

## 5. Basic Translation Techniques

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### *In this chapter*

This chapter discusses general translation strategies such as recategorization, modulation and adaptation and describes how they can be used when translating scientific and technical texts. Following on from the discussion of Skopos theory in [Chapter 1](#), this chapter looks at how to formulate a translation brief and what type of information it should contain. You will also learn when not to translate sections of text and when you should contact the client. By the end of this chapter, you will be able to distinguish between the different types of translation you may be asked to produce and you will be able to develop your own translation brief to help you decide which translation strategies to use.

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### 5.1 Introduction

Now that we have examined several typical texts and identified the typical issues and challenges they present, we are ready to start thinking about techniques and strategies for translating them. In this section, we will start out by examining some basic approaches used by translators when they translate texts. It is worth noting that these strategies are not unique to scientific and technical translation; in fact, they are used in all types of translation. What we will do here, however, is show how they are used in scientific and technical translation. Then, with the fundamentals out of the way, we will move on and look at some of the specific strategic problems you might encounter in technical documentation and explore some of the strategies you can use to deal with them.

### 5.2 The basics

Like most things in life, when it comes to translation there is the easy way and the not so easy way of doing things. The most straightforward way of translating is to translate literally but this will not work in all situations. Sometimes we need to take a more roundabout route as we travel from A to B to avoid traffic jams and roadworks. Just like when we are driving, the shortest route is not always the smoothest or fastest one. This is where the notions of *direct translation* and *oblique translation* as proposed by Vinay and Darbelnet (1958/1995) prove useful.

#### 5.2.1 Direct translation

Direct translation involves relatively straightforward strategies which require less intervention by the

translator and less deviation from the ST. Though relatively unsophisticated from a linguistic point of view, direct translation strategies such as literal translation, borrowing and calquing are useful in a range of scenarios.

#### 5.2.1.1 LITERAL TRANSLATION

Often confused with word-for-word translation, literal translation, though related, is more sophisticated than simply replacing each ST word with a corresponding TT word. With this approach, we may start by translating individual words but, when we reach a point where the TT no longer complies with the grammatical rules of the TL, we move to translating group-by-group or clause-by-clause. Essentially, literal translation involves producing a TT which reflects the content and features of the ST as closely as possible and only deviating from this where necessary in order to produce a TT which is grammatically correct and intelligible. Literal translation will typically avoid any additions, omissions, paraphrasing or other translation techniques to produce what could be described as a faithful and simple translation.

While it is tempting, particularly in a book on technical translation, to say that translation is such a complex process that it always requires sophisticated strategies, the reality is that literal translation is not as uncommon as you would expect. Cardoso de Camargo (2001:37) shows that literal translation is actually one of the most frequently used translation strategies in technical texts. Using a corpus of 18 technical, corporate and journalistic texts, she compared the use of various translation strategies in English texts and their Portuguese translations and found that in technical texts, literal translation occurs more frequently than other strategies such as transposition, modulation, **addition** or adaptation.

Of particular interest, however, is her finding that literal translation is used to translate a smaller proportion of the total word count in technical texts in comparison with corporate and journalistic texts. This is rather surprising because we would expect journalistic texts, in particular, to feature richer and more complex language use which should not be suitable for literal translation. In fact, literal translation is used for 45.3% of the lexical items in journalistic texts as opposed to 39.6% in technical texts (*ibid.*).

But while there are situations and texts where literal translation will be our most common tool, it is not the full story and you only need to translate a few technical texts to realize this. Even the process of adjusting elements of a source text so that they conform to TL grammar can be a complex process. As we learned in [Chapter 2](#), we know that different audiences have preferences and expectations regarding the way in which information is presented to them and this means that even though a literal translation may be grammatically, syntactically and idiomatically correct from a purely linguistic point of view, it may not be appropriate in the target text.

Nevertheless, even though literal translation may proportionally see more use in technical texts, it is by no means the most important strategy, nor does it represent the main tool in a translator's

toolbox. Indeed, those instances where literal translation will not suffice are more than enough to keep us busy as we translate technical texts. In addition to literal translation, technical translation requires a range of other translation procedures.

