Cooperation and Quality Assurance in Technical Translation Projects

The professional profile emerging to address today's demands in business and industry bears little resemblance to the traditional view of translators as solitary all-rounders. Translators and technical writers are now increasingly seen as problem-solvers, working in teams and interacting with other experts. They act as text coordinators, language leads, localisers, information designers or content managers.

The complex task of designing multilingual, multimedia information products requires extensive cooperation between many qualified experts (technical writers, editors, translators, localisers, graphic designers, developers, etc.). It is this collaboration that makes inter-cultural text design possible in the first place, yet at the same time, also places new challenges on the translation process and the field of cooperative text design. Both translators and technical communicators alike play key roles in inter-cultural text design, yet despite this, little empirical research has actually been conducted into the work processes involved in complex real-life translation projects or the quality assurance and documentation processes they entail. Drawing on the results of a field study involving the on-site observation of daily working life in a translation agency in Vienna over an extended period of time, this article offers insight into some of these processes. Viewing translation and technical communication as Computer-Supported Cooperative Work, it focuses on the collaboration and coordination aspects as well as some of the quality assurance issues in the translation process and the tools available to support translators in their work.

Translation as Cooperative Text Design

The commonly-held image of translation currently lags behind developments in translation practice, where a number of factors are changing the requirements placed on translation. These include decreasing product cycles, greater frequency in product updates and growth in demand for multimedia text production. The rise in
the use of information and communication technologies (ICTs) has changed the requirements on information products. In addition, the provision of information tailored to the needs of different media, culture and target groups has become a significant economic factor in the modern business world.

The professional profile emerging to address these demands bears little resemblance to the traditional view of translators as solitary all-rounders. Translators and technical writers are now increasingly seen as problem-solvers, working in teams and interacting with other experts. They act as text coordinators, language leads, localisers, information designers or content managers. "Normal" practice in technical translation has often developed away from the source text-oriented language transfer into inter-cultural translation management. Consequently, professional translation and technical communication are increasingly merging (cf. Göpferich 2002:36), and can almost be seen as collective terms for two heterogeneous, dynamic professions.

Research Setting

A field study based on participatory observation was carried out at an international translation agency in Vienna. The agency specialises in technical documentation and works with over 1,000 specialised translators and technical communicators around the world. Observing the agency over an extended period of time provided detailed insight into how a translation agency works and how large-scale translation projects with multiple target languages and fields of expertise are managed. The study took an ethnographic, qualitative approach, namely the observation and qualitative analysis of a real-life working environment. The participatory nature of the observation allowed the researchers to assume a direct role in the observed situation; they did not attempt to distance themselves from their subjects, since this would in fact have been counter-productive (cf. Lueger 2000).

Complex Work and Collaboration Processes

The agency studied does very little actual translation work in-house. Target text production is outsourced, with the agency staff themselves focusing more on project management, coordination and quality assurance tasks, such as logistics, order processing, communication with/between translators and customers, proofreading, conversion and editing of source texts and data, text layout, etc. (Figure 1 provides an overview of the translation management processes.)
The majority of the agency's customers are large corporations, who regularly need texts translated into multiple target languages. Outsourcing translation-project management offers considerable benefits for large corporations, not least by relieving internal project managers of the tasks of organising and coordinating translators. The translation agency acts as the main contractor (external coordinator) and handles this task for them. Translators also benefit: they receive better quality translation kits including pre-processed source texts and further reference material, and an opportunity to work for large corporations.

It quickly became clear in the study that cooperative text design processes are extremely complex and involve the participation of a range of different experts and specialists. The source text will be checked for consistency and layout at the agency, before being forwarded (if necessary, via a partner agency in the target language country) to the translator(s). If the graphics used in the text require additional editing, the agency will potentially have to enlist the cooperation of other experts (e.g. technical illustrators). Final translations (having already gone through several processes with the translator) are proofread and verified by the agency for consistency and layout (native speaker in Vienna), and validated in the target country by the customer. Translations memories have to be corrected, updated, etc.

