Technical Translation

Usability Strategies for Translating Technical Documentation

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Preface

Based largely on my doctoral dissertation “Textual Cognetics and the Role of Iconic Linkage in Software User Guides”, this book is intended to serve as an introduction to technical translation and usability for translators and translation researchers. In this book we will look at how it is possible to improve the quality of technical translations by drawing on cognitive psychology, usability engineering and technical communication to develop skills which can be implemented during the text production stage of the translation process to ensure more usable texts. This book draws on a broad range of research and makes it accessible and applicable to an audience with a background primarily in translation although those with backgrounds in technical writing will also find the discussions of usability, cognitive psychology and usability testing useful.

Technical translation has traditionally been regarded as the poor cousin of “real” translation. Often regarded as a vocational, practical and at times rather basic type of translation, it has been largely neglected in the literature on translation theory. The work that has been done in this area has largely been restricted to terminological issues or technical issues (e.g. tools such as translation memories and machine translation, etc.) or does not fully reflect the reality of modern translation and needs to be updated (e.g. Pinchuk 1977, Sykes 1971). However, technical translation is a much more promising avenue of theoretical investigation than many suspect. Indeed, its inevitable roots in commercial translation have served to make this an even more rich and complex area than previously believed.

In recent years, the range of technical texts facing translators has grown significantly. No longer is it enough for a translator to merely understand the source text and be able to render it into a comprehensible target text. Nowadays, clients spend vast amounts of money on professional technical writers, document design and testing procedures while technical writers spend years studying how best to present technical information to users. Technical translators, on the other hand, do not necessarily receive the training and exposure to the text types which have become so prevalent or to the processes needed to create them. There is, therefore, an urgent need
to incorporate knowledge of technical communication and usability testing into the theory and practice of technical translation.

**Aims and Structure of this Book**

The book aims to show how to improve the usability (and consequently, the quality) of technical translations within the context of target-orientated models of translation, while at the same time recognising that there is, theoretically at least, a division of labour between author and translator. Beginning with a discussion of accepted translation theory, Chapter 1 explains that existing theories of translation do not fully consider the reality of translation as form of technical communication. Subsequent discussions make the case for a communicative approach to translation where the emphasis is very much on the target audience, rather than the original source language audience or the author.

We then examine the field of technical communication as a form of professional communication and as a “supplier” for the translation industry. Chapter 2 will explore the motivations for producing technical documents and look at the various types of documents and why they are produced. After introducing a number of fairly typical types of technical texts we turn our attention to the genre of software user guides. This genre is chosen for a number of reasons. Firstly, the ubiquity of software user guides in itself merits attention. Secondly, software guides are good examples of instructional texts, a genre which also includes training and educational materials, operating guides as well as multimedia materials. Indeed, many other types of technical text perform some form of instructional function and so, an examination of user guides will provide knowledge which can applied in a variety of contexts. The book will then set about discussing how to improve translated instructional texts using an understanding of human cognitive psychology coupled with various strategies and methods garnered from technical communication.

Chapter 3 provides a detailed examination of the fundamentals of cognitive psychology and explains how humans read, understand and learn, both in general and from texts. By understanding what it is that makes humans use and understand texts, we are better placed to discover ways of making sure the interaction between reader and text is more effective. This chapter aims to provide this grounding in human cognitive abilities and limitations before highlighting the way they affect how we read texts, particularly software user guides. The aim here is to help translators understand the
problems posed by technical instructional texts for average readers and to
explore the potential for drastically improving the quality of translated
technical texts using both linguistic and non-linguistic methods. Ultimately,
such endeavours will ensure that texts complement the cognitive abilities of
readers while at the same time, compensating for the limitations of the hu-
man cognitive system.

Having discussed human cognition and outlined the role this can play in
producing better translations, the book applies this knowledge to the text
production stage of the translation process. The concept of usability will be
introduced as a truly indicative measure of the effectiveness of a text. By
ensuring that readers can use the information in a text effectively, we make
sure that the text succeeds in its primary function to instruct, or rather to
educate. A detailed discussion of usability will be presented which will in-
clude definitions of usability and human factors, factors which affect usabil-
ity, development processes to promote usability and key characteristics of
usable texts. Usability strategies will be examined under the categories of
principles, guidelines and rules.

