JoSTrans
The Journal of Specialised Translation

The Coming of Age of Technical Translation: an Introduction
Jody Byrne, University of Sheffield

Scientific and technical knowledge has always been a prized commodity throughout history (Tebeaux 1997) and the communication of this information through translation has played a tremendous role in development of human civilisations and the advance of science and technology (see for instance Delisle 1995 and Montgomery 2000). Its importance is without doubt growing particularly in light of what is commonly referred to as the 'information age' in which we find ourselves. Indeed, **Scott Montgomery** argues that despite the prevalence, and some would say dominance of English as a universal *lingua franca*, particularly in the sciences, the demand for technical translation has never been so great or indeed so assured.

However, technical translation has traditionally been viewed in a way which belies its complexity and importance, namely that it is purely about conveying information and that as long as the 'cargo' of information was there, everyone would be happy and the translator would be paid. But, as **Beatriz Méndez-Cendón** points out, merely presenting the information in a technical text is not enough, it must be properly phrased and structured within a text in order to produce coherent and readable target texts. The reality of technical translation as illustrated by the various contributions presented here and elsewhere show that technical translation is affected by a range of issues and factors such as technical communication, style, terminology, professional workflows, multimodal communication, legal requirements, technology and even psychology and pedagogy. This short list is but a subset of the myriad factors which feature in the production of technical information in a global and multilingual environment.

It is heartening, therefore, to see the variety of directions from which technical translation has been studied reflected in the contributions to this special issue of *JoSTrans*. While some of the approaches seem to be quite distant and possibly even diametrically opposed in various ways, they all provide valuable views of different parts of the massive hull of technical translation which is frequently hidden below the waterline and they invariably uncover new areas of overlap, where different disciplines complement each other or build upon the work carried out elsewhere. Combined with research presented elsewhere in the field of LSP, for example, these contributions show that the field of technical translation has reached a new level of maturity in terms of how it is viewed, taught and researched.

Klaus Schubert argues that technical translation as a professional, communicative activity cannot be fully described and modelled within the context of traditional Translation Studies. He describes the complex and

highly interdisciplinary environment within which technical translation takes place and he shows that there are various controlling factors which influence not just the work of translators but also the materials, resources and strategies they use. Like **Susanne Göpferich**, he asserts that technical translation, while benefiting from research in Translation Studies, needs to be considered from the point of view of Technical Communication as a superordinate discipline which incorporates the design, planning, production, translation, assessment and management of technical information in a multilingual environment. Such a multilingual environment, it must be said, is no longer the exception. Quite the opposite in fact and whether for legal reasons (see Byrne 2007) or for reasons of good business sense, the vast majority of commercial producers of technical information find themselves working in such a multilingual environment. In her model of translation quality assessment presented here, Göpferich submits that a broader and more interdisciplinary approach is needed, one which goes beyond the traditional methods of TQA which frequently seek to compare the ST and the TT to identify various types of non-equivalences.

The interdisciplinary and multimodal nature of technical translation is also reflected in the contribution by **Maribel Tercedor Sánchez** and her colleagues from the University of Granada. In it the authors show that technical texts often rely on non-linguistic strategies and devices in order to effectively communicate their information. Like Schubert's paper it also presents interesting implications for the way in which we train technical translators. Tercedor *et al*. also make an interesting link between technical translation and localisation in that they both involve dealing with multimodal, multimedia information. From this point of view we can see how the papers by **Miguel Bernal** and **Minako O'Hagan** on the localisation of computer games can be regarded as evidence of the closing gap between localisation and conventional notions of technical translation.

Indeed, if Translation Studies alone cannot account for the myriad factors and situations which all feed into the technical translation process, can a training programme which is exclusively based in Translation Studies really provide students with the knowledge, skills and abilities they need in order to become professional technical translators? A practical illustration of how the training of translators has been supplemented and enhanced through the use of subjects not traditionally associated with Translation Studies is provided by **Peter Kastberg** who discusses the use of Personal Knowledge Management (PKM). PKM is presented as a way of equipping students with the research and information management skills needed to contend with the vast range of subjects faced by technical translators.

