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...and the Profession? (The Impact of New Technology on the Translator)

The introduction of new technology looks set to change the scenery for the translation profession. Some of these changes can clearly be labelled as advantages, others are mostly neutral, others still cut both ways. Some of what follows has been mentioned in other articles in this publication, but let us recapitulate and examine the changes, starting with the least controversial.

1 Changes for the translator

1.1 *Improved quality*

...due to greater terminological and phraseological consistency. Translation memory tools provide previously translated sentences at the click of a button (or almost). The ease with which terminology can be looked up as well as the speed of the search make inserting the correct or the accepted term in the document a simple, less time-consuming task.

On the other hand, some translators prefer the "blank page" approach, that is they do not like being distracted by previous translations which in large organisations have probably been done by someone else.

Nevertheless, for most types of documents such as legal ones or documents that have to be written in the "house style", not having to search for those previous translations can improve considerably the overall quality of the document, as translators are less likely to be tempted into the "lazy" option of not looking up references.

[1] The author wishes to thank JOHN BEAVEN for feedback and comments.

1.2 *Enhanced productivity*

At the risk of restating the obvious, with translation memories there is no need to re-translate what has already been translated.

In the environment of the European Commission, for the 25% of texts that are believed to be repetitive, typical productivity gains are estimated to be around 60% (precise figures not yet available as tools are still in the deployment phase). In other words, for those documents, 16 pages can be translated in the same time as it takes to translate a 10-page text.

1.3 *Comfort and confidence*

The fact that the exact wording of previous translations is available at such close reach undoubtedly gives the translator added comfort and confidence. This, in turn, can enhance quality and productivity.

1.4 *The profession becomes portable*

Not that it was not portable before, although source texts and translations could not be passed on so easily by e-mail as they can now. However, the real gains come from the possibility of transmitting by electronic means all supporting documentation as well as the linguistic resources that go with the text such as reference documents, translation memories, terminology and other types of electronic prepared resources.

This certainly might conjure vivid images of translators doing their work using notebook computers by the swimming-pool sipping pina coladas in exotic places! After all, they only need a telephone outlet to plug in their modems? Sorry to have to break the spell: please read on.

1.5 *The globalisation of translation*

Translation companies and large organisations which rely heavily on outsourced translation can literally shop for more cost-effective services all around the globe. Projects have already been carried out in which a first translation was done in Latin America for a fraction of the cost and then revised in Europe to make sure that it conforms to the regional linguistic variety required by the client. The total cost of the operation, including communication and management at the remote site, was substantially lower than the usual cost.

The term "translation dumping" has even been mentioned in some cases. It is obvious that these rather alarming developments put great pressure on the productivity requirements of the individual translator as well as those of translation companies.

1.6 *Other changes*

1.6.a All work is PC-centred

No translation work is conceivable today away from a PC. However, the prospect of spending ten hours a day in front of a computer screen is not to everyone's liking. In the case of the Translation Service, ergonomy has proven to be of special concern: the normal office is perceived as being too narrow for effective work in front of a 17-inch monitor (this being the recommended size for work with multiple windows, as is necessary with, for example, the Translator's Workbench).

1.6.b The typical document look changes - "Hybrids"

As a result of various pre-treatments, translators are presented with documents which already contain text that has been replaced in the target language. This constant switching between source language text that needs to be translated and already-inserted target language text that has to be revised is perceived as distracting.

1.6.c Work becomes more intense

In large organisations which process a large number of repetitive documents, translators would alternate between "restful" passages which they had translated before and others which required a great deal of attention. Now, these "restful" passages are being dealt with by the machine; there is only new (usually considered "noble") translation left to do which obviously changes working habits.