With this theoretical basis, the next stage is to apply it in practice. A case
study will be presented in which one example of a guideline along with
several of its associated rules are tested as part of an empirical study con-
ducted in order to test whether it is possible to improve the usability of
translated texts using linguistic methods alone. The case study simulates the
text production stage of the translation process and examines whether
Iconic Linkage, the process of replacing non-isomorphic but semantically
identical segments of text with isomorphic formulations can improve us-
bility. Iconic Linkage will be defined and discussed. A range of examples
are provided to illustrate the concept in a multilingual context. A detailed
description of the rationale, preparations, methods and results of the empiri-
cal study will be presented and discussed.

The book will conclude by evaluating the previous sections and examin-
ing other ways in which textual cognetics can be used in translation theory
and practice.
Using this Book

This book is aimed at a number of potential audiences, each of which may have different needs and expectations when it comes to reading this book. The following list is intended to help you find information on individual subject areas:

- Translation theory and technical translation: Chapter 1
- Cognitive psychology: Chapter 3
- Experimental methods: Chapter 5
- Usability: Chapters 3, 4 and 5
- User guides: Chapter 2
- Reading: Chapter 3
- Readability: Chapter 2
- Technical communication: Chapter 2
- Writing strategies: Chapters 2 and 4

Chapter 1 provides a general overview of translation in general and technical translation in particular. It does not represent a comprehensive review of all the literature on translation but it does provide a good overview of the main themes in translation as they relate to technical translation.

Chapter 2 examines technical communication as a creative and technical discipline. It is useful for understanding why technical documents are produced, how they are produced and by whom. This chapter also describes user guides in detail and describes the various requirements which need to be met for a user guide to be regarded as successful and effective.

Chapter 3 is of benefit to those wishing to understand the cognitive processes which allow humans to perceive information, read documents and learn new information. It provides an introduction to human cognition and explains how this mechanism facilitates learning and reading.

Chapter 4 deals with how we can use an understanding of human cognition, translation and technical communication to engineer user guides so that they are as usable and effective as possible. This chapter looks at usability in detail and discusses various criteria which can be used to quantify
Chapter presents Iconic Linkage as one possible method for improving usability in user guides. Read in conjunction with Chapter 3, this chapter provides a solid basis for understanding usability in general and with regard to user guides.

Chapter 5 draws on all of the preceding chapters and sets out to implement measures to improve usability and then assess the effectiveness of the measures. This chapter provides a detailed introduction to usability testing and evaluates a wide range of literature on the subject. The chapter culminates in a practical usability study which draws on a range of theoretical and practical sources. The results of the study are assessed, evaluated and discussed.

Chapter 6 attempts to draw conclusions from the preceding chapters and discuss the impact of usability on technical translation as well as implications for future research.
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Chapter 1
Technical Translation

Technical translation has long been regarded as the ugly duckling of translation, especially in academic circles. Not particularly exciting or attractive and definitely lacking in the glamour and cachet of other types translation, technical translation is often relegated to the bottom division of translation activity and regarded as little more than an exercise in specialised terminology and subject knowledge. Indeed, these factors, particularly subject knowledge, have in some quarters led to technical translation being feared and loathed, like a modern-day barbarian of the linguistic world.

That technical translation has traditionally been regarded as the poor cousin of “real” translation in the literature is clear. This vocational and industrial type of translation has been largely neglected in the literature on translation theory. This is supported by an enlightening survey by Franco Aixelá (2004) who reports that out of 20,495 publications listed in the BITRA\(^1\) multilingual bibliography of translation research only 1,905 or 9.3% addressed technical translation. Literary translation, on the other hand, is the subject of some 4,314 entries accounting for 21% of the total number of entries despite its niche status in professional practice.

The work that has been done in this area has largely been restricted to terminological issues or technical issues (e.g. translation memories or machine translation, etc.) or needs to be updated to reflect the modem realities of technical translation (e.g. Pinchuck 1977, Sykes 1971). However, technical translation is a much more promising an avenue of theoretical investigation than many suspect. Indeed, its inevitable roots in commercial translation and technical communication have served to make this an even more rich and complex area than previously believed.

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\(^1\) BITRA is the Bibliography of Interpreting and Translation which was created by Javier Franco in the Department of Translation & Interpreting at the University of Alicante. This useful web-based resource can be found at \url{http://cv1.cpd.ua.es/tra_int/usu/buscar.asp?idioma=en}
The aim of this chapter is to challenge some misconceptions about technical translation and describe the reality of this form of translation. I will also try to relate technical translation to some of the more common theories of translation. There are two main reasons for this. Firstly, to show that technical translation is worthy of theoretical study and secondly to show that technical translation, like other specialised types of translation, does not fit neatly into any one theory or approach and that there is, as yet, no adequate explanation of technical translation as an activity.