Further reinforcing the idea that technical translation is concerned with more than simply ensuring factual accuracy of the content **Radegundis Stolze** shows that technical translation is very much bound up in the

cultures of the languages between which it takes place. This is something which is not always recognised as the focus of technical translation invariably centres on the subject matter or the terminology. Indeed, Stolze herself notes that the translation of technical texts involves "more than handling terminology". **Gerhard Hempel** in his study of technical manuals in Italian and German shows how culture manifests itself in texts and how interference between cultural conventions can affect the quality of translations. In a related vein, **Javier Franco Aixelá's** discussion of interference in technical translation examines how culture, terminology and prestige can cause conflict within a translation.

Stolze asserts that terminology can cause problems unless it is standardised. In cases where terminology is not standardised various cultural factors mean that terms must be checked carefully because intercultural incongruity can result in the same concept being designated differently in different cultures. This is despite the fact that in the sciences "terminology is based on exact definitions" where "every term has its place within a hierarchical system". Similarly, **David Wilmsen and Riham Youssef** also note such problems with terminology, even within the same language. Using the example of Arabic, they note that technical terminology displays significant variation from one region to another even though it should, in theory, be standardised both by the language and by the scientific or technical field in which it is used. This would appear to challenge the commonly held belief that in technical translation, even if all else fails, at least the terminology will be relatively straight-forward to deal with because it is the one constant in the equation.

Wilmsen and Youssef's paper also highlights the challenges faced by scientists whose first language is not English. They are compelled to learn the international language of science if they are to succeed. This is reflected, the authors assert, in the reversal of a policy of Arabisation in science and technology. Montgomery also discusses this phenomenon but nevertheless stresses that the prevalence of a *lingua franca*, which he identifies as being English, does not obviate the need for scientists to work within their own languages too, however great the pressure to work in English.

In view of Schubert's assertions that technical translation as a field of study owes much to interest in developing Machine Translation (MT) systems it is interesting to note that the wheel seems to have turned full circle when **Rebecca Fiederer and Sharon O'Brien** argue that translators working in technical domains are more likely to come into contact with MT systems. Their study seeks to establish whether an MT system can produce a translated user guide (for many, a staple part of the technical translator's diet) which can rival the quality of a human translation. Examining MT output on the basis of clarity, accuracy and style it is apparent that the criteria are rather more complex than one would have assumed if technical translation was simply about accuracy.

Rather reassuringly, their study shows that style is an important factor in the translation of technical texts and that human translators still have the advantage over MT systems.

One of the most striking and encouraging aspects to emerge from the papers contained in this issue is the sense of vitality and enthusiasm with which technical translation is being addressed. The papers confirm its value and its complexity and firmly establish technical translation as an exciting, vibrant and credible field of study. Far removed from the days when it was regarded as purely a terminological exercise, technical translation appears to have finally come of age.

References

- **Byrne, Jody** (2007). Caveat Translator: Understanding the Legal Consequences of Errors in Professional Translation. *Journal of Specialised Translation*, 7; 2-24.

- **Delisle, Jean** and Judith Woodsworth [eds] (1995). *Translators Through History*. Amsterdam: Benjamins Publishing/UNESCO Publishing.

- **Montgomery, Scott** (2000). *Science in Translation*. Chicago: The University of Chicago Press.

- **Tebeaux, Elizabeth** (1997). *The Emergence of a Tradition: Technical Writing in the English Renaissance, 1475-1640*. New York: Baywood Publishing.

Biography

Jody Byrne is a Lecturer in Translation Studies at the University of Sheffield where he teaches specialised translation, technical communication, translation technologies and localisation. He holds a BA in translation and a PhD in technical translation and usability. His publications include *Technical Translation: Usability Strategies for Translating Technical Documentation* (Springer, 2006) and his research interests include scientific and technical translation, technical communication and translator pedagogy. Jody is a professional member of the *Irish Translators' & Interpreters' Association* and a Fellow of the *Institute of Scientific & Technical Communicators*.
Email: research@jodybyrne.com