# Analysis of explicitation evidence in technical translation

#### Katrin Herget<sup>1</sup>, Teresa Alegre<sup>2</sup>

<sup>1</sup>Department of Languages and Cultures / Centre for Languages, Literatures and Cultures, University of Aveiro, Portugal, <sup>2</sup>Department of Languages and Cultures / Centre for Languages, Literatures and Cultures, University of Aveiro, Portugal.

### Abstract

The aim of this study is to contribute to Translation Studies in Higher Education by analyzing a parallel corpus containing German and Portuguese technical texts. Based on a text-linguistic perspective, we propose to explore in what way explicitation can be identified in the analysed text corpus, consisting of 15 user manuals from the field of electrical engineering. The corpus comprises 2100 aligned text segments, which were analysed in SketchEngine, a tool for corpus analysis. In the context of cohesion (Halliday & Hasan, 1976), and based on the transfer instances identified in the parallel corpus analysis, we aim at providing a categorization of explicitation for practical translation classes. In our study, we discuss four categories, namely overspecification, specification, implicitation, and underspecification, depending on a decreasing explicitation degree. In terms of quantitative analysis, the corpus revealed that most instances attributed both underspecification were to and specification. Although user manuals are a highly conventionalized text genre with little room for variation, we found that explicitation elements constituted an important device in the transfer process.

*Keywords: Explicitation; technical translation; user manuals; cohesion; parallel corpus.* 

# 1. Introduction

Due to the importance of Specialized Translation in today's globalized world, the translation profession is more and more influenced by technology for a faster and more efficient transfer of specialized texts into different target languages. Translation training has therefore to take into consideration the study of different domains, such as scientific, technical, and legal translation, in response to a diversified professional reality. This study proposes to analyze technical texts as subject of one of the most representative fields technical translation. Byrne (2006, pp. 1-2) claims that technical translation has long been considered "the poor cousin of 'real' translation", despite its "importance" and "overwhelming demand". Krüger (2014, pp. 13-14) argues in the same way, stating that "[s]cientific and technical translation, together with specialized translation in general, has therefore often been reduced to a simple, almost automatic transcoding process". Technical translation involves texts on "applied knowledge from the natural sciences" (Byrne, 2006, p. 3). Byrne (2006) argues in favour of a clear distinction between technical and scientific translation, in that "scientific translation relates to pure science in all of its theoretical, esoteric and cerebral glory while technical translation relates to how scientific knowledge is actually put to practical use" (p. 8). By acknowledging the role of technical translation, the next chapter will discuss its most representative text genre, the user manual.

## 2. Technical translation and the text genre user manual

In the scope of Specialized Translation, technical translation involves a wide variety of subject areas that belong to different types of industry, from the primary sector to human services. The industry produces a large volume of text types and text genres - operation manuals, user guides, patents, technical data sheets, among others - that the technical translator should be acquainted with. Such text genres describe products (instruments or machines) and give instructions on their functionalities.

According to Reiss's typology (2000/1971), based on Bühler's tripartite model of the linguistic sign, the author proposes a prototypical text type classification, suggesting a specific translation method for each text type. Reiss differentiates among *informative*, *expressive* and *operative* texts, also adding a *multi-medial* text type, a so called "hyper type" (Reiss, 2000, p. 164) that refers to verbal, other than written texts. The basic communicative function of informative texts is of descriptive nature, consisting in a transfer of content. However, as Reiss puts it, texts often do not belong to just one category, but rather are composed of different types that may overlap. This is the case with user manuals, which apart from transmitting information, also have an operative function. Once the text type is determined, the translator has to define the text genre, being intended as "the classification

of a given text according to specifically structured sociocultural patterns of communication belonging to specific language communities" (Reiss, 2000, p. 165). The determination of a text genre is insofar a decisive factor in the analysis process, as it may differ from one language to another, implying diverging text convention patterns (p. 165). Therefore, the translator has to assure for the selection of the adequate target language text pattern. The present study aims at analyzing *user manuals*, being characterized by the use of domain-specific vocabulary and specific text patterns. Informative texts seek to transmit information in a precise and objective manner. When translating informative texts, translators are required to establish functional equivalence, thus, trying to convey "sense and meaning in order to maintain the invariability of the content" (Reiss, 2000, p. 167). On the other hand, operative texts require that the target text produces the same effect as the source text (Reiss, 2000). User manuals are therefore a good example of a textual genre, in which content description and receiver-oriented instructions are combined, revealing "a high degree of directedness as a result of the shared special interests [...] that exists between particular groups of senders and receivers" (Neubert & Shreve, 1992, p. 41).

