information for understanding the terms' meaning correctly. This collaboration, determined by the specific nature of the specialized translation, is not integral part of the translation process but of the pre-translation stage. In this preliminary stage the information regarding the terms' meaning and their correspondents can be acquired from written documents as well. This supposes the search for terminological information from a wide range of sources: academic journals recommended by domain experts, textbooks, printed and electronic general language dictionaries and glossaries, terminological databases, other specialized sites on the Internet.

All professions that deal with specialized knowledge need glossaries and terminological databases. These specialized vocabularies are found in the study area of terminology, a subject field that lies at the basis of scientific and technical writings and of their translation. Since terminology deals with systems of terms and, through extension, with specialized fields of knowledge “terms refer to the discrete conceptual entities, properties, activities or relations that constitute knowledge in a particular domain” (Bowker, 2011: 286). Consequently, terms are

linguistic units¹ that help us to conceptualize processes, states, phenomena described and analyzed in distinct domains. They have a key role in understanding, acquiring and conveying information and specialized knowledge.

The term-concept relationship in professional communication

Concepts are units of thought that help us to organize our knowledge and perceptions upon the world. They are the products of "a mental process whereby objects and phenomena in the real world are first of all perceived or postulated. Once this has occurred such objects and phenomena take on an existence in the realm of our thoughts. This existence is an abstract one" (Pearson, 1998: 11). These concepts need labels to be communicated. These labels are given by the linguistic units, called words in general language and terms in specialized languages because "they may belong to different cognitive structures or frames" (Montero Martinez & Faber Benitez, 2009: 95). Both words and terms are considered part of the same linguistic reality: the close connection between the common vocabulary and the specialized ones makes possible the migration of these linguistic units from one register to another.

We are at a point when terms with roots in plain English label specific concepts in distinct domains. Most linguists and terminologists agree that words acquire terminological status or "have protected status" (Pearson, 1998: 7) when they are utilized in fields of knowledge. For instance, the word *performance* is frequently encountered in general language. The meaning that we all know today began to take shape in the early XVIIth century, namely the "action of performing a play"². However, a few people know that British lawyers and other members of the legal community make use of the noun *performance* in legal documents. So, there are situations where, in a source language, one linguistic unit labels at least two distinct concepts, but these concepts are expressed differently in another language:

a) general language

En: After the music *performance* I went to see her in the dressing room.

Ro: După *spectacolul* muzical m-am dus să o văd la vestiar. (our translation)

- concept: the act of playing a piece of music in front of an audience

En: *performance*

Ro: *spectacol*

¹ In terminology a term is also considered a conventional symbol, being represented by a word, a compound word or a multiword expression that in a given context has a specific meaning.

² <https://www.etymonline.com> (last visit 10.09.2023).

b) legal language

En: “The Security Interest shall secure the payment and *performance* of Debtor’s promissory note of even date herewith in the principal amount of twenty thousand (\$20,000) Dollars [...]” (Excerpt from a security agreement drawn up on the 11th of May 2011 and quoted in Krois-Lindner & TransLegal, 2011: 180).

Ro: Garanția reală mobilă asigură remunerarea și *executarea* biletului la ordin al Debitorului anexat la aceeași dată cu suma datorată de douăzeci de mii (\$20,000) de dolari [...]. (our translation)

- concept: the act of doing something stipulated in a contract

En: *performance*

Ro: *executare*

Terminology documentation is fundamental when specialized information from a source language is conveyed in a target language. As a language mediator responsible for effective professional communication the “translator wanders between languages, cultures, texts, bodies of knowledge” (Cronin, 2013: 28) and implicitly s/he “wanders” between the terminological concept systems trying to find the adequate terms and to give an adequate message rendering. This process could become confusing when, in a source language, a term¹ present in two distinct subject fields labels two distinct concepts, but has different correspondents in a target language. For instance, the roots of the term *clause* should be searched in the early XIIIth century when it designated “a sentence, a brief passage of a written composition”². Over time, *clause* suffered semantic changes and received additional meanings; this fact caused the loss of its original usage. Nowadays this English term labels distinct concepts in two subject fields – legal language and grammar – but in Romanian the same concepts are labelled differently:

a) legal language:

En: They added a *clause* in the contract which stipulates that the employer can dismiss the employees for economic reasons.

Ro: Au adăugat o *clauză* la contract care stipulează faptul că angajatorul îi poate concedia pe angajați din considerente economice. (our translation)

- concept: a particular section in a written legal document such as a contract

En: *clause*

Ro: *clauză*

¹ In the literature, these kinds of linguistic units are perceived as words with special reference utilized in more than one subject field. Many terminologists consider that they occupy an intermediary position, being placed between highly specialized terms and ordinary words; they belong to the “non-subject-specific specialized vocabulary” (Hoffmann quoted by Pearson, 1998: 17).