2 Social aspects

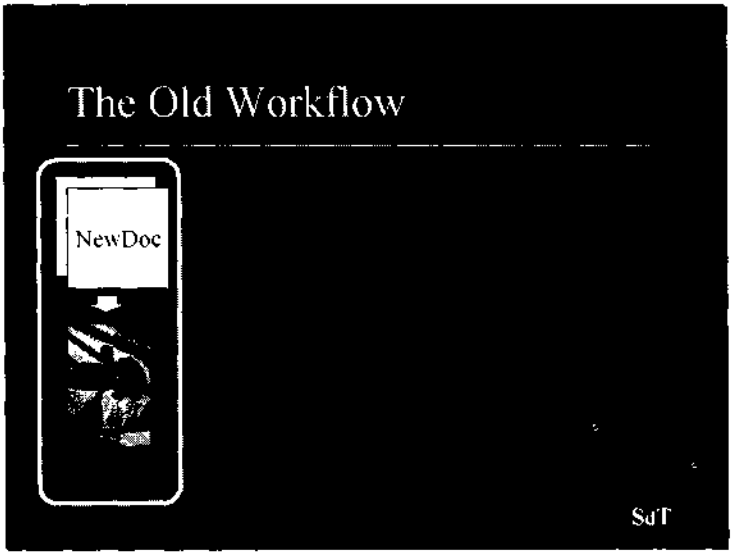
It used to be that translators once in a while had to get up from their desks to consult other colleagues or pay a visit to a documentation centre. Although perceived by some as impeding productivity, these walks proved extremely useful in adding a social dimension to what is essentially a

solitary profession, leading to increased job satisfaction. These short breaks were also beneficial to the overall quality of the end product as the sustainable attention span obviously varies between individuals.

Now, with documentation and information available at their fingertips through the Internet, CD-ROMs and other electronic documentation media, the danger of social isolation looms greater. It is too soon though to analyse in depth the long-term effects of this change in translation practise will have for in-house translators.

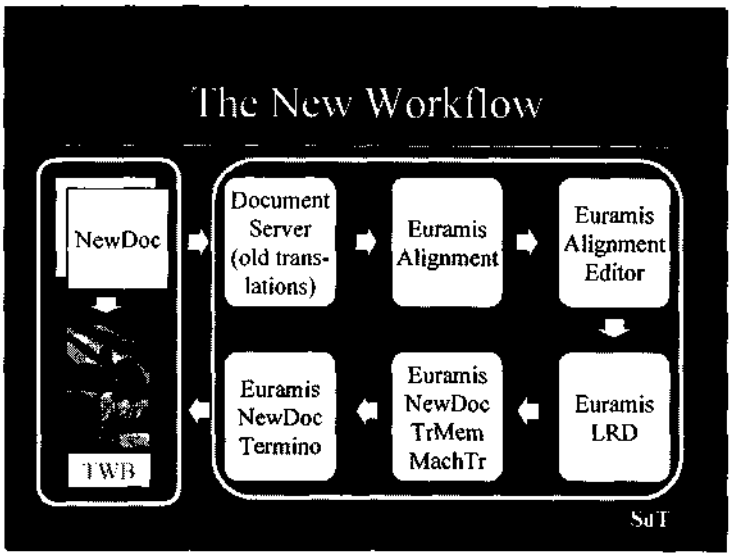
3 Text preparation and translation

From previous articles dealing with translation workflow, it can be seen that the translation process before the introduction of translation technology went something like this:



In other words, the document to be translated came in the service and was immediately passed on to the translator who had to do all the documentation, preparation and translation work on the PC.

With the introduction of translation technology the scenery changes. The typical computerised workflow as described in the previous papers could look like this:



Just to sum things up: a new document comes in, searches for reference texts in SdTVista and alignment with EURAMIS are carried out, the result is edited with the EURAMIS alignment editor, the memory is sent to the EURAMIS LRD, terminology is retrieved from the text, and a local translation memory is built with added suggestions from machine translation. Only then is all this passed on to the translator.

The reverse process starts once the document has been translated: the formats are checked, new terminology is extracted, and the result is sent to the translation memory for future reference.

The relative size of the boxes in the above illustration shows that a substantial amount of preparation work has to go into the document before it even reaches the translator. Consequently, this preparation work should not be done by a translator, as leaving these time-consuming manipulations to highly paid professionals would not be cost-effective.