#### 5.2.1.2 BORROWING

Borrowing can be described as perhaps the simplest form of exchange between languages as it involves transferring an SL lexical item into the TT without any form of modification except, perhaps, for transliteration to account for different writing systems and characters. Often borrowing is used because there is no existing word or concept in the TL but it can be used deliberately in order to create a particular effect in the TT, for example to make the TT seem more foreign or "exotic". Such an approach might prove useful when translating popular science texts where the text tries to recreate a particular atmosphere or sense of the source culture. The following words are used in a variety of languages without translation, although they may be modified slightly to fit in with the grammatical rules of the receiving language.

- boot, Internet, email, pixel, ABS (Anti-Blockier System), pitot tube, diskette

#### 5.2.1.3 CALQUE

Calquing is similar to borrowing in many ways but it involves the literal translation of the individual constituent parts of an SL word or phrase to create a new term, or neologism, in the TL. The use of calquing is something to be approached with caution, as a calque is often a rather alien-sounding thing in the TL and, with the exception of the author (or in this case, the translator) and a few others, neologisms may confound most readers and ultimately prove as uninformative as retaining the original ST term. While authors such as Mancuso (1990:197) condemn neologisms as the work of "arrogant" authors, it is sometimes necessary to introduce new words and there are various accepted calques such as those listed below. Nevertheless, introducing new words without good reason is inadvisable, particularly where there are perfectly acceptable alternatives in the TL.

- log in (German: *einloggen*),
- skyscraper (Spanish: *rascacielos*),
- command separator (Danish: *kommandoseparator*),
- disk defragmenter (Swedish: *Diskdefragmenteraren*)
- workstation (Swedish: *arbetsstationer*)

#### 5.2.2 Oblique translation

*More sophisticated and complex than direct translation, oblique translation is used when the grammatical, pragmatic and lexical differences between the SL and TL are too significant to allow*



*direct translation.*

While direct, especially literal, translation is quite common as a translation strategy, there are cases where a straightforward approach is not enough to allow us to produce a suitable translation. In such cases, we will need to resort to less direct approaches in order to produce our translation. This is where the notion of *oblique translation* comes into play. Coined by Vinay & Darbelnet (1958/1995), it describes four translation procedures which are used where the stylistic or linguistic features of the source text are such that a straightforward replacement of ST elements is not possible because it would produce a TT which is unacceptable in terms of meaning, structure, idiomaticity or style.

#### 5.2.2.1 EQUIVALENCE

Using the definition provided by Vinay & Darbelnet (1995:31), we can describe equivalence as the process of replacing elements in the ST with corresponding elements in the TT so as to “replicate the same situation as in the original whilst using completely different wording” (*ibid*:342). We would use such an approach if translating more directly would result in a translation which loses meaning or impact, or which is missing the idiomaticity or flow of a corresponding text originally produced in the target language.

In contrast to the more conventional notion of equivalence, which would take several volumes to define and explain, equivalence as a translation procedure simply involves finding the TL counterpart for a particular SL word or phrase. We can use it, for example, to replace fixed expressions or formulaic phrases, idioms or proverbs. More specifically, in the case of technical texts we can use this procedure as a way of translating elements such as warning signs and labels.

- Danger → Risk of Death
- Wet Paint → Freshly Painted

#### 5.2.2.2 TRANSPOSITION/RECATEGORIZATION

Transposition or recategorization is the process of replacing one class or type of word in the ST with another type of word in the TT without changing the meaning. This sounds complicated but, in reality, it is quite simple and most people will find it reasonably intuitive. This procedure is usually needed because of differences in the way information is expressed in the SL and the TL, and maintaining the same word class would result in a translation that is awkward or unintelligible. Some transpositions are obligatory; for example, where the SL may have a noun describing a particular process or object, while the TL can only convey this information using a descriptive phrase. Other transpositions are optional and may be chosen simply to improve the style or flow of the TT. Examples of transpositions include:

- Nominalizations (noun to verb): "The *regulation* of the heating system is carried out by the main computer" vs. "The main computer regulates the heating system"
- Passive to active: "The new standard was approved by all member states" vs. "All member states approved the new standard".
- Passive to imperative: "The safety mechanism is engaged prior to performing maintenance work" vs. "Engage the safety mechanism before carrying out maintenance work".

