From: Jody Byrne: Scientific and Technical Translation Explained

1.2 A place for translation theory?

What can translation theory tell us about translating technical documentation?

Translation theory has always been a problematic area of study. Part of the problem is that it seeks to understand and explain translation, which is itself a complex and notoriously difficult concept to pin down. In the rush to explain the various facets of translation – and possibly to justify translation as a discrete field of study – a plethora of theories, models and approaches have emerged, some of which are extremely insightful and useful, but amidst the noise created by so much work it is sometimes difficult to make sense of it all.

An introductory book intended to explain the practice of scientific and technical translation is not the place for a lengthy discussion of translation theory, although it is necessary to mention briefly some of the more relevant theoretical approaches which relate to this area. The following paragraphs will provide a very brief outline of how translation theory can be applied to scientific and technical translation.

One of the most difficult aspects of translation theory is that scientific and technical translation have traditionally been neglected by scholars and none of the mainstream theories really addresses scientific and technical translation specifically. Some models have been developed as general theories of translation while others have emerged from particular types of translation, such as literary translation or bible translation. As a result, applying any of the available theories to scientific and technical translation is fraught with difficulty.

Difficulties also arise because, as Chesterman (2000:49) points out, many theories of translation adopt a binary approach to translation consisting of diametrically opposed extremes. Some examples of this include *formal* vs. *dynamic* equivalence (Nida & Taber 1964), *semantic* vs. *communicative* (Newmark 1977) and *covert* vs. *overt* (House 1977). While this approach certainly serves to make the theories neater and easier to describe, it represents a rather oversimplified vision of the translation process. Translation inevitably involves shades of grey – new scenarios, unusual combinations of factors and so on – which means that trying to shoe-horn a translation into one category or the other is often uncomfortable, if not impossible. Conversely, having too many categories or options can make classifying a particular translation scenario equally challenging.

While a lot of valuable work has been done in the field of **LSP** (Language for Special Purposes) and text typologies, which help us to understand why and how texts are produced in specific communicative contexts, there is still a lot to be done before we can comfortably apply a theoretical model to scientific and technical translation. Typologies are discussed in Chapter 3 but for more information see, for example, Göpferich (1995) and Trosborg (1997).

1.2.1 Recreating the source text

Traditionally, the source text has been regarded as the most important element in translation, particularly as it is the starting point for the whole process and the basis upon which **target texts** are produced. The prevailing view has been that, for a translation process to exist there has to be a source text, otherwise we would not be translators, we would be writers. In recent years, however, the focus of translation theory has, particularly in non-literary spheres, shifted away from frameworks based on the source text towards a more communicative approach. This means that translation is increasingly being regarded as a communicative process and, as such, the guiding factors are the message and recipient, i.e. the content and the target audience. This change of focus has made the study of translation clearer in that we can relate it to actual real-world events with real participants.

The emphasis on the source text is perhaps most apparent in the numerous definitions and types of **equivalence**, which all rely on one thing: a link or bond of some sort between the source text and the target text. It is this relationship that, according to Kenny (1998:77), allows the **target text** to be considered a translation of the **source text**. As Catford (1965:49) explains, "the TL text must be relatable to at least some of the situational features to which the SL text is relatable".

The focus in equivalence theory on the need to have a strong link between the source and target texts is unfortunately taken to extremes, however, with the result that the source text can erroneously be regarded as the most important component in the translation process, with translators striving to create as close a replica of the source text as possible. Indeed, some would argue that it should be the sole guiding

principle for translators. Taking this approach to its natural conclusion, we would have a situation where we could never separate the source text and target text; the target text could not function as a translation without the ever-present source text.

While this is clearly problematic in many ways, to deny that there must be at least some link would also be misguided. Quite simply, without the source text there can be no translation. While this relationship can, to a certain extent, be abused through, for example, an insistence on excessively literal translations motivated out of an unquestioning and sometimes misguided loyalty to the author, often to the detriment of the target language (**TL**) reader, the fact remains that the source text forms the basis for the translation.