The Importance of Technical Translation

It has been estimated that technical translation accounts for some 90% of the world’s total translation output each year (Kingscott 2002:247). This is unsurprising given the importance attached to the availability of technical information in a variety of languages, motivated partly by the increasingly international focus of many companies and partly as a result of legislation such as Council of the European Union Resolution C411 (1998a), EU Directive 98/37/EC (Council of the European Union 1998b) and Council Directive 93/42/EEC (1993) and international standards such as EN 292-2: 1991 and EN 62079: 2001 to name just a few. These represent just some of the various laws, directives and regulations across the world that require the provision of comprehensive, accurate and effective technical documentation in a variety of languages. Coupled with increasing international cooperation in scientific, technological and industrial activity, it is clear to see why technical translation is one of the most significant employers of translators.

Yet despite the overwhelming demand for and importance of technical translation, there are several stubbornly persistent myths about technical translation’s importance, nature and role both in industry and within academia.

Some Misconceptions

Before we examine technical translation in greater detail and try to relate it to various theories of translation, it would be useful to look at what we mean by “technical translation” and contrast some misconceptions about technical translation with the realities of what it means to be a technical translator.
Technical translation includes economics, law, business etc. In reality, “technical” means precisely that, something to do with technology and technological texts. Just because there is a specialised terminology, doesn’t make something technical. In discussing technical translation it is useful to make the distinction between specialised and technical translation. For example, religion has a very specific terminology and very definite conventions, styles and document structures but it is never regarded as “technical”. The tendency among certain theorists to include LSP texts such as legal, financial and economic texts within the field of technical translation is less than helpful not least because each area has its own unique characteristics, requirements and constraints. Simply because a field or subject area has unique or specialised terminology does not make it technical. This is not to say that financial translation, or indeed legal translation, do not deserve to be studied in detail as areas in their own right, in fact there are a number of extremely useful books on these areas such as Alcaraz & Hughes (2002), but rather that they will not be discussed here. Instead, this book will take as its basis a definition of technical translation that has its roots in the translation industry and indeed industry as a whole, namely, that technical translation deals with technological texts. Or more specifically, technical translation deals with texts on subjects based on applied knowledge from the natural sciences.

Technical translation is all about terminology. This particular misconception is not unique to those uninvolved in technical translation. A surprising number of people within technical translation share this belief Pinchuck (1977:19), for example, claims that vocabulary is the most significant linguistic feature of technical texts. This is true insofar as terminology is, perhaps, the most immediately noticeable aspect of a technical text and indeed it gives the text the “fuel” it needs to convey the information. Nevertheless, Newmark (1988) has claimed that terminology accounts for at most just 5-10% of the total content of technical texts yet there is a disproportionate amount of attention devoted to terminology and lexical issues in technical translation. A simple subject search for “technical translation” on the BITRA bibliographic database reveals that more than half of the 150 entries found relate to terminological or lexical issues.

What makes this even more surprising is the fact that in many fields of science and technology, the terminology is remarkably similar to the extent that separate, specialised dictionaries are frequently unnecessary. Indeed, Fishbach (1993 and 1998) points to the quasi-conformity of medical terminology thanks to the common origins in Latin and Greek. So, depending on the particular language pairs, a translator should have less trouble locating appropriate specialised terms in the target language than with
However, perhaps even more important than terminology is actually knowing how to write the texts. Translators need to produce texts which are identical to those produced by technical writers working in the target language (Fishbach 1998:2). Failing to comply with target language text conventions can undermine the credibility of the text, the author and the information in the text. O’Neill (1998:72) claims that “there is no substitute for a thorough knowledge of the target language”. In order to do this, it is necessary to look to technical writing and this is not something many translators have the opportunity to do, either as part of their training or as part of their own efforts to improve their skills.

According to Lee-Jahnke (1998:83-84), there are three things that are essential in order to learn how to deal with scientific and technical texts:

- know the text structure in the different languages
- know the LSP for the area
- know the subject area

Style doesn’t matter in technical translation. This is, perhaps, one of the more irritating misconceptions for technical translators because it is so completely unfounded and implies that technical translators do not have the same linguistic and writing skills as other types of translator. Perhaps the problem stems from differing opinions of the nature of style and the popular belief that it relates exclusively to literature. If we look at style from a literary point of view, then it does not have any place in technical translation. But if we regard style as the way we write things, the words we choose and the way we construct sentences, then style is equally, if not more, important in technical translation than in other areas because it is there for a reason, not simply for artistic or entertainment reasons. As Korn-ing Zethsen (1999:72) asserts, literary texts “do not hold a monopoly on expressivity and creativity”. To illustrate this, consider a leaflet containing instructions for using a product. The limited space available requires both the author and translator alike to express information in a way which is sufficiently clear, simple and concise so as to allow readers to understand the information completely and quickly but which nevertheless conveys all of
the necessary facts. In comparison, consider a poem where an author may purposely choose stylistic devices, structures and metaphors which will make the meaning ambiguous and leave it open to several interpretations so as to add to the readers’ enjoyment of the poem. Both situations will require the use of stylistic and expressive language in order to achieve the desired effects although these approaches may be at opposite ends of the stylistic spectrum.