### 5.2.2.3 MODULATION

Modulation refers to the process of changing the form of information by presenting it from a different point of view. It is useful where a literal translation would result in a translation which might well be grammatically correct but which is nevertheless unidiomatic. Some modulations are compulsory (or fixed), usually because of structural differences between the SL and TL, while others (known as free or optional modulations) are not. At the most basic level, modulations might involve changing a sentence from a positive to a negative, for example:

- "Never turn off the refrigeration unit" vs. "Leave the refrigeration turned on at all times".
- "Easy to use" vs. "Not difficult".
- "Protects against most viruses" vs. "Only allows a few viruses through"
- "This X-ray machine does not damage photographic films" vs. "Photographic films can be scanned by this X-ray machine without being damaged".

Other types of modulations involve replacing abstract concepts with concrete concepts:

- Reboot → Restart, Start Again
- Hardcore → Crushed Stone
- Monitor → Visual Display Unit (VDU)
- Tarmac → Asphalt

Some terms and expressions are modulated simply because of a TL preference for using a particular viewpoint to describe the concept. Take for example the *Geneva stop*, which is a type of gear mechanism used in mechanical watches and old-fashioned cinema projectors. It is also known as a *Maltese cross* because of its appearance. While both terms are equally correct and used with more or less the same frequency in English, different languages have specific preferences for which term they use.

Geneva Stop	Maltese Cross
Portuguese: roda de Genebra	▪ Danish: malteserkorsmekanisme

- Dutch: maltezerkruis
- Spanish: mecanismo de cruz de malta
- Swedish: malteserkors

Other modulations involve replacing a concept “part for whole” or “whole for part”. In a text describing the manufacture of cars, this might involve replacing *transmission* (whole) with *gears* (part).

#### 5.2.2.4 ADAPTATION

Adaptation can be described as a strategy of last resort in translation as it may involve a significant amount of deviation from the ST. Vinay & Darbelnet (1995:39) themselves describe it as the “extreme limit of translation”. Indeed, it is a procedure to be used with caution, no matter what type of text you are translating.

Adaptation makes use of three key procedures – cultural substitution, paraphrasing and **omission** – and is used when the ST describes a situation or concept which does not exist in the TL culture or which does not have the same connotations or relevance to members of the TL audience. Such cases might include references to foods in the instructions for microwave ovens or dietary supplements, references to “mailboxes” or “zip codes” in computer software or websites, or even references to institutions such as local councils or government authorities in design and construction documentation for a manufacturing plant. We might also find ourselves forced to adapt the ST if it is poorly written, unclear or somehow resistant to translation.

Under normal circumstances, we would use cultural substitution first in order to overcome a culture-specific problem in the ST. For example, in an environmental impact report for building storage tanks in a biogas processing plant we might replace a reference to a government agency in the SL culture with a reference to the corresponding agency in the TL culture. We might even replace a reference to a particular type of soil commonly found in the source country with a reference to a comparable soil in the target country.

If such a substitution fails, we may paraphrase the ST by expressing the meaning of the ST descriptively, using words which do not necessarily correspond to those of the ST. Using the examples just given, we might instead include sentences such as “the gas collection plant must be inspected by the relevant environmental agency in your area” or “the decision to use reinforced concrete will depend on the soil composition in the area”. It is perhaps the most useful of all translation procedures for technical translation as it also helps to avoid interference and unidiomatic constructions caused by sticking too closely to the ST.

If we are unsuccessful in finding a cultural substitute or paraphrasing the ST, we can, in a limited number of cases, omit information. Extreme caution is required in such instances because, as we have seen in previous chapters, technical documentation is concerned first and foremost with



information so the decision to omit information should only be a last resort and you must be able to justify it completely.

Practical examples of using adaptation might include replacing a sentence in the documentation for a satellite receiver which advises users to consult a specific magazine which only exists in the SL country with a generic reference such as "more details can be found in various satellite magazines". Training materials or technical advertisements may describe typical scenarios in which a product might be used. In order to make this information as meaningful and clear to the reader as possible, the scenarios will more than likely be something to which the reader can relate, and as a result, they may be quite firmly rooted in the SL culture.



