TRANSLATING CULTURAL ELEMENTS
IN SPECIALISED TEXTS

Abstract: The aim of this paper is to discuss the occurrence of cultural elements in specialised texts, taking into consideration the translation perspective. It is argued that texts, as the transmitters of messages, include both subject-relevant data as well as implicit cultural elements. Consequently, cultural elements are present on all linguistic levels (morphological, lexical, syntactical, pragmatic etc), and specialised texts are no exception to this. Interestingly, culturally based conventions of text construction may even comprise a major translation problem in scientific communication. Detecting cultural elements in texts is, therefore, decisive for translation. In order to illustrate all the previously mentioned issues, relevant examples have been provided.

Key words: translation studies, culture, special languages, specialised texts.

Introduction

Cultural elements are a background of knowledge which is generally relevant for adequate communication within a society; Goodenough (1964: 36) defines culture in the following manner

Culture, being what people have to learn as distinct from their biological heritage, must consist of the end product of learning: knowledge, in a most general, if relative, sense of the term. By this definition, we should note that culture is not a material phenomenon; it does not consist of things, people, behaviour, or emotions. It is rather an organization of these things. It is the forms of things that people have in mind, their models for perceiving, relating, and otherwise interpreting them.
Cultural embedding, viewed as the background of human communication and cultural embedding, is also important for the understanding and translation of technical and scientific texts. Cultural elements in texts are present at all the linguistic levels – ranging from specific concepts and word forms, single sentences and text structure to pragmatic context. Technical translation, as well as research into language for specific purposes (LSP), has long been regarded as a field of the exact sciences, and the idea of a cultural embedding of scientific and technical texts has been dismissed from the theoretical analysis. Translating technical and scientific texts in the professional environment is, however, something more than handling terminology. Any message within a technical or scientific discourse contains both subject-relevant data and some implicit references to the cultural background of the speaker. Thus, the elements of cultural embedding will be present in specialised texts, and culturally based conventions of text construction may even comprise a major translation problem in scientific communication. The key questions seem to be: what are the cultural elements and how are they used in texts? These issues are crucial in translation because a translator from a different culture may not be able to adequately render the implicit cultural traces. In translation one often finds more or less adequate modulations or adaptations resulting in ‘cultural shifts’, and a translation where foreign elements are not adapted will appear as an overt translation (House 1997:29). This is, however, inadequate in technical translation since its purpose is to transfer scientific information across the language border.

**Cultural embedding in terminological concepts**

In technical translation terminology must be checked conscientiously. It goes without saying that no cultural differences are prevalent in internationally standardised terminology, e.g. words listed in the relevant databases with the mark CE, DIN or ISO. This type of terminology, however, is very much in the minority. Understanding the terminology, which is essential for the adequate translation, is not fully guaranteed by consulting dictionaries and databases as new terms, carrying inherent conceptual differences, are constantly being created. Schmitt (1999:228) presents some impressive examples of an inter-cultural incongruence of concepts, where comparable terms are not equivalent due to the fact that the concepts they designate are different for cultural reasons. There are, for instance, varying standards for steelmaking between the U.S.A. and Germany: carbon steel is not equivalent to Kohlenstoffstahl (as is indicated in many dictionaries), it is rather Baustahl, a less brittle type of steel. Due to climatic variations, safety and construction rules may be different in various countries, even if the terms designating the respective object are apparently the same: Wärmepumpe (in Germany for environment-friendly house-heating) ~ heat pump (for heating and/or
cooling in the U.S.). From a linguistic perspective we are faced with the so-called ‘false friends’. There is also the example of apparently equivalent terms in the construction of power stations: Druckhalter Wasserstandsmesskanal ~ pressurizer water level sensing channel, or integriertes Blockregelsystem~ integrated control system, etc. Even if the basic function of the respective object is the same, e.g. in American and the German cultures, the terms are still incongruent because the objects are constructed in a different way. The problems of equivalence vary among the languages. For the joining of materials the German and the English languages have special words: löten – to solder; schweißen – to weld. The Italian language is, by comparison, less specific and so, for example, the word saldare can mean to solder/to weld, whereas French, another Romance language, uses the terms brasage/brasure – to solder and soudage/soudure – to weld, which are occasionally even used interchangeably.