In many cases, the importance or even existence of style in technical texts goes completely unacknowledged, due largely to the belief that because technical language is functional, it must be “plain” and stripped of any form of style or linguistic identity. In reality, however, technical translation is a highly complex endeavour and style is one of its most important facets. For this reason, this book will take as its basis the concept of style and its application in technical translation. This book will show that style, which has been regarded at best as a way of ensuring compliance with target language norms, can actually have much more profound effects on the quality of technical translations.

**Technical translation is not creative; it is simply a reproductive transfer process.** While technical translation “is undoubtedly more restricted in range than aesthetic translation” it is much too easy to overestimate and exaggerate its apparent simplicity (Pinchuck 1977:20). But in order to convey information in an appropriate and effective way, technical translators have to find novel and creative linguistic solutions to ensure successful communication. That this task is often hampered by a restricted vocabulary and stylistic constraints merely makes the achievement all the more impressive.

**You need to be an expert in a highly specialised field.** There is a common belief that in order to be a good technical translator, you need to be an expert in a highly specialised field and you can’t specialise in more than one or two subject areas. But the reality is that, armed with a good and solid understanding of the basic principles and technologies, many technical translators can, in the words of Robinson (2003:128) “fake it”. He says that “translators… make a living pretending to be (or at least to speak or write as if they were) licensed practitioners of professions that they have typically never practiced.” They are like actors “getting into character”.

However, lest technical translators be branded a bunch of scurrilous charlatans who deceive unwitting clients we need to put Robinson’s comments into perspective. The notion of pretending to be an expert means that the translator should have enough subject knowledge either to know how to deal with the text or to be able to acquire whatever additional information is needed. Researching a new subject area for a translation is
always easier when you know \textit{at least something} about it compared to when you know nothing at all. It is, therefore, essential that translators have excellent research skills, make full use of parallel texts and have a very good understanding of general scientific and technological principles. Technical translators need to “impersonate” the original author who is generally, though not always, an expert in a particular field and they need to write with the same authority as an expert in the target language. So in this case, the real challenges for the technical translator are to be able to research subjects and to have expert knowledge of the way experts in a particular field write texts. We can summarise the essential areas of expertise for technical translators:

- subject knowledge
- writing skills
- research skills
- knowledge of genres and text types
- pedagogical skills

With regard to subject knowledge, O’Neill (1998:69) says that medicine, nursing, dentistry etc. all share some subject knowledge, e.g. physics, biology, pharmacology etc. Consequently, what are normally regarded as quite separate specialisms frequently share the same basic knowledge. The same can be said of various other types of technological area: engineering, mechanics, construction etc. They all share more or less the same core knowledge.

When it comes to specialised subject knowledge, it is a truism that you cannot master every area so it’s probably best to get a good foundation in the more generic, transferable subject areas and rely on this together with an ability to research new areas to deal with unfamiliar subjects. So for a technical translator, gaining a good understanding of the basics of science and technology can provide a good basis for diverse applications within technical translation.

\textbf{Technical translation is all about conveying specialised information.} This is not entirely true, of course the main concern for technical translators is to make sure that information is conveyed accurately but they are also responsible for ensuring that the information is presented in the correct form, that it is complete and that the information can be used correctly and effectively. The translator’s responsibilities encompass many of those of the technical author and that may involve quite radical changes. Technical
The Importance of Technical Translation

translation involves detailed knowledge of the source and target cultures, target language conventions, text type and genre conventions, register, style, detailed understanding of the audiences; whether translators realise it or not, an understanding of how people learn and use information. Subsequent chapters in this book, particularly Chapter 2, will show that merely presenting information to readers is not enough. Readers must be able to assimilate the information with as little effort as possible. The information presented in technical documents is a means rather than an end and it should not add to the work of readers.

The Reality of Technical Translation

Having looked at some of the more prevalent and serious misconceptions of technical translation, it’s time to look at the truth behind technical translation. Our aim here is not to provide an exhaustive and comprehensive treatment of the area but to give a good general overview and insight into the area. This section seeks to describe the reality of technical translation in a professional context, to describe what it is that technical translators do and what factors affect their work.