Some of the main participants in these processes and their respective roles include the:

- customer placing the order (initiator/customer; proofreading and layout of source text)
- technical editor (customer; creation, proofreading and layout of source text)
- translation agency (coordinator; placing order with translator(s), proofreading and layout of target text)
- partner translation agency (as sub-coordinator; translation and proofreading of target text)
- translator (translation and proofreading of target text).
Fig. 1: Translation management as described by the agency

Fig. 1 illustrates the phases involved in a typical translation project as described by the agency (cf. Risku 2004:178).

Ensuring smooth cooperation and communication between all participants is one of the agency's main roles. Many customers have neither the expertise, the interest nor the time to deal with specialised questions from individual translators. Consequently, the agency acts as a communication hub, handling all questions and requests for further information from translators. Any questions they cannot answer internally are sent to the customer or an external expert for clarification. To ensure consistency and quality across language versions, all answers are forwarded to all translators involved in the project. The agency is also responsible for controlling the quality of the translations, either proofreading texts themselves or subcontracting proofreading to a partner in the target language country.
Fig. 2 illustrates the different actors the agency might have to deal with in the course of a translation project. The organisation of such a project can be viewed as a network of interdependent actors, with the translation agency functioning as a network coordinator. This arrangement shows similarities with the concepts for the "fractal" or "virtual enterprise" (Warnecke 1992; Wirth & al. 2000). These concepts have been discussed mainly with an application in the production sector, however, manifestations of such highly fragmented network arrangements lend themselves much better to the "information economy", where most of the functioning applications take place.

In the agency studied, one project manager generally handles a project from start to finish. An average project lasts 4-5 weeks and requires extensive contact with all the individual players. For example, in one project, an 8-page newsletter had to be translated into 12 languages (including Chinese) within 4 days. During the proofreading phase, the text had to be repeatedly sent back and forth between the agency, customer and 12 translators, with the Chinese version alone requiring 12 revisions!
From Quality Assurance and Documentation to (Total) Quality Management

Given the range of different cooperation partners and the complex processes involved in such projects, quality assurance in translation processes is by no means an easy matter. It begins right at the start with the quality of the source text and source material (related texts, terminology, etc.), since suboptimal source material (inconsistencies, file format, etc.) can greatly hamper the translation process. In one project (technical documentation for a vehicle display panel), it later transpired that the display screens had already been translated elsewhere. Unfortunately, the reference material made no mention of this, and since the newly translated documentation did not correspond with the previously translated screens, an additional 120 hours of work were required to correct the documentation text.

Inconsistent use of terminology in the source text and terminology reference files provided by customers can also raise problems. In another case, four different terms were used in English (source language) for the same function on a fax machine, and two equivalents were given in the target language, while three different target language terms were given for one single term in English, raising all manner of quality issues.

Given the often short deadlines set by clients, combining high quality with speed of delivery can be a major challenge. As we observed in the agency, adhering to a number of basic rules, such as using qualified translators provides a first level of quality assurance. Nonetheless, expert translators will have some questions concerning a text and ensuring they get the answers they need is also a key factor in the quality of the translation, with the final decision in any discrepancies ultimately lying with the customer.

Changing the definition of quality from mere "zero defects" to "quality as the ongoing creation of value for the customer" (Lawton 2005), the focus shifts from eliminating errors to an understanding of the customers' value-systems, as well as those of the other stakeholders. This sense of "total quality", as advised by different leaders in the discipline, e.g., Deming, Juran and Feigenbaum is the basis of high quality translations. Knowing the special needs and wants of a customer, with regard to a translation project allows the translator a much better translation of the "text between the lines", and often distinguishes an ordinary translation from a high quality translation.

Information about a customer decreases exponentially with the
number of organisational breaks. Therefore, the translation agency, which is the main contractor, plays a vital role in the transfer of explicit and implicit knowledge to other translation agencies and translators. It acts as a quality manager for the project and therefore tries to systematically ensure standards and motivate all agents to deliver quality. Unfortunately, in the translation business success is measured quantitatively rather than qualitatively, i.e., pay is often according to translated lines and qualitative measures are often lacking.

