Sanaa Benmessaoud has a BA degree in English language and literature, a postgraduate diploma in Translation, and an MA in Applied Translation Studies from the University of Leeds in the UK. Currently she is enrolled in a PhD program in Translation Studies at l'Université de Montréal, Canada. She has ten years of experience in translation, one translated book, two published articles, and a forthcoming book review.

Sanaa's fields of interest include translation theory, issues of identity formation and cultural representations in translation, the sociology of translation and the intersection between translation studies, gender studies and cultural studies.

She can be reached at sanaa_benmessaoud@yahoo.

I- Introduction

Over a century after the birth of Eugen Wüster, the founder of modern terminology science (Kingscott, 1998: 15), the amount of terminology with which language professionals have to deal has mushroomed. We are now living in an age of specialization and globalization. Sciences are increasingly branching out into new fields of study, bringing about more terminology. Markets have been internationalized and businesses are expanding all over the world. In such a global context, terminology management has gained momentum as appropriate terminology management contributes to the 'global product development strategy' (IBM website).

This article explores the various forms of terminology management possible through the use of computers, with particular emphasis on Star TermStar and Passolo. For reasons of space, the article will evaluate the user-friendliness of such systems only from the translator's perspective.

II- Terminology Management

Austermühl (2001: 102) defines terminology management as 'the documentation, storage, manipulation and presentation' of terminology, which is defined as 'the set of special words belonging to a science, an art, an author, or a social entity' (Pavel and Nolet, 2001: 13). As such, appropriate terminology management is paramount not only for the translator but also for client corporations, for terminologists and for professionals working with specialized knowledge. Bernth, McCord and Warburton (2003: 52) maintain that adequately managing terminology increases terminology consistency in source language (SL) products, thus improving their readability and the usability of target language (TL) versions, and reduces translation problems stemming from terminology redundancy.

II-1 Searching for Terminology

According to Austermühl (2001: 107), 'working on a translation largely means searching for terminology'. The search involves,
however, more than finding a technical term in the SL and its equivalent in the TL. It involves finding all the necessary information to grasp the meaning of the concept and to use it adequately. Searching for terminological data is, therefore, very time-consuming and 'can take up to 75 percent of a translator's time' (ibid: 102). Such electronic tools as CD-ROMs and the Internet are very useful in this operation.

A wide range of CD-ROM dictionaries are nowadays available in different languages. They can be installed fully or partially, depending on the space available in the hard disk, and allow for a much easier and faster search for terminology than paper dictionaries. While the latter permit only one main option for search, namely looking up the main word in one language, CD-ROM dictionaries provide various search modes, including access by headword or by text. Besides, such dictionaries can be used alongside the word-processor or web browser so that the translator can use the copy/paste functions to look up the term or even simply mouse over a term on a webpage to have its equivalent pop up, as it is the case with the Oxford Pop-up dictionary.

But the Internet is by far the most useful tool for translators and terminologists alike. Inasmuch as terminology management involves finding documents dealing with specific subject fields in both the SL and TL (Esselink, 2000: 399), 'the Internet is the most powerful resource ever' for terminology mining (Dyson, 1998: 19). The Internet features powerful search engines, such as Google (http://www.google.com), and metasearch engines such as Metacrawler (http://www.metacrawler.com), that allow access to increasing amounts of specialized knowledge in various languages, to terminology databases, general and specialized dictionaries and glossaries, which contain large volumes of valuable data.

Moreover, when working on a project for a given software package or operating system such as Windows, the translator can use the Internet to access the server of the software's developer and use that company's glossaries to extract terminology (Esselink, 2000: 403-404).

II-2 Terminology extraction

The second step in terminology management after identifying the term is to extract it. Term extraction is 'an operation which takes a document as input and produces a list of term candidates as output' (Streiter et al., 2003: 2). By reducing redundancy and increasing consistency, this operation is paramount in writing and translating software products (Bernth, McCord and Warburton, 2003: 51). When the document is not available in an electronic format, the extraction can be done by typing terms. This inconvenience is, however, overcome by the use of a scanner to obtain electronic versions of printed documents. Terminology can then be extracted either manually by the use of the copy/paste functions or through the macro function. However, when dealing with large amounts of data, manual extraction becomes time- and effort-intensive and requires the use of extraction systems such as TExtractor.
II-3 Terminology storage and manipulation

Data storage and manipulation is as critical as data identification and extraction for translators. The systems used for such purposes depend on the translator's familiarity with computer programs, the size of the projects s/he works on and his/her financial resources.

II-3-1 Non-specialized tools

The easiest way to store terminological data is to do it in a word-processor like MS Word. The translator can draw a table with different columns for the required fields (for SL term, TL(s) equivalent...), store data in it either by typing it, through the copy/paste functions or the macro function, and sort this data by field. However, a database in Word cannot host large amounts of data, since a table in a Word document can only contain a limited number of columns. Data can also be stored in a spreadsheet application such as MS Excel or in a database management system such as MS Access, which do not require much training or extra expense. They both allow data storage, import of external terminological data and linking of objects, which is particularly useful in updates. Besides, unlike Word, they allow the storage of larger amounts of data.

A translator can thus open a database in any of these tools while translating, search for a term, copy it and paste it in the translation document. Indeed, Word, Excel and Access all allow data retrieval, though retrieval is easier in Word than in Excel or Access. In the former, the user can search for a term by using the Find function (Ctrl+F) or by browsing down the table. In Excel or Access, the user has to specify, among other things, what to match and whether to look in formulas or values in Excel, or in the ID field or the table in Access.