Scientific vs. Technical Translation

One of the greatest fallacies when discussing technical translation is to somehow lump it together with scientific translation, or worse still, to use the two terms interchangeably. Throughout the literature on translation, in the frequently brief references to technical translation we see the expression scientific and technical translation, where, out of convenience perhaps, authors see no problem in treating these two siblings as conjoined twins or even as the same person. This fundamental error serves only to confuse the issue because scientific and technical translation are not the same and as such, cannot be compared equally.

Despite the obvious connection between the two, i.e. they both deal with information based, to varying degrees, on the work of scientists, scientific translation is quite distinct from technical translation. Certainly, they both contain specialised terminology and, on the surface, deal with complicated scientific subject matter (to an extent) but it is all too easy to overestimate these apparent similarities at the expense of other, more compelling, differences.

One of the easiest ways of disambiguating the matter is to look at the words themselves: scientific and technical. Scientific relates to science
which is defined by the Chambers Dictionary as “knowledge ascertained by observation and experiment, critically tested, systematised and brought under general principles” (Chambers 1992). Technical relates to technology which is defined as by the Concise Oxford English Dictionary as “the application of scientific knowledge for practical purposes”. Thus we can say 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, dirty fingernails and all. The differentiation between scientific and technical translation is also acknowledged by the information sciences. Pinchuck (1977:13) points out that even in libraries, pure sciences are classified under 5 while applied sciences, i.e. technological material, are shelved in their own place under 6.

Scientific and technical translation, therefore, is a generic term which is used to refer to pure science, applied scientific research and technology. But it is not just the subject matter that distinguishes scientific from technical translation. Technical translation (and technical communication, which will be covered later on) can be characterised at a basic level on the basis of:

1. subject matter
2. type of language
3. purpose

So we can, for example, translate a scientific paper which deals with the concept of electromotive force and the effects of currents passed through conductors, complete with formulae, hypotheses, discussions and calculations or we can translate an installation guide for an electrical motor. Both texts are based on the fact that if you pass an electrical current through a piece of wire, a magnetic field is created which exerts a force acting at right-angles to the wire. The difference is the way in which the knowledge is used and presented. And this is a fundamental difference between scientific and technical translation and one which also affects the type of language used in the texts.

In our scientific paper on electromotive force, the goal is to discuss, explain, justify, impress, convey, convert and possibly entertain. An author will use the full extent of the language, within specific conventions and norms, to present the information in an interesting, serious and impressive way. In some cases, these texts even border on the literary, using the same devices and strategies as a short-story writer or novelist. Scientific language
can be quite formal\(^2\) (think of journal papers) and will often have considerable range, just like a literary text. Such texts will also see the use of various rhetorical strategies, Greek and Latin terms and expressions as well as various affixes and compound terms.

The following examples illustrate the type of literary language use which can be found in scientific texts and even within a single text. In the introduction to a detailed book on astrophysics, Schatzman and Praderie (1993:1) paint a rather picturesque scene:

> In the splendour of a moonless night, far from the pollution of the sky by artificial lighting, the first revelation is that of the stars.

> The next sentence is taken from a book discussing the scattering of X-rays in gases, liquids and solids where the author uses rhetorical questions, among other strategies, to enrich the text.

> How is the sudden decrease of \(\mu\) in Fig. V.5 explained by resonance? (Hukins 1981:47)

> In discussing the origins of the universe and the *Big Bang* theory, Goldsmith (1995:68) uses the expression “*tough little devils*” as a humorous way of explaining the nature of helium nuclei:

> This tiny fraction results from the characteristics of helium nuclei, tough little devils that cannot easily be made to fuse into larger nuclei, because no stable nuclei exist with either five or eight nucleons (protons or neutrons).

An installation guide, on the other hand, is written to help someone do something. The aim here is to convey the information an engineer needs in order to install, connect and commission the motor. Consequently, the language used will reflect this: simple, unambiguous, concise, and, for want of a better word, unremarkable. The aim here is not to entertain the reader.

\(^2\) Popular science books and magazines which form a sub-class of scientific texts tend to have a less formal and possible more journalistic tone but they are still capable of switching between a jovial, friendly style and a more formal “scientific” tone.
People generally do not settle down with a glass of wine to spend the evening reading installation guides for fun. Pinchuck refers to technical language as “workshop language”, which is somewhere between scientific and general language. It is less regulated, less literary and even colloquial on occasion but always strictly functional.