Perhaps the most well known types of equivalence are *formal* and *dynamic equivalence* proposed by Nida in 1964. Formal equivalence is concerned with the message in terms of its form and content. With this type of equivalence the message in the TL should match the different elements in the source language as closely as possible, be they lexical, syntactic, stylistic, phonological or orthographic. According to Catford, a formal correspondent (or equivalent) is "any TL category (unit, class, structure, element of structure, etc.) which can be said to occupy, as nearly as possible, the 'same' place in the 'economy' of the TL as the given SL [source language] category occupies in the SL" (Catford 1965:27).

Dynamic equivalence, on the other hand, is based on the notion that the **TT** should have the same effect on its audience as the **ST** had on its own audience. With dynamic equivalence, the emphasis is not so much on finding a TL match for an SL message but rather on creating the same relationship between the target audience and the message as that which existed between the SL audience and the message (Nida 1964:159). The aim here is to produce a target text which is natural and idiomatic and which focuses on the TL culture. According to dynamic equivalence, a successful translation needs to capture the sense of the ST and not just the words. As such, it can only be regarded as a successful piece of communication if the message is successfully transmitted to the target audience.

Nida & Taber make the point, however, that eliciting the same response from two different groups of people can be difficult, particularly when we consider that no two people from the same language group will understand words in exactly the same way (1969:4). This sentiment is also expressed by Steiner (1975:28). What we are left with, therefore, is an approach which is theoretically quite desirable but difficult to implement and imprecise in practice. Applying the idea of formal and dynamic equivalence to any type of translation, not just to scientific and technical translation, rarely produces anything tangible or specific for a translator to make use of because they are such vague and subjective concepts.

There are a number of systems, which have been put forward to examine the levels of equivalence (see, for example, Komissarov 1977, Koller 1979, Baker 1992). One of the most enduring of these is the scheme proposed by Koller (1979:188–189), according to which equivalence can occur on the following levels:

- **Denotational meaning**, namely the object or concept being referred to;
- **Connotational meaning**, which is, according to Koller divided into language level, sociolect, dialect, medium, style, frequency, domain, value and emotional tone;
- **Textual norms**, which are typical language features of texts such as legal documents, business letters etc.;
- **Pragmatic meaning**, which includes reader expectations;
- **Linguistic form**, namely devices such as metaphors, rhyme and so on.

Each of these levels then gives rise to a particular type of equivalence, which can be used to describe the relationship between the ST and TT. In scientific and technical texts, achieving equivalence on any of these levels might require the translator to focus more on the information being communicated (denotational meaning) in the case of an instruction manual, on the *way* in which information is expressed (linguistic form) in a popular science article or on set phrases and document conventions (textual norms) in the case of a certificate of conformity (see Chapter 4). In order to emphasize equivalence on one of these levels, translators may find themselves having to settle for lower levels of equivalence on one or more of the remaining levels.

It has become rather fashionable to dismiss equivalence when discussing professional translation (Pym 1995 & 2010). The insistence of equivalence-based approaches on maintaining what some would regard as excessively close links between the target text and the source text and its original audience seems incongruous when the point of translation is to communicate to a new audience. Equivalence can also be

criticized for its general difficulty in incorporating real-world, extratextual issues such as time constraints, preferred terminology and style, reader expectations, etc. However, to dismiss equivalence out of hand because it appears old-fashioned, excessively concerned with the source text and isolated from the world in which translation takes place is like saying that walking is not as useful as running and should be banned. In reality, both running and walking have their advantages and their disadvantages, it all depends on what it is you are trying to achieve.