The main limitation of these tools as far as translation projects are concerned is that they do not allow for automatic retrieval of data. Such tools may, therefore, be adequate for small and medium-sized translation businesses and small-scale projects or for other language professionals such as terminologists who only need to store data and manipulate it optimally without having to use it in a translation. These tools are, therefore, not suited to large translation businesses where being able to use terminology databases as part of a translation memory is a valuable asset.

II-3-1 Specialized Tools

TermStar by Star is an excellent repository for huge amounts of terminological data since it allows the creation of numerous databases each capable of housing several bilingual and multilingual dictionaries supporting different languages, including right-to-left ones such as Arabic. The translator can store various terminological data, including the SL and TLs, and a host of information pertaining to both SL and TL terms in every such dictionary.

Updating of data is very user-friendly within TermStar. It can be done either by double-clicking an entry or by right clicking an entry and clicking Edit. Adding an entry is equally easy and is
performed through the Rapid Entry Mode, through the Data Record or by right-clicking in the dictionary window and choosing New Entry. Accordingly, the whole procedure of data update in TermStar follows a logic which any person familiar with computers, but not necessarily with such a specialized tool, can grasp. Besides, the translator can open and consult dictionaries in TermStar independently of any project or link various dictionaries to the same project from Settings in Project.

TermStar also offers two features of paramount importance in large-scale translation projects. First, it allows the export of dictionaries in a text file and the import of fully-fledged dictionaries from such applications as Word, Excel or Access, after converting them into text files, and from translation systems such as Passolo. This feature is of great help for translators in that it enables them to import their clients' in-house glossaries or dictionaries from a variety of repositories, and to exchange data between colleagues. Besides, it allows the project manager to control terminology consistency by being able to receive data from the various translators in his/her team, reduce it to the same format, and make sure that they are all using the same TL equivalents.

Second, TermStar offers various modes of data retrieval. Data can be found in a TermStar dictionary through the use of the Find option, which allows for the use of wildcards, or by browsing down the dictionary using the down or up arrows of the keyboard. Once a term is found, it can be copied, after entering the Edit Mode, and pasted into any external document. But, most importantly, data can be retrieved automatically as part of a translation memory within Transit, since TermStar can be accessed as an integrated part of the Transit TM and editor (Wassmer, 2003). This option, combined with the possibility of importing a glossary from Passolo, means that a translator can use the translation of a software interface in the translation of the software user's manual.

Nevertheless, the import/export processes in TermStar are rather complicated, since they require several commands from more than one menu. If the translator wishes to import a dictionary without linking it to existing data, s/he has first to create an empty dictionary within an existing or new database. If one step is missed or done inappropriately, particularly at the level of the import filter, the whole import procedure fails, which is frustrating for a new user. Likewise, to export a dictionary, the layout has to be changed and cross-references have to be hidden before data can be exported. Thus, the user's manual is necessary for a new user to work his/her way through the procedures.

As to Passolo, it is a 'specialized translation environment for the localization of Windows-based software' (ibid). It does not have, therefore, all the features of TermStar but it still allows the storage of terminology. This can be done simultaneously with the translation process. The translator can save every translated term and its equivalent in an existing or new glossary using the Add To Glossary function that can also be activated by the Ctrl+F10 key combination. Passolo equally recognizes right-to-left languages and allows the import of a glossary created in Notepad.exe following Passolo glossary structure (a line for
language ID, another for SL term and a third for the TL term, separated by tabs). A glossary created within Excel following the same structure can equally be saved as (tab delimited) text and imported into Passolo.

As to glossary export, Passolo provides various options. A glossary can be exported as a Passolo glossary file (.glo) via Passolo Glossary Maker, and sent to any translator translating window-based software in Passolo. It can be exported as a text file (.txt) and opened in Word, Notepad, Excel or Access, updated and re-imported in Passolo. A glossary can also be exported as an Excel file (.xls) via Customizable Text Export, which allows the translator to choose various settings for the export, including whether to keep shortcut keys in the exported file or not. Finally, Passolo is equipped with the add-ins feature that allows the export of a glossary to Star's TermStar. The export/import operations in Passolo are very easy and straightforward. All tasks to perform within these operations are visible and quick to grasp, and a beginner may not need to resort to the user's manual or to on-line help.

However, terminology update is not practical, since it is not possible to view and access the content of the glossary from within Passolo. If the translator has to modify an entry in a glossary, s/he has either to translate or re-translate a string with a new term and then add the translation to the glossary via the Ctrl+F10 key combination, or to export the glossary in any of the formats above, make the necessary update, and re-import it in Passolo, which is rather unpractical. For the same reason, retrieval of terminology in Passolo is only possible as part of a translation memory via fuzzy matches, since it is not possible to look up a term in a glossary within Passolo, copy it, and paste it elsewhere.

**III- Conclusion**

I would conclude that any comparison between the various forms of terminology management discussed above would not be meaningful, each having been developed for different purposes. They should rather be seen as complementary tools which, if used in conjunction with one another, enable all language professionals to exchange data, update it and use it optimally. Together, they constitute a valuable resource that allows to manage and control the very element that carries knowledge: the word.

**References**

**Books**


**Journals**


**Websites**