² <https://www.etymonline.com> (last visit 15.09.2023).

b) grammar:

En: A main *clause* can stand independently as a complete sentence.

Ro: O *propoziție* principală are înțeles de sine stătător. (our translation)

- concept: a sentence structure that mainly consists of a subject and its predicate

En: *clause*

Ro: *propoziție*

Unlike words that are used by all speakers to refer to any topic in the quotidian life, terms label concepts in specialized contexts¹. One of Eugen Wuster's assertions related to the general terminology theory offered an idealized vision of professional communication: ambiguity should be avoided by using a single term that labels a single concept in a particular subject field. According to this theory monosemic reference should be a rule, *i.e.* a one-to-one correspondence between a term and a concept. For instance, in linguistics *ellipsis* designates the omission of a word or of a group of words from a context, considered unnecessary; or in medicine *smallpox* designates a contagious virus disease marked by fever and eruption. This theory is embraced by traditional terminologists because this one-to-one correspondence between a term and a concept really improves professional communication.

However, polysemy occurs even in the same subject field. This phenomenon brings to “terminological variation” (Faber & Lopez-Rodriguez, 2012: 14) and implicitly it may generate difficulties during the translation process. There are some approaches to terminology that “seek to reduce polysemy as much as possible using standardization methods” (L'Homme, 2020: 415). This process involves close collaboration between terminologists and domain experts; these professionals are able to define a concept and then to assign a term to that concept. Nevertheless, this target is hard to reach because concept systems and definitions are subject to change. Even the terms receive connotations and associations that enlarge their semantic content so that one linguistic unit may label more than one concept in the same subject field. For instance, the term *interest* is encountered in the finance domain and labels two concepts related, their common denominator being “money”:

a) finance domain

En: Other accounts offer the possibility to create deposits for which banks offer a higher *interest* for the current accounts.

¹ Words and terms differ with respect to their users and the communicative situations where they are found. If words are used in everyday speech to express feelings, give orders, etc. the use of terms is usually limited to professional circles where specialized topics are discussed.

Ro: Alte conturi oferă posibilitatea de a crea depozite pentru care băncile oferă o *dobândă* superioară pentru conturile curente. (our translation)

- concept: money paid regularly at a particular rate for the use of money lent

En: *interest*

Ro: *dobândă*

b) finance domain

En: He could not declare his *interest* due to the tabling of the parliamentary questions.

Ro: Nu a putut declara *suma investită* în companie datorită amânării întrebărilor parlamentare. (our translation)

- concept: the act of making known the money invested in a company

En: *interest*

Ro: *sumă investită* (în companie)

For an accurate translation, the understanding of the terms' meaning is essential. Therefore, the translator's task is not easy since s/he has to deal with denominative variations: one linguistic unit present in one language may have at least two correspondents in another language. That is why the professional has to pay attention to these translation traps: the new discoveries and researches in a subject field permanently favours the appearance of new concepts that have to be named.

Challenges encountered in specialized translation

The translator's work becomes harder when s/he has to translate highly specialized texts where many terms are not integral part of the general terminology¹. These texts are characterized by high level of abstraction. For this reason, terminology documentation is a little bit difficult since many term correspondents are not found in dictionaries of general interest. Most of them are monosemous: they label a single concept, being confined to one particular subject field. However, the translator faces situations when terms are polysemous, labelling two related concepts in the same subject field.

These highly specialized texts are found in textbooks where uncommon terms are mainly explained to small professional circles. They are usually "terminology-rich" (Faber & Lopez-Rodriguez, 2012: 25) due to the numerous terms present in these writings that are typically short and to the point. Since the main purpose of specialized texts is to convey information and to be instructive, these are characterized by a greater repetition than usual of terms and terminological phrases. This act of

¹ These are terms encountered in professional communication but they are known and used by non-specialists as well.

repeating can help the reader to follow along and to keep the ideas tied together.

Further on we shall focus upon a paragraph where the meaning of the term *capitalization* is explained. This is taken from a textbook that may arouse interest for economists, business people, professors who teach and students who attend courses at the Faculty of Economic Sciences and Business Administration.