In some cases, new technical terms are created by means of metaphorical terminology referring to similarities in the function, form, or position of an object. But even if the concrete form of an object might lead to a similar cognitive concept in various cultures, this is not necessarily always the case (Stolze 2009:129). Problems in translation can arise when the metaphors are not identical between languages and translators are not aware of this fact. Consider the following examples (of English, German and Polish terms):

- male plug/male connector – Steckerstift – wtyczka
- head light – Scheinwerfer – światło główne
- female mould – Negativform – forma wklęsła
- cable sleeve – Kabelmuffe – mufa kablowa
- sleeve – Buchse – tuleja
- rotor blade – Rotorblatt – łopata wirnika

Other examples (of English and German terms) are provided by Schmitt (1999:238) who mentions different legislation, production methods, varying measuring methods, the specific climate and semantic prototypes, e.g. a ‘hammer’ that actually has various concrete forms and names (ball peen hammer – Schlosserhammer, cross peen hammer – Klauenhammer). This problem can often be solved with the help of a dictionary, but the translators need to be aware of the issue. They will have to be critical and possess the relevant knowledge in order to be able to select the right expressions.

In addition to this variation, there is the basic difference of terminological conceptualisation in the sciences and in the humanities (Stolze 2003:201) that will also be present in the texts. In the natural sciences terminology is based on exact definitions and includes methodical deduction. Every term has its place within a hierarchical system, but it is not always totally free of cultural differences in the
concepts (as shown). In the humanities, in turn, there is an academic convention and interpretation of concepts to be agreed among scholars. Recognition of the relevant terminology and its distinction from general language forms is important in order to prevent naive understanding of a specialist text.

Cultural embedding in the linguistic form

Terminology in the form of nouns and adjectives, combined with a few tenses, is a characteristic feature of the functional style of communication for specific purposes. There are, however, langue-specific forms of word compounding, to be recognised and applied in technical translation. English and German terms are mostly construed by a combination of several nouns, or of an adjective with a noun, in a similar sequence. In Romance languages in turn the word compounding goes in the reverse order and is realised by particles. The following examples (Stolze 2009:132) illustrate these issues:

E 1-2-3-4: brake failure warning lamp  
G 1-2-3-4: Bremsstörungskontrolllampe  
F 4-3-2-1: témoin détecteur d’incident de frein  
I 4-3-2-1: lampada pilota di disturbo del freno  
P 4-3-2-1: lâmpada de controle de folha de freio

In a geographical text, for instance, one may encounter the term undersea basaltic volcanoes and translate it into German, according to the standard (Stolze 1999:68), with unterseeische Basaltvulkane, as more than three parts are unusual, especially for popular texts. However, there are many other solutions possible idiomatically, but not technically:

— unterseeische basaltische Vulkane (adjective, not a technical expression)  
— unterseeische Vulkane aus Basalt/des Basalts (unnecessary explicitation)  
— basaltische unterseeische Vulkane (focus reversed)  
— basaltische Unterwasservulkane (unclear)  
— Basaltvulkane unter dem Wasser (lack of precision)  
— basaltische Vulkane unter Wasser (unclear)  
— Unterwasservulkane aus Basalt (general language)  
— unter Wasser liegende Vulkane aus Basalt (literary).

In the case of analytical languages, such as English, the occurrence of multi-element compounds may be quite ambiguous for a translator due to several possible ways of their interpretation. Consider the following examples:
Due to the language economy the use of this linguistic concentration is developing fast in many European languages. Linguistic differences based on culture are not limited to the word level but they also include syntactic structures.

**Cultural elements on syntactic level**

Syntactic forms concern the way in which the elements in a sentence are connected idiomatically. Whereas languages in literature demonstrate a wide variety of creative linguistic forms, technical communication applies a purposeful reduction of stylistic forms where the content-oriented nature of technical communication means that short sentences, a linear theme-rheme organisation and a dense syntactic compression are prevalent. There are, however, differences between languages, beyond the technical and scientific writing styles. If the target language structure is different, the translator needs to apply shifts in order to enhance intelligibility. This also concerns the use of discourse markers, which is different in the languages and where interference between two languages in translation may cause less idiomatic formulations (Olohan & Baker 2000:142).

For example, the contrastive English-German discourse analyses, made by House, suggest that German speakers and writers tend to present information syntactically in a more explicit manner than their English counterparts. Therefore, according to House, a tendency to explicate, in the case of English to German translators, would simply be a reflection of German communicative preferences. These phenomena are cultural aspects because they are inherent to the idiomatic usage of language, and this should not be omitted in technical communication.

