



In Dublin's Fair City

Teaching Translation Technology at Dublin City University.

by Sharon O'Brien and Dorothy Kenny

The B.A. in Applied Languages (translating with interpreting) has been run by the School of Applied Languages and Intercultural Studies (SALIS) at Dublin City University (www.dcu.ie) since the early 1980s. Even back then, the importance of technology in the daily life of the translator was recognized and the subject "Translation Technology" was first introduced in a pioneering move in the mid-eighties. Translation Technology is now a core module on two programs in DCU: the B.A. in Applied Languages and the Graduate Diploma in Translation Studies. Machine Translation also plays an important role in both of these modules, as well as in the B.Sc. in Computational Linguistics.

Many SALIS graduates go on to work in the language industry in roles as diverse as Computer-Aided Translation Specialist, Technical Author, Software Localization Engineer, Project Manager, Documentation Manager, Terminology Specialist and, of course, Translator. The Irish Software Localization industry, in particular, has benefited by recruiting SALIS graduates.

History of Translation Technology Teaching at DCU

The original Translation Technology course involved an introduction to the principles of online terminology management and online term databases. Also, the ALPS Translation Support System was acquired

by the School and used by the students right up until the mid-nineties. (ALPS was the machine translation technology developed by ALPNET. It was later superseded by their translation memory technology.) Later, another machine translation system, Globalink's GTS, was also introduced. This course aimed to give students an appreciation of the strengths and weaknesses of terminology management tools, online termbases, and machine translation technology. That translation memory (TM) technology was not a feature of most translators' professional lives at this point in time is reflected in its absence from the course.

Enhancements in technology and an increase in its use resulted in an expansion of the Translation Technology module by the mid-1990s. Translation Memory and Ter-

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minology Management tools had become much more sophisticated at this stage. While previously, translation companies had a somewhat skeptical attitude towards this technology, more were now implementing it on a daily basis. It therefore became even more important for graduate translators to have a good working knowledge of the principles of these tools.

Additionally, increasing enthusiasm for the World Wide Web and the resulting potential for doing business in countries which, up until that point, had seemed unreachable, gave rise to a new enthusiasm for Machine Translation technology and its potential for translating online Web pages. So, while Translation Memory technology was gaining in importance, Machine Translation technology was, and still is, an important component of the Translation Technology module at Dublin City University.

More Recent Developments in Language Technology Modules

Since the mid-nineties, the industrial landscape in the world of translation has changed considerably.

With the maturation of translation technology came the expectation that

translation companies would put it to use on a regular basis. This was especially the case in the IT domain.

Consequently, the current expectation of a graduate translator is that he or she has a good working knowledge of *at least* one Translation Memory and Terminology Management tool. Not only that, but the graduate translator now finds him/herself faced with an expansion of the traditional role to include many new tasks including translation technology evaluator, terminology specialist, creator of translation memories, post-editor of machine translation output, software localization specialist, DTP specialist and technical writer, to name but a few.

The Translation Technology module at DCU has evolved to reflect the wider variety of knowledge and skills required from the graduate translator. For example, an introductory module on software localization has been running on the Graduate Diploma in Translation Studies since 1997 and this module will be offered to the final year B.A. students in Translation Studies for the first time in 2001. The traditional Translation Technology module has been split into two modules, "Translation Technology," encompassing Translation Memory and Machine Translation tools, and "Terminology Management," to reflect the increasing importance of both topics. Dublin City University also has a particular strength in corpus linguistics (see, for example, Pearson 1998; Kenny

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2001; Bowker and Pearson forthcoming 2002), and since 1998 has been offering a module in this area aimed specifically at translators. Here the focus is on using electronic media to conduct linguistic research relevant to translation practice and research.

Teaching and Assessment Methods

The Translation Technology modules at Dublin City University are currently offered to two groups of students, i.e. final year students of the B.A. in Applied Languages and Graduate Diploma students in Translation Studies. The former group is usually equipped with adequate IT skills

by the time they reach this level. The latter group, however, can come from varying backgrounds, e.g. recent graduates of traditional B.A. programs, teachers, people who have lived and worked abroad for many years and who want to return to third-level education, etc. This means that the latter group can have varying levels of IT skills from none at all to fairly advanced. Consequently, both groups are taught separately and the pace differs. However, the curricula have much in common.