Scientific texts will be conceptually more difficult and will be more abstract than other types of text. They will, however, have more standardised terms which are easier to look up and they are likely to be better written than texts on other levels. Technology-based texts will be more concrete, will contain less information in more space, they will be more colloquial and will feature concepts which are easier to understand. In addition to this, there will be products and processes in the external world which can be referred to. In other words, technical texts can rely on world or background knowledge to a greater extent. (Pinchuck 1977:218-219).

The Aim of Technical Translation

This leads us on to examine the aim of technical translation. While the preceding discussion would lead us, quite justifiably, to say that the aim of technical translation is to transmit technical information, this would be just half of the story. Although it is true that technical texts are utilitarian (Pinchuck 1977:18) and are intended to serve a relatively finite purpose, namely to clearly present information to the target language readers, there is more to technical translation than simply transmitting information. Instead, the challenge for technical communicators is to ensure that all of the relevant information is indeed conveyed but also that it is conveyed in such a way that the readers can use the information easily, properly and effectively. Indeed, this aim is precisely the same as that of technical writing, which, rather unsurprisingly, forms the basis for technical translation in that it supplies the raw materials for translation activities.

3 Pinchuck (1997:163-164) is eager to stress that workshop is not meant in any derogative sense. Rather, it reflects one of the traditional areas where scientists work and as such is equally as valid as “scientific”. In any case, he offers an interesting discussion of the differences between scientific and technical language.
A Communicative Service

In previous paragraphs we referred to technical translation as a communicative service. Indeed, this is reflected in the following quote from Sykes (1971:1):

Practical translating... is a service industry. The value of the service provided by... the translator, depends here, primarily, not on the effort which went into its preparation, its literary merit, its quality of presentation, production and reproduction, etc., but on its gap-bridging capacity, its message and content, its scientific or commercial utility to the requester.

The purpose of technical translation is, therefore, to present new technical information to a new audience, not to reproduce the source text, per se, or reflect its style or language. Technical translation is a communicative service provided in response to a very definite demand for technical information which is easily accessible (in terms of comprehensibility, clarity and speed of delivery).

As a communicative service or act, translation inevitably involves people. At the most basic level, we can say that this communicative act involves the author, the translator and the reader. This is the standard way of examining the translation process. However, this is far too simplistic for anything other than the most basic discussions.

In reality, several parties are involved in the process. This has been addressed by authors such as Vermeer and Nord but it is necessary here to emphasise the important roles played by the various stakeholders. Conscious of the fact that the majority of non-literary documentation is not produced as a result of some desire or intention on the part of the author, Nord (1991:42ff) distinguishes between the sender and text producer (author). Using software user guides as an example, we can say that the sender would be the software company who actually develops and sells the software. As part of the product development process, the company instructs one of its employees, a technical writer, to produce a comprehensive user guide to help users learn to use the software. Thus, the text producer in this case is the technical writer working for the software company.

An interesting point is made by Nord (1997:21) who claims that unless a source text was produced specifically to be translated, the source text author has no immediate involvement in the translation process. This poses something of a problem because in the current climate with multilingual, multinational companies and legislation requiring documents in multiple
languages, it is difficult to imagine a case where it does not occur to someone during the production of documentation that it may be translated at some stage, even if it is just a distant prospect. Still, it is hard to see why the author would be involved in this process unless the translator needed to clarify an ambiguous part of the text. Again, with the growing dependency on freelance translators, it is unlikely that a translator would have any direct or indirect communication channel with the author. A peculiar situation indeed and, perhaps, worthy of further investigation in the future.

We can see from this however, that the stakeholders in the technical translation process are not simply the author, translator and reader. If we examine the practical circumstances surrounding the production of multilingual documentation, we can propose a number of other parties:

- Document Initiator
- Writer/Text Producer
- Translation Initiator
- Translator
- User

The Document Initiator is the person or entity responsible for the production of the original source language document. In the case of product documentation, this is invariably the company that manufactures the product. The Document Initiator’s aim here is to have documentation that will help users learn how to use the product effectively, safely and efficiently. This can be motivated by a genuine desire to help users, to provide a “complete” product, to improve the company’s competitiveness and reputation, to reduce calls to technical support or simply to comply with legal requirements.

The Document Initiator then instructs the Writer (who may be in-house or a freelance contractor) to produce the documentation. The Writer either receives a detailed brief from the Document Initiator or develops a document specification on the basis of interviews with the Document Initiator and/or the Writer’s own expertise. Working to this specification, the Writer gathers information from a variety of sources such as white papers, project outlines, hand-written notes, product specifications and marketing materials and processes them to produce a text which then goes through a number of iterations which is tested at each stage for content, clarity and ideally usability. The completed document is returned to the Document Initiator and distributed to customers. By referring to the sender and the text producer (Nord 1991:42ff) also acknowledges the need to differentiate
between the person who actually writes a text and the person or entity who orders its creation.