#### Transcreation – Taking adaptation to extremes

The term *transcreation* comes from the words *translation* and *creation* and can be defined as an extremely free form of translation (more so than regular adaptation). Transcreation probably has more in common with copywriting than it does with traditional translation and its aim is to produce texts which are fully adapted to the cultural and linguistic requirements of specific countries or regions and in which there is absolutely no trace of the original ST or culture. Transcreation is more commonly associated with advertising and marketing materials but it can be applied to other types of text where the resulting product needs to be tailor-made for the target audience and not contain any indication that it is a translation or that it was produced for anyone other than the target audience.

Scenario	Solution
The ST is an on-screen help system for a satellite receiver which advises readers to consult a named specialist magazine for details of satellite co-ordinates which only exists in the SL country.	The TT replaces the ST reference with the name of a corresponding publication in TL country (a cultural substitution). Ideally, however, generic <b><i>undertranslations</i></b> should be used to avoid problems caused by the TL being used in more than one TL country.
The source text is a technical data sheet for a chemical product advising readers to comply with the regulations set out in a specific law applicable only to the SL country when disposing of the product.	The TT replaces the reference to the SL law with one which is applicable in the TL country. Again, a generic <b><i>undertranslation</i></b> should be used to avoid problems caused by the TL being used in more than one TL country.

#### 5.2.3 Expansion and contraction

*Depending on the subject and your target audience's background knowledge, you may need to add explanations to your translation or remove unnecessary detail so that it meets readers' expectations.*

Expansion, also known as explicitation, involves making something which is implicit in the ST explicit in the TT in order to make the TT clearer, more relevant to the TT audience, or to compensate for some perceived lack of background knowledge on the part of the TT audience. Expansion may involve adding explanatory phrases to clarify terms or statements or adding connectors to improve the flow of the text and to make it more readable. As a result of this strategy, a translation ultimately may contain a higher level of semantic redundancy or repetition, whereby the same or similar information may appear a number of times, sometimes in close proximity.

Although this may prove problematic in certain types of text, technical texts in particular are less likely to suffer as a result because they are by necessity explanatory in nature and, as mentioned in [Chapter 2](#), present less information in a greater number of words than scientific texts, for example.

Expansion is a useful strategy for improving the cohesion and coherence of the TT when the ST has, for instance, been produced by someone other than a trained writer. In such cases, the ST may contain an excessive amount of jargon or ellipsis, which, although perfectly comprehensible to SL readers, may not be entirely intelligible to a TT audience. Expansion can also prove useful where the TT audience typically has less subject or background expertise than the ST audience and requires additional explanation. A similar scenario occurs where the ST audience can be regarded as a high context culture (see *High and Low Context Cultures* on [page 39](#)) which requires less explicit information, while the TT audience is either a low context culture or less dependent on context than the ST audience. In such cases the TT audience, although possessing a comparable level of subject knowledge, may expect and prefer certain things to be spelled out rather than left unsaid.

A very good example of this was a brand of instant mashed potato sold by the same company on both the German and Irish markets. The German packaging featured instructions for making one portion of the product and instructions for making two portions. The only difference between the two sets of instructions was the doubling of quantities of water and butter. The same product on sale in Ireland, however, only provided instructions for making *one* portion.

It is difficult to provide a satisfactory explanation for this apart from cultural preferences. It is something that could prove problematic for translators in either direction, as there is a risk of either patronizing one audience (by including instructions which the target audience may regard as obvious) or failing to respect the preferences of the other (by omitting instructions, which forces the target audience to resort to guesswork).

Conversely, contraction refers to the practice of making something less detailed in the TT. The motivations for this are the same as for expansion, and the aim is to adapt the TT to the perceived expectations and background knowledge of the TT audience. Taking the example of the instant potato instructions, translating the German instructions into English for the Irish market would probably involve contracting the instructions by omitting the instructions for making two portions.



Translators may also choose to employ contraction as a strategy to eliminate information which can reasonably be regarded as unnecessary, irrelevant or potentially confusing for the TT audience.

