Cultural Issues Facing the Technical Translator
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ABSTRACT

This short article discusses the importance of prioritising cultural competence in technical translation. It emphasizes how cultural issues are inherent in technical texts and should not be overlooked, both in translation practice and in translation training.

KEYWORDS

Technical translation, cultural competence, cultural issues

When referring to the competences of the skilled technical translator, studies have shown that four general competences are required:

1. General language competence L1 + L2
2. LSP competence L1 + L2
3. Knowledge of the relevant domain
4. LSP translation competence L1 <-> L2
   (Kastberg 2002a)

In this article Peter Kastberg will explore some central arguments supporting that this list should also include a fifth competence:

5. Cultural competence L1 + L2

Furthermore he will show us that cultural issues are not merely a curiosity of certain technical genres, but in fact inherent to technical communication as a whole.

Sciences as Cultural Constructions

Taking into account more recent theories of culture – i.e. culture as a group’s learned set of habits and the values accompanying these habits – we have a basis for arguing against what still seems be to a generally accepted idea, namely the culturelessness of technical culture (see however Maillot 1981 and Schmitt 1999 for the emergence of other viewpoints). Or rather, the notion that technical domains are devoid of cultural influences is due to the fact that the laws of the sciences from which technical domains stem, namely the laws of physical sciences, are above the constraints of any one national culture. That, of course, is true. But this doesn’t mean that sciences are acultural, they are artefacts of a professional culture (Kastberg 2002b). Albert Einstein puts it this way:

Science is not just a collection of laws, a catalogue of facts. It is a creation of the human mind, with its freely invented ideas and concepts (1938).
As constructions of the human mind physical theories are not and cannot be, as it were, ‘justified true belief’ but (merely) ‘justified belief’. As such they are models of explanation constructed in retrospect in such a way that for the moment (that is until they are deconstructed by stronger arguments) they seem to fit our perception best. In this sense, then, sciences are not static God-given entities; they are dynamic, man-made cultures. This, in turn, leads to the consequence that laws of science may be (and often have been) made obsolete by societal progress or they may be deconstructed by scientific advances.

**Technical Disciplines as Cultural Disciplines**

Having said that the laws of science are themselves cultural artefacts we can now take a critical look at the generally accepted idea that technical disciplines should be cultureless. The reasoning behind such an idea can probably be reconstructed along the lines of a syllogism much like this one:

- Physical theories are acultural
- Technical disciplines stem from physical theories
- Therefore technical disciplines are acultural

Logical flaws aside, the realities of technical disciplines are positively not the same in the U.S. and, say, the Sudan. The main reasons being that the technical disciplines are themselves cultural and historic constructions. Scientific disciplines are entities that have a life cycle: they are born, they grow, they interconnect with other disciplines, they enter into family like relationships, they divorce, they give birth to other disciplines, and they wither and may subsequently die.

We can illustrate this point by looking at the system of disciplines in the three scholastic paradigms of medieval Europe. In the first paradigm, septem artes liberales, i.e. the arts that were suitable for young, free men (grammar, rhetoric, dialectic [the trivium], music, arithmetic, geometry and astronomy [the quadrivium]), we find a family of disciplines that have long since grown apart, having in the meantime established families of their own and where any family resemblance in our day and age seems almost inconceivable, e.g. astronomy and music. Much of the same holds true for the second paradigm, which was the more ‘vocational’ or practical one, the septem artes mechanicae (craftsmanship, war, navigation - including geography and trade -, farming and housekeeping, forest and animals, medicine and court life). In addition to what was said with regard to the second paradigm we find grounds to say that the ‘art’ of court life is now virtually non-existent and that, consequently, training or education within that field is not institutionalized the same way as is the case with the other prevailing ‘arts’. When it comes to the third and last paradigm, the artes illicitae, artes magicae or artes incertae, (which we could summarize as witchcraft and/or magic) these ‘arts’ are examples of disciplines,
which have been made obsolete by societal progress and deconstructed by scientific advances. Turning to our cultural agenda, these disciplines and the paradigms in which they are categorized are themselves artifacts of an elitist, basically religious and clearly European culture, which has itself long since passed into oblivion.