The **Translation Initiator** is the person or entity responsible for starting the translation process. This is generally the Document Initiator but it can be argued that the Translation Initiator may be a different department or manager within the same company. The motivations for the translation process are similar to those for the document production process, i.e. a desire to enter into new markets where the documents serve not only as a way of training customers but also as an “ambassador” for the company and its products. Translations may be motivated by a need to comply with legal requirements such as the Council of the European Union Resolution C411 which states that “customers are entitled to manuals produced in their own language” irrespective of where the product was made (Council of the European Union 1998:3). The Translation Initiator sends the document and some form of instructions to the Translator.

While strictly speaking the **Translator** is the next step, in reality this is not always the case. Frequently, texts will be sent to translation agencies or localization vendors who will then send the document to a translator. It goes without saying that this additional link in the chain can present both problems and benefits for the Translation Initiator and the Translator. Problems arise from the fact that this is another stage in the communication process and as such, any instructions or requirements specified by the Translation Initiator may well be “watered down”, misinterpreted or not passed on by the agency or vendor. Of course, this depends on the systems and processes the agency has in place as well as on the personalities and communication skills of the project managers and administrators involved. It is not unheard of for a project manager to simply send a text out for translation by a freelancer without passing on any form of instruction, assuming instead that the translator will know what to do with it. On the other hand, certain agencies have robust processes in place to ensure that translators are given detailed information such as whether the text is for publication or for information purposes, whether specialised terminology or style guides need to be used and so on. However, for the sake of clarity and simplicity, we will assume that the instructions from the Translation Initiator have been conveyed perfectly to the Translator and that there is no cause to suspect that ambiguities have been introduced or instructions lost.

**Translators** can be either staff (working for the Document/Translation Initiator), in-house (working in-house for an agency or vendor) or freelance and they are responsible for producing a foreign language version of the original document. Unfortunately, practices regarding translation briefs or instructions for producing the translation are far from consistent and
frequently problematic. In addition to the factors discussed above, the problem is that many Translation Initiators simply do not have the necessary knowledge or experience to realise that they should give some form of brief when commissioning translations. Some simply regard this as the translator’s responsibility. For instance, some might argue that you would not give a mechanic a detailed checklist and instructions for servicing your car. Instead they would expect that, having described the problem in general, the mechanic would be able to establish what the problem was and would know how to fix it. The same thinking applies when some clients think of translators. At best, many clients will simply specify that the document is for publication purposes, should use company’s own terminology and should “read well”. In this regard, in-house and staff translators fare a little better than their freelance counterparts.

Even in the absence of a translation brief, an in-house translator will have access to various experts, sometimes even the original author as well as access to a variety of existing documentation in the form of previous versions of the document and parallel texts. Freelancers, unfortunately, do not always have this luxury although the more conscientious will pester the client or agency for this material. More often than not, translators have to rely on previous experience and knowledge of the document conventions for both languages. So, using a knowledge of the two languages, including the methods for producing effective texts in the target language, subject knowledge and their perception of the audience’s needs, expectations and requirements while at the same time ensuring that the client’s wishes are met along with the legal requirements for documentation, the translator produces the foreign language version of the text. The translation is then made available to the User, who represents the final stage in the process.

It is the User who, according to Holz-Mänttäri (1984:111), is the decisive factor in the production of a target text. Where technical documents are translated, there are two sets of users: the source language user and the target language user. Although both users are on the surface quite different in terms of their needs, i.e. documents in the respective languages, they share certain macro-aims, e.g. learn how to use the product. However, this may need to be achieved in different ways. This is where the technical writer and the technical translator share a common purpose to determine what their respective users want and how to achieve this. In order to translate effectively, a translator needs to fully understand and know the users (Reiss & Vermeer 1984: 101).

The user is the real reason the original document was produced in the first place and subsequently translated. What the user wants from a translation has been subject to much debate, argument and hand-wringing among
translation theorists. Some argue that the target language reader may be interested in gaining an insight into the culture of the source text culture or the source language itself. Others would argue that the target reader wants to experience the text in the same way as the original audience did. In certain circumstances this may be true. However, in the case of technical translation, all readers are concerned about is getting the information they need and being able to understand and use it effectively in order to do something else, usually some task relating to their day to day work. This may sound rather absolutist and dogmatic, but in reality many people treat translations not as translations but as original target language texts. This is unless, of course, there is some quality issue within the text which identifies it as a translation in which case the user will probably lose much, if not all, trust in the text. In any case, the translation needs to function in precisely the same way as any other text in the target language. Readers are unlikely to show mercy to a translation that is obviously a translation just because it is a translation. This serves only to distract them from their primary concern: finding the information they need in the document and using it.