These levels of equivalence give us, in theory at least, the ability to compare source and target texts, once a translation has been produced. However, we need to be wary of trying to use the various types of equivalence to *dictate* how a translation should be produced and how the ST and TT should relate to one another. They are simply not designed to do this; equivalence cannot tell us which of its various levels should be used, primarily because it has difficulty taking account of the fact that, as Toury (1995:26) says, a translation is a fact of the target language that hosts it. This means that scientific and technical translations will be governed and judged in the context of the norms, expectations and rules of the target text. In other words, they will be treated as if they were originally produced in the target language and not as translations. Moreover, equivalence does not take into account those real-world issues which play as much a role in shaping the translation process as the source and target languages, the text and its content etc. All that we can realistically expect to achieve using the various levels of equivalence is describe how the source and target texts relate to one another after the translation has been completed. A more helpful way of using equivalence is to employ its levels and types during the translation process as a set of tools or policies which can be selected in order to achieve some translation goal. In practice, this might mean that when translating an instruction manual, for instance, we would decide that denotational equivalence is more important than equivalence of linguistic form or connotational equivalence and that we would concentrate on conveying the information rather than on recreating the particular stylistic features of the source text.

The difficulty in adopting this type of approach, as hinted at above, is that we do not know which of the various levels of equivalence and, by extension, which aspects of the source text, are the most appropriate for a particular context. Simply knowing the different ways in which a source text and target text *can* be equivalent does not mean that a translator will choose the most appropriate one for a particular project. As a result, translators are usually left to their own devices in choosing the most appropriate translation strategy and may or may not choose the right one.

1.2.2 Focusing on the target text

Skopos theory was developed by Hans Vermeer in 1978 and was the first theory to fully recognize the professional reality of translation and that, unlike equivalence, the target text, or more precisely the **purpose** of the target text, is the most important in determining the way we should translate texts (Vermeer 1982; 1987a). This theory is based on the principle that translation is a communicative activity, which is performed for a specific reason; a text is written for a specific purpose and it is translated for a specific purpose. It is this purpose, which is known as the **Skopos**, which governs the translation process, unlike equivalence, where the ST and its effects on the SL audience determine the translation process, or for that matter **functionalism**, where the ST function defines the TT function and the translation process.

Skopos theory maintains that the translation process is determined by the Skopos of the TT as specified by the commissioner and the translator. A text, according to Skopos theory, is an *offer of information*, i.e. the raw materials from which any number of possible translations can be produced (Vermeer 1987b). The way in which a translator selects the "correct" translation depends on the intended purpose of the translation being known. While this may seem rather vague, it does in fact reflect the reality of translation. For example, the way in which we translate a document will depend on who is going to read it, how they are going to use it, the way in which the text will be distributed and so on. These factors do not necessarily remain constant between source and target text and they are particularly important in scientific and technical translation.

Take, for example, a situation where we are asked to translate the user guide for a toaster. In both languages, such texts are expected to have an informative function so the primary function will not change. In the original source language culture, it is normal for such documents to adopt a tone which emulates an expert "speaking down" to a layperson who is instructed to follow certain procedures. However, target language readers would react quite badly to what they would perceive as a patronizing and demeaning, almost insulting, tone. If this document were

being translated for distribution in the target country, the appropriate course of action would be to translate the text in such a way that this expert–layperson register is replaced by a peer-to-peer register where the reader is *advised* to follow certain procedures. A translator would be entirely justified in making such changes, as the translation would fail in its purpose otherwise.

However, if the user guide is simply being translated for use by a service engineer, the emphasis will be on the information and the reader is unlikely to be "offended" by harsh orders and will not need to have the translator explain every concept in simple terms. Ultimately, we would have two quite different translations originating from the same source text. But if, according to Vermeer, an ST is an offer of information and can give rise to any number of potential translations (Nord 1991:23), how is the translator to know which one is the most appropriate one? If it were left to chance, there is the risk that the translator may pick the wrong one, i.e. translate the text in a way that does not meet the client's requirements.