Technical Concepts as Cultural Concepts

 Needless to say, the conceptual systems of technical disciplines are to a large extent standardized. Such standardizations, however, are seldom universal, even if ISO (the International Organization for Standardization) and other agencies may have come a long way in their efforts to create uniform concepts. Two things stand in the way of total uniformity, or total cultural oneness. First of all, the number of technical concepts seems to grow exponentially. Secondly, the number of technical (sub)disciplines seems to grow ever increasing.

To illustrate this point, we have two examples of seemingly quite mundane technical instruments showing remarkable terminological incongruence across otherwise closely related European cultures. The Spanish term *soldar*, for instance, is ambiguous when it comes to translation into e.g. English, German and Danish, because the term stands for both welding and soldering. It is not, of course, that a Spanish technical culture does not recognize the difference between these two methods of combining materials, nor is it that only one of the means is used in Spain, the reason is that the culture in question has developed other means of distinguishing between these methods of combining materials than the English, German and Danish speaking cultures. The English notion of screws and bolts – another seemingly inconspicuous means of combining material – faces a similar problem when translated into the equivalent German conceptual system, as seen in the figure below:

**Figure from Göpferich (1995: 23-24)**

![](image)

It is not that the German technician is working with a physical object totally different from his English colleague – the objects are positively identical. The
conceptualizations of the objects, however, differ due to preferences that can only be labelled cultural and historic.

**Technical Genre Conventions as Cultural Conventions**

Based on the insight gained we can now oppose another generally accepted idea, namely that technical texts are cultureless. The reasoning behind such an idea can probably be reconstructed along the lines of a syllogism much like this one:

Physical theories are acultural  
The content of technical texts stem from physical theories  
Therefore technical texts are acultural

If technical texts were indeed acultural then there is no reason why the same genre shouldn’t be composed in the same way in, say, England and Germany. Experience tells us, however, that technical genres do differ from culture to culture. Let us strengthen our point by looking at differences in the genre conventions governing the piece of text found on the back of identical electrical household appliances in England and Germany:

- Caution: Risk of electrical shock. Do not open!  
  Caution: To reduce the risk of electric shock, do not remove cover (or back).  
  No user-serviceable parts inside.  
  Refer servicing to qualified service personnel.

On the same electrical household appliances in Germany the equivalent expression is:

- Before opening, pull the plug! (our translation)

Apart from appearing to be rather laconic (or short and to the point depending on your cultural bias!) the German version of the same warning lacks quite a few of the cultural extras of the English version; i.e.

a) the explicit reference to what it is you should not open,  
b) the explicit assurance that there are no user-serviceable parts inside,  
c) and finally the suggestion that, in no uncertain terms that you should leave servicing in the hands of competent personnel.

The reasons for these quite obvious differences, we take it, are not due to English speaking customers being especially susceptible to rational persuasion and that the German speaking customers cannot be persuaded from opening their electrical appliances no matter what you tell them. The reasons are traditional patterning of warnings in the two cultures, patterns derived from

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1 Based on Gopferich 1995.
the cultural contexts in which they are supposed to serve their purpose. These cultural contexts themselves are subject to a number of influences. In this case probably the foremost influence would be the different perception of liability issues.

In an increasingly globalized world, the above insight makes it imperative that we take into account the fifth, the cultural competence in both translation practice and translator training. Taking the fifth competence seriously, the training and the subsequent professional life of a technical translator may become more challenging and complex, but at the same time all the more interesting.

References


Biography

Peter Kastberg is a state certified translator and he holds a Ph.D. in applied linguistics (technical communication). He is director of the ASB Research Area for Knowledge Communication, Aarhus School of Business, University of Aarhus, Denmark (www.asb.dk/knowledge). His current research interests include mediation of specialized knowledge across knowledge asymmetries, the ontogenesis of knowledge, and public understanding of science.