With this general overview of the key stakeholders involved in technical translation, we now need to take a closer look at the role of the translator. After all, it is the translator who facilitates this extension of the communication process.

The Translator’s Role

Given its central position in the entire translation process, the role of the translator is, understandably, more complex than the other participants and as such merits closer investigation.

Much like the source language technical writer, the translator’s primary job is to communicate information by means of a text. This aim supersedes any desire or intention to transfer the source text into the target language. As Robinson (2003:142) maintains, “translators don’t translate words they translate what people do with words”. In this case, we have the added complications presented by the fact that we are dealing with two different
languages, a fairly rigidly prescribed framework within which to produce the target text (i.e. the translation brief and the source text4).

However, like the technical writer, the translator uses information from a variety of sources, not just the source text, to produce a target text which is effective and which performs the desired communicative function.

In this sense, the translator becomes the *intercultural* or *cross-cultural technical writer* referred to by Göpferich (1993) and Amman & Vermeer (1990:27). But this isn’t just an excuse for loose and overzealous translations by translators who are dissatisfied with their role as *mere* translators and yearn for the “power” of an author. Quite the opposite in fact! The sign of a good technical translator is the ability to do some of the things a technical writer does to make sure that the person who ultimately reads the text can do so with relative ease and that whatever tasks the reader needs to perform, are easier having read the text.

However, in practical and professional terms, the actual work of a translator is still somewhat unclear and not fully understood. In the words of Mossop (1998:40) there are “no systematic observations, or even self-descriptions, of how professional translators proceed when they translate”. This is indeed true. We may speculate as to what is actually involved in translating a text and how it is done by a translator but in terms of what a translator actually does and when, we are still guessing to a large extent. Mossop describes the process of translation as a process consisting of 5 tasks performed over 3 phases of translation production:

- Phase 1: Pre-drafting
- Phase 2: Drafting
- Phase 3 Post-drafting

4 I am conscious of the need not to elevate the source text to such heights that it dominates and determines the translation process. The emphasis here is, and will remain, firmly on the needs of the target audience and not on the source text or author. Having said this, there is a limit, as yet intangible, to what a translator can do and how far a translator can deviate from the source text. A useful way of thinking about this is Nord’s notion of “function plus loyalty” as part of her approach to Skopos theory (see page 38) although Vermeer has reservations about introducing subjective, value judgments into Skopos theory (Vermeer 1996:83).
During the course of these phases, translators perform the following tasks, although it is not clear, according to Mossop, how the tasks are distributed. It is possible that the tasks are performed sequentially or in parallel.

- Task 1: Interpret the source text
- Task 2: Compose the translation
- Task 3: Conduct the research needed for tasks 1 and 2
- Task 4: Check the draft translation for errors and correct if necessary
- Task 5: Decide the implications of the commission. In other words, how do the intended users and uses of the translation affect tasks 1 to 4?

While Mossop presents these phases and tasks as a description of practical translation as a whole, they are easily applied to technical translation, although it is possible that the distribution of tasks and stages is even more difficult to pin down. Nevertheless, this description serves to give a useful overview of the stages involved in producing a technical translation because it acknowledges the need for translators to conduct research so as to understand not just the text but also the subject while at the same time ensuring, by means of revisions and corrections, that the text conforms to target language norms and target audience expectations.

**Technical Translator or Technical Communicator?**

That the lines separating the role of technical translator and technical writer have become somewhat blurred is inevitable. What’s more, this fact is gaining greater recognition in the wider “communication” community. Various professional societies for technical communication in Europe and in the United States - such as the Institute for Scientific and Technical Communicators and the Society for Technical Communication - specifically include translators in their definitions of technical communicators.

Not only do both camps deal in the same currency, i.e. technical information in texts, they also share several key tasks and activities. Perhaps first and foremost, technical writers are, to a certain extent, not unlike translators in that they need to “translate” what Van Laan and Julian (2002:18) call “geek-speak” into clear and understandable English. As mentioned previously, a technical writer gathers information from a variety of sources including documents that were produced by and for experts such as programmers and engineers. With this come the inevitable infelicities of style, excessively technical content or indeed missing information. This information