Rather than leave such an important strategic decision to chance, Skopos theory introduces the notion of the **translation brief**, which is defined as a form of project specification which sets out the requirements for the translation (Byrne 2006:39). This brief is intended to form the basis for identifying the Skopos of the translation and is supposed to, among other things, clearly define what the translation is to be used for and who will use it. In his definition of translation, Sager (1993:116) acknowledges the need for some form of brief or instructions "from a third party" on the basis of which the translation is carried out. Unfortunately however, producing a translation brief is quite a hit and miss affair with clients rarely able to provide anything more relevant or specific than "I have a 7,500 word document that I need translated. It's got something to do with electronics and I need it by the end of the week."[1] In such cases, the translator generally needs to ask certain probing questions such as "is the text for publication?" etc. and on this basis construct some form of translation brief. This unfortunately weakens the effectiveness of Skopos theory somewhat.

This problem is compounded by the fact that nobody seems to know exactly what should go into a translation brief although the general consensus seems to be that it should provide some form of information about the target audience, intended purpose of the text and any stylistic or terminological requirements. Sunwoo (2007), in her paper "Operationalizing the translation purpose (Skopos)", seeks to address this problem and presents a detailed "model for constituting the translation purpose from the translation commission" and a way of situating the text. The result is a very detailed analysis although it is probably much too complex for practical use.

Skopos theory can be tricky to use in practice because of the vagueness of the notion of the translation brief and also because it does not actually say how we are to fulfil a particular Skopos. But it does help us to concentrate on the most important aspects of the translation process.

From this very brief description, we can see certain limitations which are also indicative of other theoretical approaches to translation. For example, while equivalence gives us theoretical criteria with which to compare translations against their originals and which can be used as strategies if needed, it cannot account for the numerous factors which exist outside texts but which nonetheless play a crucial role in translation. Nor for that matter does equivalence tell us which of the various levels and types of equivalence is the most appropriate for a given translation scenario. Equivalence frequently places too much emphasis on the role of the source text to the detriment of all other factors.

While the introduction of **functionalism** (see House 1977, for example) was a groundbreaking step in that it lessened the emphasis of translation on purely textual factors, it still, unfortunately, maintained the excessive importance attached to the source text. Skopos theory, on the other hand, is valuable in that it explicitly addresses the professional context of translation and takes a more holistic approach.

Unfortunately, it can be problematic from the point of view that the Skopos of a translation is based on the undefined notion of the translation brief, which is open to interpretation and may, in some cases, be very difficult to formulate because translators are rarely given meaningful translation briefs or commissions. Moreover, because Skopos is intended as a general theory of translation, it is not really in a position to offer explicit instructions or guidance on how to achieve specific Skopoi.

One method of reconciling the problems outlined above might be to combine the best features of Skopos theory, equivalence theory and work carried out on text typologies. This would involve using Skopos theory to determine what it is we need to achieve with our translation. This gives us our general overview of what type of translation is required.

When combined with a knowledge of text typologies we can then produce a clearer picture of what precisely our translation will look like in

terms of features such as language, terminology and content, based on what we know about comparable texts in the target language. Then, with this knowledge, we can use the various levels of equivalence not as criteria for comparing texts, but as guidelines, informed by our understanding of the purpose of the target text which will aid us when translating.

However, there is much more to translation theory than the examples given above. There are numerous other models and approaches available such as relevance theory (Gutt 1991), translation norms (see Schäffner 1999), descriptive translation studies (Toury 1995) and functionalism (Reiß 1971), some of which may have something to offer scientific and technical translation. It is essential to realize however, that while none of the existing theories of translation on their own can provide an infallible model of the translation process, particularly for scientific and technical translation, they do provide adequate raw materials with which we can develop an informed and acceptable working theoretical model to guide our practical work. The challenge here is to examine the various theoretical approaches and models and then cherry pick those aspects which appear to be most relevant. It is quite conceivable that all of the components for a robust and reliable theory of translation, not just scientific and technical translation, are available to us already. All that remains is to assemble the various pieces into a basic usable theoretical framework.

Practical Exercise 5: Skopos versus equivalence

Draw up a list of the advantages and disadvantages of using (1) just equivalence and (2) just Skopos theory to explain scientific and technical translation. Compare the results of both lists. If you had to choose just one theory, which would it be and why? How would *you* combine the two theories?