#### 5.2.3.1 RECYCLING INFORMATION

A useful way of clarifying information in a text is to expand a translation by recycling information provided elsewhere in the text. This approach bears a certain similarity to compensation, which is described later on in this chapter and which involves taking information from one part of a text and using or reusing it somewhere else in the text. This approach is also quite useful where there are problems in the way the source text is written; for example, where certain essential information is omitted from the ST and this hampers either the comprehensibility or the effectiveness of the text.

To illustrate how recycling might be necessary, let's imagine translating a maintenance guide for a large machine used in the manufacture of body panels for cars. Such documents are usually modular in design, which means that they are not intended to be read from cover to cover and the sections are not necessarily read in sequence but rather in the order in which they are needed. In one of its later sections, the document provides detailed instructions on how to replace a faulty component from inside the machine. The procedure requires an engineer to reach into the machine, underneath the large 2000 tonne hydraulic press, which is used to die-cast car panels.

However, unless the machine had been deactivated and a number of safety measures put into place, anyone following the instructions would inadvertently activate the machine and suffer severe injuries or possibly be killed. The key information needed by readers to stop this happening does appear in the document, albeit in a chapter much earlier on in the manual, crucially, in a relatively unrelated chapter. However, the information is absolutely necessary in the later section because the procedure is required as part of another task.

In this situation, the translator is faced with the choice of simply translating what is in the text, in the knowledge that someone will probably be injured as a result, or copying the information from earlier on in the text and pasting it into the other section. Admittedly, this is a rather extreme intervention, but it is wholly justified. A less controversial approach would be to raise these concerns with the client and suggest the appropriate changes.

A less extreme application of recycling is in the formulation of sentences being translated. Depending on the language combination, a translator may be faced with sentences which simply resist any attempts at idiomaticity in the target language. This can be as result of short fragmented sentences in the SL or restrictions posed by the grammar of the TL. In such cases, repeating information, particularly in the case of promotional or marketing materials, can permit translators to completely recast sentences and produce fluent and idiomatic translations. This may simply involve repeating the product name or it may involve repeating features or characteristics which have already been described previously in the text. In cases where it is not possible to combine sentences, translators can use recycling as a way of padding out sentences which would otherwise be too short

and fragmented in the TL.

It is important to remember that recycling does not involve introducing new information into a text; it simply involves reusing information and wording which is already present in the ST. It should also be used sparingly so as to prevent the text becoming overly repetitive.

#### 5.2.4 Generalizing and particularizing

*Different languages, texts and audiences will require different levels of precision and specificity.*

*Generalizing* is used to describe the practice of making information in the ST less detailed when it is transferred to the TT. This strategy can take the form of omitting information or replacing a specific word with a word which has a less specific meaning. This may be useful where the target language does not have a similarly specialized or specific word, preferring instead to use a generic catch-all term. It may also be necessary, for example, if you are translating a specialized text for a general audience where, as the translator, you might decide that a particular term in the source text will be unfamiliar to the target audience so you decide to translate it using a less specific, more generic term or hypernym in the TT.

Of course this approach can only work if the specific, detailed term (the hyponym) presented in the ST is not essential for comprehension, if it can reasonably be inferred from the context or if it can be slotted in at a suitable point somewhere else in the text; otherwise the reader will either not fully understand what is being said or will be unable to carry out some action. In such cases, the original information will have to stay in the text.

In practice, this might mean that if you are translating a text which describes how specialist paints are used to prevent rust from affecting the structure of oil rigs, you might translate the word *coating* with a word along the lines of *paint*, a less specific term, if the TT was for a general audience.

*Particularization*, or specification, on the other hand, is where we use a more specific term to the one contained in the ST. We may need to do this because the generic term used in the ST is simply too broad in the TL, introduces too much uncertainty or ambiguity in the TT or has connotations associated with it which are undesirable in the TT. The challenge for us as translators, however, is to ensure that we understand the subject matter of the text sufficiently well to allow us to decide which of the possible specific terms available is the correct one. For example, does *motor vehicle* mean *car*, *truck*, *van* or *motorcycle*? Often we can ascertain the correct term from the context but this will not always be the case, and thus good communication with the author or client or access to a subject matter expert is vital.