## 3. The role of cohesion in specialized texts

In order to be able to apply the textual approach for the purpose of analyzing explicitation in user manuals, we first have to conceptualize the seven key criteria of text introduced by Beaugrande & Dressler (1981), being *intentionality, acceptability, situationality, informativity, coherence, cohesion,* and *intertextuality.* 

The standards of textuality [...] are all relational in character, concerned with how occurrences are connected to others: via grammatical dependencies on the surface (cohesion); via conceptual dependencies in the textual world (coherence); via the attitudes of the participants toward the text (intentionality and acceptability); via the incorporation of the new and unexpected into the known and expected (informativity); via the setting (situationality); and via the mutual relevance of separate texts (intertextuality) (de Beaugrande & Dressler, 1981, p. 14).

When applied to the field of Translation Studies, Neubert & Shreve (1992, p. 70) consider that "the principle of textuality can be used to define the conditions under which a  $L_1$  text and its  $L_2$  counterpart can be said to be textually equivalent". In order to produce a textually equivalent target text, the translator has to be aware of the specific elements of textuality. According to the authors, the textual surface triggers "chains of references to knowledge frames", by which the reader is able to recognize the "textness" of a specific document (Neubert & Shreve, 1992, p. 70).

Due to its importance in establishing "textness" (cf. Neubert & Shreve), the feature of cohesion has been widely studied in oral and written discourse. The most influential approach

in the systematization of cohesive devices was presented by Halliday & Hasan (1976), who characterized the concept of cohesion as

a semantic one; it refers to relations of meaning that exist within the text, and that define it as a text. Cohesion occurs where the INTERPRETATION of some element in the discourse is dependent on that of another. The one PRESUPPOSES the other, in the sense that it cannot be effectively decoded except by recourse to it (Halliday & Hasan, 1976, p. 4).

Within the context of cohesion, we aim at studying explicitation in technical translation. The notion of explicitation has been widely studied and explored, giving rise to a variety of different approaches (Vinay & Darbelnet, 1995/1958; Nida, 1964; Krüger, 2014, among others). Within the field of Translation, explicitation "is the reformulation as a tentative TT [target text] solution of a segment of the ST [source text] conveying implicit information which the translator sees as problematic for the end-readers" (Scarpa, 2020, p. 218). Explicitation can be represented through different categories, in accordance with a specific approach. Our analysis is based on the following main categories: a) overspecification, b) specification, c) implicitation, and d) underspecification.

Overspecification refers to the transmission of information into the TT that can be considered redundant, leading to an overemphasis of content. The second category of specification renders the TT more specific than the ST, providing the reader with detailed information and thus contributing to a better understanding of the communicative situation. Implicitation occurs when the information given in the TT is less explicit than in the ST, "relying on the context or the situation for conveying the meaning" (Vinay & Darbelnet, 1995, p. 344). The last category of underspecification refers to situations in which the TT omits part of the ST information. In terms of classification, these four categories can be represented in a continuum of an increase in the degree of explicitness.

underspecification	>	implicitation	>	specification	>	overspecification	

Figure 1. Increasing degree of explicitation.

## 4. Method and corpus design

On the basis of the analysis of an aligned parallel corpus, the present study aims at analyzing evidence of explicitation in technical texts. Widely used in translation studies, a parallel corpus is "typically made up of source texts in language A and their translations in language B" (Saldanha & O'Brian, 2013, p. 68), providing insights into transfer procedures through comparison. The analysed text corpus consists of 15 user manuals retrieved from the German website *https://www.manualslib.de/*, offering free access to a variety of user manuals. In an

initial phase, the German and the Portuguese texts were aligned in Memsource, a Translation Management System. In a second instance, the aligned segments were processed in SketchEngine for corpus analysis. Each aligned bilingual segment was manually checked for evidence of explicitation. The assignment of a segment to one of the four categories was not always obvious, since these categories are situated in a continuum with blurred limits. In the following, we intend to illustrate each category providing examples from the corpus analysis.

a) Underspecification

German ST	Portuguese TT					
(1) Vergewissern Sie sich, dass das	(1') Certifique-se de que o					
Elektrowerkzeug ausgeschaltet ist,	interruptor está desligado quando					
bevor Sie es an die	insere a ficha na tomada.					
Stromversorgung und/oderden						
Akku anschließen, es aufnehmen						
oder tragen.						
(2) Das Gerät ist nicht für den	(2') Os nossos aparelhos não são					
gewerblichen oder industriellen	concebidos para uso comercial.					
Einsatz konzipiert.						