**Translation Technologies**

Translation technologies can help agencies and translators considerably when it comes to cooperation, quality and consistency (e.g. by providing access to contact details, contextual information, reference files, terminology, etc.; cf. Risku, to appear). When compared with other creative professions (e.g. architecture), it seems almost absurd that the use of information technology and re-use of earlier translations is at times even misunderstood as quasi-automatic translation. The ability to offer a cost-effective service to regular customers for whom a great deal of reference material, prior solutions and tacit, cooperative knowledge is already available, is as natural a customer retention measure in inter-cultural communication as it is in architecture. It should, therefore, be seen more as an indication of the quality of an agency's knowledge and information management than as the partial automation of a skilled, creative task.

Terminology Management systems ensure that uniform, consistent terminology is used throughout a translation or by a project team and can make a significant contribution to the quality of a translation. Similarly, Translation Memory systems (TMs) are useful for handling large translation volumes, particularly when the project is coordinated from a central location and the customer places importance on consistency.

Translation Project Management systems provide an up-to-date overview of the status of a project, the documents involved and the remaining steps and costs incurred. They store various versions of the source and target texts and also include a customer and supplier database. Storing this information in a central location facilitates work processes allowing, for example, the automatic generation of reports (such as the profitability of individual projects or customers). They can also show the number and status of projects allocated, for example, to an individual translator, thus avoiding double bookings. They also help improve cooperation with
partners, particularly when data on shared projects is made accessible to external users.

Internet-based cooperation platforms for managing translation projects offer a range of functions, including visualisation of process steps for each of the actors involved, administration of project workflow, logging of all activities for reporting purposes and the integration of other tools such as TMs.

Localisation tools, i.e. solutions for use in the translation of software applications, are also a good example of how technology can support translators, enabling them to work on more than just purely linguistic material. They allow the translator to view and adapt the actual user interface during the translation process, thus taking the context into consideration, turning the entire software product into the object of the translation and allowing translators to endow it with their "knowledge of the links between linguistic, formal and cultural requirements" (Freigang 1996:140). Localisation tools support cooperative translation and can help raise certain aspects of the quality of the translation.

However, there are also some problems associated with the use of such translation technologies and they should also be seen as a double-edged sword. For example, with translation memories, there is always a risk that solutions devised for a different context may dominate the current text, a situation that is aggravated by poor source and reference material and data. File formats can also be problematic - the need for correctly formatted, continuous text often means that source files have to be converted (making TM systems at times more of a hindrance than a help). If the members of a translation team use different systems, these systems must be compatible both in terms of text formats and terminology. Using a TM containing previous translations for a customer provides access to existing context and history, and thus increases productivity and quality. However, since they are based on a comparison of individual elements, they follow the rather amateurish strategy of translation as simple substitution of elements in different languages. Furthermore, they work on the "garbage in, garbage out" principle. Whilst a translator might accept a translation proposed by a TM for what it is - namely just a suggestion - other cooperation partners may misunderstand this fact and assume it to be a viable translation, which does not need further checking or validation in light of the current context (cf. Risku, to appear).
Closing Comments

The partnerships and processes in international translation projects are varied and complex and the players involved include, suppliers, customers, translators, technical writers, consultants and other agencies, to name a few. They communicate with each other not just as representatives of their specific expert roles, but also as individuals. The management of translation projects involves far more than just the coordination of texts and deadlines: it is above all about managing people. The image of translation work that emerged from the study is one of strong, human relationships of identification and connection. These relationships begin with the initial contact and are based on mutual respect and loyalty both for each other and to the common task, namely the enabling of intercultural, expert communication. You have to be able to rely on your partners to successfully complete complex projects and deal with unexpected problems. Once an order has been accepted, the actions that follow should be oriented not just on successfully completing the project, but also on strengthening future cooperation.

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- intercultural communication
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