Source text: “The term *capitalisation* refers to the act of providing *capital* for a company through the issuance of various *securities*. Initially, company *capitalisation* takes place through the issuance of *shares* as authorised in the *memorandum of association*. The *authorised share capital*, the maximum amount of *share capital* that a company can issue, is stated in the *memorandum of association*, together with the division of the *share capital* into *shares* of a certain amount (e.g. 100 *shares* of £1). The *memorandum of association* also states the names of the *subscribers*. The *minimum share capital* for a *public limited company* in Great Britain is £50,000. *Issued share capital*, as opposed to *authorised share capital*, refers to *shares* actually held by *shareholders*. Accordingly, this means that a company may authorise *capital* in excess of the mandatory *minimum share capital* but refrain from issuing all of it until a later date – or at all.” (Krois-Lindner & TransLegal, 2011: 34)

Target text: Termenul *capitalizare* se referă la actul de a furniza *capital* la o companie prin emiterea mai multor *titluri de valoare*. Inițial, *capitalizarea* companiei are loc prin emiterea de *acțiuni* în temeiul *actului constitutiv*. *Capitalul social autorizat*, suma maximă a *capitalului social* ce poate fi emisă de o companie, este menționat în *actul constitutiv*, împreună cu împărțirea *capitalului social* în *acțiuni* având o anumită sumă (ex. 100 de *acțiuni* cumpărate cu o liră sterlină). *Actul constitutiv* menționează și numele *semnatarilor*. *Capitalul social minim* pentru o *societate pe acțiuni* în Marea Britanie este de 50.000 de lire sterline. *Capitalul social emis*, în contrast cu *capitalul social autorizat*, se referă la *acțiunile* deținute efectiv de *acționari*. În consecință, acest lucru arată că o companie poate autoriza surplus de *capital* față de *capitalul social minim* obligatoriu dar se poate abține să-l emită în întregime până la o dată ulterioară – sau deloc. (our translation)

This brief paragraph is a proof that specialized languages evolve continuously. The fields of economics and finance are not an exception to the rule. Their concept systems become larger and, as a result, new terms are created to label them. Many of these terms have as starting point the already existing ones. For instance, *share capital* is at the bottom of other term formation: *authorized share capital*, *minimum share capital*, *issued share capital*. In the following, we shall analyse the terminological issues and the repetitive structures utilized to outline the term *capitalization*.

Terminological issues. It is noticeable that the paragraph abounds in financial terms characterized by univocality, precision, clarity. Even if

they have a use restricted to the fields of economics and finance, some of these terms are known not only by domain experts but also by a reduced number of non-specialists¹. The latter category watch the news and/or read the newspapers in order to be informed about the recent evolution of capital markets: *capital, share, shareholder, public limited company, subscriber*. As regards the explanation of the term *capitalization* this is achieved with highly specialized terms utilized just in the business environment. They are all related to the manner in which companies raise capital in Great Britain and they are hardly heard or uttered in everyday speech: *securities, share capital, minimum share capital, authorised share capital, issued share capital*.

A term may belong to a subject field but is also used in other subject fields, fact that indicates a constant, uninterrupted flow of terms between domains. The term *memorandum of association* is not an exception to the rule. Being part of the legal language terminology, it is also used in a context that explains the mechanisms through which a company is being run. In fact “the distinction between *terms belonging to a special subject field* and *terms used in a special subject field* is generally accepted” (Cabre, 1998: 80).

The presence of the terms *share* and *securities* indicate once again that there is no boundary line between the general language and the specialized ones. Words heard in everyday speech are borrowed in specialized areas of studies where they acquire terminological status, due to the extension of their semantic content.

Firstly, in general language “a *share* of something” denotes “a part or an amount of something” allotted to someone. When it comes to the finance domain, the translator has to pay attention to the polysemy of the term *share* where it labels two related concepts: in “a *share* of the profits” *share* indicates a percentage; then, in “a *share* in a company” *share* is related to the finance equity and denotes one of the many equal parts into which the ownership of a company can be divided. The common denominator that connects these concepts is “portion”.

Secondly, *security* – used at the singular form – denotes the condition of being safe, being known by the majority of people. Nevertheless, a few people know that in the finance domain, *securities* – used especially at the plural form – labels a specific concept, namely stock certificates. Thus, there is a connection between “safety” expressed in plain English and “investment, financial performance” found in the finance domain.

¹ The perception of a text is closely connected to the individuals' expectations. These expectations are determined by different situations: the individuals' social background, their world knowledge, and/or their communicative needs.