Examples (1) and (2) provide evidence of ST information content, which is not reproduced in the TT. Such omission represents an underspecification, which might have consequences for the correct operation of a device. Examples (1) and (2) may reveal a culture-specific background. Technical knowledge and exact explanations are highly appreciated by German readers, being associated with signs of product quality and expertise.

b) Implicitation

German ST	Portuguese TT
(3) Wenn Sie mit einem	(3') Ao utilizar a ferramenta eléctrica
Elektrowerkzeugim Freien arbeiten,	ao ar livre, use uma extensão de fio
verwenden Sie nur	adequada.
Verlängerungskabel, die auch für	
den Außenbereich geeignet sind.	
(4) Wir garantieren während der	(4') A garantia abrange: []
Garantiezeit: []	

Examples (3) and (4), assigned to the category of implicitation, are insofar interesting that the German ST is more explicit than the Portuguese TT, representing a common feature of

technical texts. By repeating words and phrases, the ST tends to create more redundancy, guaranteeing that the information is fully transmitted. The Portuguese segments, although shorter, transmit the same message.

#### c) Specification

German ST	Portuguese TT				
(5) Rissige Sägeblätter oder solche,	(5') Discos de serra que apresentem				
die ihre Form verändert haben,	rachaduras ou <b>tenham dentes</b>				
dürfen nicht verwendet werden.	deformados não deverão ser				
	utilizadas				
(6) Ein Werkzeug oder Schlüssel,	(6') O facto de uma chave ou uma				
der <b>sich</b> in einem drehenden	ferramenta de regulação <b>ficar presa</b>				
Geräteteil <b>befindet</b> , kann zu	na peça em rotação da ferramenta				
Verletzungen führen.	eléctrica pode causar um acidente.				
(7) Verwendung einer Staub-	(7') O emprego deste tipo de				
absaugung kann Gefährdungen	dispositivos pode evitar perigos				
durch Staub verringern	causados pela produção de poeiras.				

Segments (5), (6), and (7) contain more specific information in the TT, providing the reader with additional information concerning operation details. Example (6) illustrates a more general description of the situation by using the verb *befinden* in the ST, whereas the TT (*ficar preso*) reveals that the object is stuck, which may lead to a malfunction of the electric device.

d) Overspecification

German ST	Portuguese TT
(8) Benutzen Sie kein	(8') Não utilize a ferramenta elétrica,
Elektrowerkzeug, dessen Schalter	se nãoconseguir <b>ligar e desligar</b> pelo
defekt ist.	interruptor.
(9) Während des Ladevorgangs	(9') A ferramenta eléctrica não pode
kann derAkku-Tacker nicht benutzt	ser utilizada durante o processo de
werden!	carga; <b>elanão está com defeito se</b>
	não funcionar durante o processo
	de carga.

In examples (8) and (9), units of information are added to the TT; these are no longer mere translations, but adaptations. Whereas the ST does not specify the problem, the TT makes use of redundant information, running the risk that it will not be accepted by the reader.

#### 5. Results and Discussion

The corpus analysis revealed that the category of underspecification was the most represented, with 63 instances. This category was followed by 48 occurrences of specification, and 29 instances of implicitation. The least represented category, overspecification, only revealed 7 occurrences.

Type of explicitation	T1	T2	Т3	T4	Т5	T6	T7	<b>T8</b>	Т9	T10	T11	T12	T13	T14	T15	Total
over- specification	0	1	1	0	0	2	0	0	0	0	0	0	2	0	1	7
specification	0	5	2	5	1	6	1	6	2	7	0	3	4	2	4	48
implicitation	1	4	3	0	1	3	4	2	1	3	1	2	1	1	2	29
under- specification	1	6	4	2	1	7	5	9	0	7	0	1	7	5	8	63

Table 1. R	esults of Cor	pus Analysis.
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As far as underspecification is concerned, the corpus analysis revealed that explanations that could not be retrieved from the co-text were not transmitted in the TT. This kind of insufficient explicitation may have consequences for the correct usage of a product. When analysing the instances of specification, we observed the presence of content-related aspects, with the general information of the ST being specified in the TT. This is often done by the addition of detailed information which provides the reader with further knowledge. In the examples of implicitation, the adaptation to the target culture is achieved by eliminating source language details which contribute to the need for security in the ST culture. However, in the target culture, repetitions or duplications are perceived as disturbing elements. The instances of overspecification showed a minor presence in the analyzed corpus, revealing a less popular preference of explicitness in the TT.

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