While overtranslation and undertranslation can be used intentionally as justified and effective translation strategies, it is also worth remembering that they can also be used accidentally to the detriment of the TT. One example of this relates to the translation into German of *European Council Directive 70/220/EEC* which deals with the safety requirements for vehicle fuel tanks. The English source text referred to *fuel* while the translation incorrectly referred to *petrol*, giving a more specific



meaning than the one intended. This inappropriate use of particularization could have presented various safety, financial and legal problems for drivers, manufacturers and governments and the text had to be corrected as a result. For this reason, you should be careful when selecting TL terms to ensure that they have the same connotations and denotational meaning as the SL term unless there is a valid reason for doing otherwise (Byrne 2007).

#### 5.2.5 Compensation

*Particular features cannot always be recreated in the target text but it may be possible to add similar features elsewhere in the target text to make up for it.*

Compensation is the process where we make up for the loss of certain source text features in the target text by introducing other features elsewhere in the translation which are not necessarily present in the source text. One of the best ways of illustrating this is to consider what happens when we translate a humorous text or film. There may be a scene in the film where the clever use of wordplay, for example, has a humorous effect. If it is not possible to recreate this wordplay, the joke may be lost and the film loses some of its comedic content. If, however, the opportunity presents itself later on in the film to take advantage of a potential wordplay or pun we can introduce a new joke into the film thereby restoring its "humour quota". The result is that, overall, the translated film will have the same number of jokes, although they are not necessarily in the same places as the original film.

Applying this basic idea to technical texts, we know that we are not going to be dealing with jokes or word plays but it does mean we can redistribute information and textual features throughout the text in order to balance out the information load or make the style more consistent. Hervey *et al.* (1995) describe four types of compensation:

*Compensation in kind* involves replacing one type of textual feature in the ST with another type of feature in the TT. This might involve replacing infinitive forms of verbs used in German to give instructions with imperative verb forms in English. Additionally, if the syntax or tone of the ST indicates a level of formality which is not reflected by the same structure in the TL, you may need to add other syntactic or stylistic devices to recreate this effect.

*Compensation in place* is used to make up for the loss of a particular feature or effect at a particular point in the ST by recreating it elsewhere in the TT. If, for example, a technical advertisement contains an example of wordplay which cannot be rendered accordingly in the ST, it may be possible to produce a similar play on words elsewhere in the text providing it is appropriate to the overall purpose of the text. This approach is quite similar to the strategy of recycling information described above, and involves taking information which was originally found in one part of a text and using, or reusing, it somewhere else.



*Compensation by splitting* may be used where the ST contains a word for which there is no corresponding TL word which conveys the same range of meanings. An example might be the English word *fastener* which is used as a collective term for all manner of objects used to attach things together such as bolts, screws, clips, clamps and pins. If we are translating into a language where a corresponding term either does not exist or is not as comprehensive we may need to spell out these meanings so as to ensure comprehensibility.

*Compensation by merging* allows us to condense features or information presented in the ST over a fairly long stretch of text (or in a complex compound word) and to present it in a shorter phrase or even in a single word. Using the previous example, if the source text refers to attaching a "mounting bracket to a rack unit using bolts, screws, clips, clamps or pins" we might decide to use the generic TL term *fastener* to combine all of these meanings into the expression "the mounting bracket can be attached using suitable fasteners".

It is worth noting that both compensation by splitting and compensation by merging are very similar to the ideas of generalizing and particularizing translation and the reasons for using them often overlap.

#### 5.2.6 Restructuring

*The sequence in which information is presented to readers in a text or even in individual sections, paragraphs or sentences can play an important role in the success of a translation.*

Usually, information in a technical text is presented in a logical or chronological sequence. Such sequencing is particularly true in the case of instructional texts or texts which describe processes and procedures which need to be carried out. Often this will involve presenting information in the order in which it is required and the sequencing is fairly stable because it depends on real-world objects or processes. However, although perceptions of what does and does not constitute a logical or intuitive flow of information are largely culture-independent because they depend on our human cognitive processes, there are instances where cultural expectations and norms take priority and it will be necessary to rearrange the sequence of information in a text.

One example of this is the way in which people use written instructions. Some people will read the instructions in their entirety before performing any of the steps while other people may perform each step as they read it. Obviously, this is going to cause problems for readers if a particular step can only be performed after some other step has first been completed but the instructions present the steps in the wrong order.