The teaching methods involve a combination of lectures with small groups of students and practical sessions. Lectures are always held in a language laboratory that is equipped with the appropriate hardware and software so that demonstrations can easily illustrate a point.

The focus is as follows:

- Learning the *general principles* of Alignment, Translation Memory,

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Terminology Management, Machine Translation and Corpus Linguistics technology. This is achieved through lectures and demonstrations.

- Discovery by the student, on an independent but guided basis, of the strengths and limitations of the technology. This is achieved through guided practical class and term assignments.
- Appreciation of the benefits and disadvantages of using this technology on a daily basis to aid the task of the translator. This is achieved through lectures, practicals and assignments.

While existing text books on Software Localization address Translation Technology (e.g. Esselink: 2000), no text books are currently available on the sole topic of translation technology. One useful source is Bowker (forthcoming 2002—see references below). Sprung (2000) also provides insight into the practical application of Computer-Aided Translation (CAT) and other tools in industry. In Machine Translation, older sources such as Hutchins and

Somers (1992) and Arnold et al. (1994) are still useful, while Trujillo's (1999) more recent volume helps bring students up to date with recent developments. The students are also instructed to make use of the Online Help and manuals that accompany

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the technology as well as evaluative articles. They also benefit from presentations by industrial representatives on campus, which normally take place once every semester.

Assessments are always of a practical nature and require the student to obtain a good understanding of a tool's features. It is expected that the student can produce a well-considered appraisal of a tool's features, strengths, and weaknesses.

The Challenges We Face

1. Teacher Challenges

One of the main challenges faced by those who teach Translation Technology modules is the "skills versus knowledge" debate. Is it our job to train translators how to use the leading translation memory tool so as to increase their chances of employ-

ment on graduation? Or is it our job to impart knowledge of the technology on a more general level and to equip the students with the ability to evaluate and to learn the use of these tools themselves? Experience to date shows that the students are more anxious to learn skills so they can add that skill to their CVs. However, this technology, like all other technologies, changes rapidly. Today's bestseller might be replaced in six month's time. Although difficult, it is important for us, as teachers, to remain focused on imparting valuable knowledge rather than on being in-house trainers for one specific tool.

If we are to include more than one brand of tool in the course, we are faced with the challenge of having to know about the features of several tools. We also have to find the finance to acquire sufficient licenses for each of these tools and we need the appropriate computer equipment.

When teaching about a technology, some of the knowledge can be imparted in a traditional "lecture" or "tutorial" environment. However, there is no match for the knowledge that can be gained by hands-on experience. Students require several hours of contact with the technology in question and they need one-to-one guidance during much of this time. Such one-to-one guidance is inevitably very demanding on the teacher who is trying to give each student in the class an equal chance to learn.

2. The Curriculum

Perhaps the biggest challenge regarding the curriculum for translation technology is that of keeping up-to-date with techno-

logical advances. This means being able to afford licenses and equipment as well as the time required to keep oneself up-to-date with recent developments.

While it would be impossible to include all relevant tools in a translation technology curriculum, we are faced with the challenge of including a sufficient variety of tools in order to give the student translators a chance to evaluate and compare the strengths and weaknesses of different technologies.

3. Industrial Involvement

Translation technology vendors were initially slow to realize the benefits of being involved with university programs. This situation is now being rectified and developers of Translation Memory and Terminology Management tools, in particular, are offering good discounts on licenses. Involvement from Machine Translation vendors is more limited because this type of technology is more expensive, often requires a higher specification of equipment and more time for installation, training and maintenance.

Industrial involvement also takes the form of sponsorship of prizes for "best thesis" awards and campus presentations by representatives of tools' companies. Recently, financial prizes offered by one of the leading translation memory developers for final year projects in Computational Linguistics have been quite generous.

Verbal support for post-graduate research involving Translation Technology has been forthcoming in the past. This is now being translated into concrete action such as the donation of software for research.

Conclusion

There is a greater need now more than ever for graduates with skills in translation technology. The teaching of Translation Technology at Dublin City University is, therefore, a very important component of the overall translator training curriculum



and it is likely to stay that way. In fact, with the ever-widening role of the translator, Translation Technology is set to become even more important in translator training programs and is likely to include aspects such as technical and controlled authoring, desktop publishing (DTP), multi-media production, multilingual knowledge and content management, and data mining in the future. As teachers of this subject, all we need is the software, hardware, skills and time to keep up with the technological developments!

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