**Cultural elements within the text structure**

The culture-specific use of language is connected with the communicative situation, and frequently recurring situations lead to the creation of distinctive text types. A fixed structure of texts reinforces intelligibility for the communication partners within their culture. Linguistic research has grouped text types into various text genres, both for literary (Werlich 1975:71) and for specialist communication (Göpferich 1995). The text structure as a reflection of cultural norms is most clearly
noticeable in texts which are totally standardised for their situation rooted in a culture, i.e. medical certificates, tax declarations, weather reports, school certificates and employment references, court sentences, balance sheets bills, business letters, obituaries, menus, cooking recipes, crossword puzzles, tourist information, etc. Such texts are standardised together within their cultural background, and a possible translation may either concentrate on a literal and formal representation or on a target-specific transformation, depending on the purpose. For example, court sentences in Germany begin with the substance of the judgement in a sentence followed by a statement of facts and the presentation of the reasons for the decision, quasi as a justification of the sentence. Court sentences in France show first the statement of facts followed by the reasons for the decision based on a list of relevant articles from the code, which finally ends with the substance of the sentence. In Italy, the court sentences begin with a presentation of the lawyer’s conclusions, a description of the instruction proceedings, and the reasons for the decision, the whole ending in the substance of the judgment. In British or American court sentences one may find the accumulation of relative sentences as a typical feature of this text genre. Informative text types on a higher level – possibly with an international perspective – such as user manuals, patent specifications, scientific papers, monographs, articles of law, sales contracts, among others, are based as a text type on a specific communicative situation, and they focus in their content on a specific technical object, and still there are traces of culture left in such texts which have not yet been standardised on an international level (Stolze 2009:132). Texts as language usage within a cultural situation are never a mere response to external conditions or technical objects but, rather, a result of individual language usage. Cultural aspects are mainly visible in the global text structure. It is not always easy to distinguish between cultural embedding and the structures characteristic of a text type. One may note, however, that macrostructures of texts may be culturally different, even if their extra-lingual function as such is comparable. There seem to be culturally different styles of writing, but the importance of cultural styles in academic presentations is often underestimated by academics when presenting abroad. This aspect is relevant for translating such articles as it may even be necessary to rewrite an article in a ‘shape’ which is preferred in the target culture.

**Cultural elements on pragmatic level**

Due to the fact that pragmatics refers to senders and receivers of a text message it is also part of the text itself. It is in this respect that we find traces of the cultural background which is mentioned implicitly. There are different procedures for organising social life, especially with regard to law. This is reflected, for example, in legal texts and personal documents. Different legal structures can also have an impact on the text level and in the case of an unwitting translator, with insufficient
background knowledge, this may lead to an inadequate translation that is hardly comprehensible. Cultural differences include different concepts of politeness, stereotypes of foreign people, and special images of a society in another area. Such features tend to reflect on the text level and any literal translation will sound strange in the target culture.

Intercultural differences may also cause problems in business relations when the corresponding texts contain hidden information. Whereas Americans and Europeans follow the norms of clear, direct expression, there are other cultures favouring indirect expression in order not to be impolite or offend their partners, even if they communicate in the English language (Hall 1976:98). Scientific language is a group language, a sociolect. Pragmatic aspects of user preferences may be observed in translation. The translator will have to have a clear knowledge of the cultural specificities and explain them in the translation. There are various possibilities for compensating cultural incongruence between texts: paraphrasing, explication, adaptation, and modification (Stolze 1999:225).

Cultural elements in technical texts – translator’s approach

We have discussed various aspects of cultural diversity as they appear in texts. Each and every text as an individual entity is different, and the translator needs a factual, relevant and procedural knowledge base to recognise its characteristics. The translator as a person (and not a machine) needs points of orientation to become sensitive to the content of a text, and at the same time to activate the given knowledge base. When they become aware of a lack of technical knowledge, they will start research activities, analyse parallel texts, ask specialists, or search the Internet. The awareness, however, must first be created and like in the case of finding one’s way in an unknown territory, the translator will use a cognitive map for guidance. One may observe some points of orientation, going from macroscopic to microscopic structures. Any linguistic feature has a specific relationship to the text as a whole and it may have a different meaning within a different proposition. Therefore the mere description of linguistic forms indicating cultural aspects such as: standard formulae, strange positions, specific word compounds, unusual expressions, is not sufficient. One also has to determine the ‘right culture’ which is relevant as the cognitive environment for the text determines the value of the individual structural elements. One will have to first grasp the text’s message as a whole, and only later analyse the details with reference to the text’s embedding. The orientation in such a holistic approach to texts may be assisted by some ‘categories of attention’ which are presented in the following table (Stolze 2003):
Based on the hermeneutic philosophy of language, Stolze presents the translator’s holistic approach to texts. The idea expressed there is that translators begin their work with a global view of the text for translation, rather than with a text analysis focusing on syntactic structures which seem difficult to translate. The translator’s approach, a vertical treatment of the text as a whole, is in practice opposed to the sequential text analysis. The global approach is applied in a similar manner in dealing with literary and with technical texts. The above categories for specialist communication are in a somewhat different manner also valid for the translation of literature (Stolze 2003:244) where the knowledge base is more general and language allows for more creative solutions.

References