Gerzymisch-Arbogast (1993) identified certain patterns and characteristics relating to the sequencing of information in texts and found that certain languages favoured a particular sequencing of information which could be perceived as *given* and *new* relative to the author's perceptions of the readers' background knowledge. It is worth pointing out that this is quite different from the notions

of *theme* and *rheme*, which relate to given and new information within a particular sentence or discourse. She explains that in order to produce effective translations, a translator may need to alter the sequencing and even the proportion of *given* and *new* information within paragraphs or sections of text (using expansion and contraction, generalization and particularization, or even repetition). In practice, this may involve **foregrounding** certain information, omitting other information or even repeating information.

A rather extreme example of this is presented in a study by Ulijn (1995) who examined the sequencing of sections within a document. Ulijn's experiment showed that the structure of documents may need to be changed for different language audiences. He found that what might be perceived as the most logical sequence of information in a document for one audience might be counterintuitive or confusing for other language audiences. The following example illustrates how the structure of a user guide might need to be changed for two different target audiences.

Table of Contents (Language 1)	Table of Contents (Language 2)
1. Introduction	1. Introduction
2. Getting Started	6. Specifications
3. Advanced Features	5. Maintenance
4. Troubleshooting	2. Getting Started
5. Maintenance	3. Advanced Features
6. Specifications	4. Troubleshooting

*Figure 9: Example of a table of contents modified for two different audiences*

Similarly, source texts may not always be well written, with the result that information which should have been presented in a particular order, even for the SL audience, appears in some other sequence. Problems may be caused, for example, if the instructions for backing up files on a computer tell readers to delete a file before they have actually backed it up.

As a result, we may need to rearrange the information within sentences, paragraph or even chapters. However, there are limitations on what we can reasonably do as translators. So, although Ulijn's observation that the sequence of chapters within a book may need to be changed, we cannot move entire chapters or sections within a document unless we get permission to do this because it is not really a translator's job. We should at least, however, let the client know. This issue is also discussed in the section entitled *Errors in the Source Text* on [page 161](#).

### 5.2.7 Iconic Linkage

*Minimizing variation and ensuring the same information is expressed in the same way can improve*

### *the usability of translations.*

In certain types of technical texts, particularly those with an instructional function, emphasis is often placed on the **usability** of the information as a way of measuring the quality of the texts. The same also applies when translating these documents. In the case of texts, usability refers to how easily and effectively readers can assimilate and act upon information that is presented to them in texts. While there are various ways of improving the usability of texts such as using diagrams, structuring chapters in particular ways, including examples and even things like using different fonts and page sizes, translators are restricted to strategies which we can implement during the writing stage of the translation process. This is because many of the strategies for improving usability go beyond the traditional role of the translator and are more commonly associated with the work of technical writers.

However, we can improve the usability of texts by implementing a strategy known as Iconic Linkage (IL) (Byrne 2006). This strategy involves reducing the number of ways in which the same information is presented in a text. It takes the idea of parallelism – using grammatically parallel structures for parts of a sentence which are similar in meaning – and expands it to include matching sentences and phrases throughout an entire text, not just those which are in close proximity. So, as the following examples show, if the same information is presented three times in the source text, but each time using a slightly different wording, instead of replicating the slight differences for each of our translations, we pick one single translation and use it for all three of the ST sentences.

- Always exit the application before disconnecting the storage device from your PC.
- The user must never remove the unit from the system without first closing the associated program running on the PC.
- To safely remove the drive, you must first close EasyUSB.

Research has shown that this strategy can significantly improve the effectiveness of texts (Byrne 2005). It does this by minimizing the amount of cognitive effort and problem solving needed in order to understand a text. Additionally, by using consistent wordings repeatedly, IL improves predictability and aids learning by taking advantage of the human tendency to form habits (Byrne 2006:172–174). In any case, it is nearly always a good idea to translate the same information in the same way because it improves clarity, aids learning and comprehension, and looks more consistent and professional. It also has a knock-on effect if the text being translated is going to be used as a **pivot** or *relay translation* because the TT becomes the ST for another translation activity. In such cases, Iconic Linkage makes the use of translation memories more effective thanks to the increased repetition the text contains.