Repetition. As we have already mentioned, the author of a specialized text resorts to repetition to clarify the main ideas. In the paragraph above *memorandum of association* is repeated three times to underline the importance of such a corporate document: there are explained the rules according to which a company provides capital through the issuance of securities. *Share* is also repeated three times to emphasize that the ownership of a company can be divided into equal parts; moreover, these shares are accessible and can easily be bought by people willing to invest in the company. Then, *authorized share capital* is repeated twice to show the contrast with *issued share capital*, both terms being related to distinct types of shares held by the shareholders.

Concluding remarks

Even if specialized languages and general language are interrelated, specialized languages are different from the general one as regards the usage and the information conveyed. Nevertheless, even if the communication of specialized information takes place just within small professional circles, in our globalized world, non-specialists could be interested as well in acquiring this kind of information.

Any translated text finally stands for a “recreated product” (Ionescu, 2000: 53) meant to communicate the same intention, meaning and information found in the source text. In scientific and technical writings details, explanations are important, and they must be properly conveyed in translation. *This is a process that requires responsibility and constant learning. For this reason, the translator, as a language mediator, always looks for better solutions to complex problems.*

When it comes to translating scientific and technical texts, the possession of a vast specialized vocabulary is an asset because advanced language knowledge is needed. This professional needs special skills and experience to perceive the translation traps: the difference between a word meaning heard in general language and its meaning when – borrowed in a field of knowledge – it acquires terminological status. The same professional has to distinguish correctly the meanings of the same term used differently in distinct fields or the polysemy found in the same field, where a term may label two related concepts.

Additionally, the translator has to keep an eye on the evolution of language and on the specialized vocabularies’ enrichment. Since new concepts appear in distinct subject fields new terms must be assigned to them. Moreover, already existing terms have their semantic content enlarged and others are permanently created to label the new-appeared concepts.

References

Books and articles:

- BELL, Roger T. *Translation and Translating: Theory and Practice*. London & New York: Longman, 1993.
- BOWKER, Lynne. "Terminology". In: Mona Baker & Gabriela Saldanha (eds.), *Routledge Encyclopedia of Translation Studies*, Second Edition. London & New York: Routledge, 2011: 286-290.
- CABRE, M. Teresa. *Terminology. Theory, methods and applications*. Edited by Juan C. Sager. Translated by Janet Ann DeCesaris. Amsterdam & Philadelphia: John Benjamins Publishing Company, 1998.
- COOK, Guy. *Applied Linguistics*. Oxford University Press, 2008.
- CRONIN, Michael. *Translation in the Digital Age*. London & New York: Routledge, 2013.
- FABER, Pamela & LOPEZ-RODRIGUEZ, Clara Inés. Chapter 2 "Terminology and Specialized Language". In: Pamela Faber (ed.) *A Cognitive Linguistics View of Terminology and Specialized Language*. De Gruyter Mouton, 2012: 9-31.
- O' HAGAN, Minako. "Computer-aided translation (CAT)". In: Mona Baker & Gabriela Saldanha (eds.) *Routledge Encyclopedia of Translation Studies*, Second Edition. London & New York: Routledge, 2011: 48-51.
- L'HOMME, Marie-Claude. "Revisiting Polysemy in Terminology". In: Zoe Gavrilidou, Maria Mitsiaki, Asimakis Fliatouras (eds.) *Euralex XIX. Congress of the European Associations for Lexicography. Lexicography for inclusion*, Volume 1, Euralex Proceedings, 2020: 415-424.
- IONESCU, Daniela-Corina. *Translation Theory and Practice*. București: Editura Universal Dalsi, 2000.
- KROIS-LINDNER, Amy & TransLegal. *International Legal English. A course for classroom or self-study use*, Second Edition. Cambridge University Press, 2011.
- MONTERO MARTINEZ, Silvia & FABER BENITEZ, Pamela. "Terminological competence in translation", *Terminology International Journal of Theoretical and Applied Issues in Specialised Communication*, 15 (1), 2009: 88-104, DOI: 10.1075/term.15.1.05mon.
- NORD, Christiane. *Text Analysis in Translation. Theory, Methodology and Didactic Application of a Model for Translation Oriented Text Analysis*, Second Edition. Amsterdam & New York: Rodopi, 2005.
- PEARSON, Jennifer. *Terms in Context*, Amsterdam & Philadelphia: John Benjamins Publishing Company, 1998.

Dictionaries:

- NĂSTĂSESCU, Violeta. *Dicționar economic englez-român/ român englez*. București: Editura Niculescu, 2009.
- POPA, Ioan-Lucian & POPA, Lucia-Mihaela. *Dicționar de afaceri englez-român/ român angle*. București: Editura Niculescu, 2012.

Internet sources:

<https://www.etymonline.com>