4 A new profession - the Linguistic Assistant

To start with an example, much in the same way that the medical profession has separated tasks involving different levels of skills by introducing medical assistants to help doctors concentrate on their core tasks, the language industry would benefit from the help given by *Linguistic Assistants.* These would take over all the pre- and post-processing tasks that are necessary in today's computerised linguistic working environment (cf INGE SCHULT'S article in this publication p 330).

This is best illustrated with another example, alignment and alignment editing. Here, it is necessary to be able to recognise the size and general meaning of a particular sentence. However, since no language editing is involved in the process, the control of alignment can be done by a person with relatively modest linguistic skills - it is merely a question of deciding whether a source sentence corresponds to a target sentence in a graphical user interface.

The obvious reason for this is to rise to the challenge of providing the most cost-effective service. In the past the translator-typist tandem was less costly than a translator typing alone - one typist could deal with work generated by several translators, typically three or four. The situation is similar now, with a linguistic assistant being able to prepare and post-process texts for several translators.

Moreover, a linguistic assistant can deal with more foreign languages than one. This person need not have a profound knowledge of the languages and thus can provide a multilingual service. Some tools even have provision for processing several languages at once.

In the Translation Service, interested secretaries have the opportunity to change their working profile and take on the role of linguistic assistants. This is perceived to be much more satisfactory than typing for hours on end. In private translation companies, students or linguistically talented persons act as linguistic assistants and take on all the text handling and translation preparation tasks.

It only remains for this activity to be recognised as a profession and for schools to provide the relevant training in their foreign language or secretarial courses.

5 The need for linguistic resources management

Large amounts of linguistic data need to be managed if quality is to be preserved. The simple accumulation of data tends to introduce doubles, inconsistencies and noise.

The problem is not new. Take EURODICAUTOM, one of the world's largest terminological databases, with over 1 million multilingual entries. Most of today's budget goes not into extending the coverage (with the exception of the relatively new languages), but rather into what is called *consolidation,* which consists of making sure that entries are complete and that there are not duplicates.

With the emergence of translation memories, the scope of this consolidation activity broadens. Gigabytes of linguistic data in EURAMIS

need to be kept clean from the point of view of both form and content. Otherwise, users lose confidence and the organisation is left with a giant of limited use.

Tools for managing linguistic resources are few and far between. Interfaces for introducing data are getting more user-friendly, but they all tend to deal with individual entries and not with large ensembles. In the absence of tools, the effort of human intervention is prohibitive.

The solution used up to now is to make sure that what goes into a linguistic database is of a high standard. Sooner or later though the need will arise to address the problem with appropriate maintenance tools.

6 ...and the profession?

The introduction of new technology forces translators into acquiring new skills which have little to do with language - and certainly little to do with what they learnt at traditional university courses.

6.1 *Personal computers*

Since the demise of the standard typewriter, customers usually ask for translations to be delivered on electronic media so that they can be integrated into the document production process - which is electronic - as soon as possible and with minimal cost and risk of introducing errors.

This obliges the translator to stay up-to-date with the latest word processing systems, and occasionally to install new software (such as desktop publishing) at the request of their clients. New file formats also have to be dealt with; it is not uncommon for publishers to work on an Internet-compatible version of their documents.

Despite the increasing user-friendliness of interfaces, the personal computers and operating systems that hide underneath keep getting more complex with each subsequent version of the hardware and the software. Personal communications in the form of connection to the Internet for access to documentation and terminological databases are an absolute must, as is electronic mail to send and receive work.

6.2 *Learning to use new translation technology*

In the Translation Service standard courses in the use of translation memory tools typically take three weeks. However, this does not mean that they are complex. It is not the learning of the tools themselves that occupies all this

time - one day is more than enough for that. It is rather the feeling for the methodology of using them in the most effective way, for the workflow associated with the new technology, for developing the judgement when to use translation tools and when not to.

6.3 *Multilingual document production consultancy*

For many clients, such as small and medium enterprises which are venturing into multiligualism, the translator is expected to organise the whole document production process, and has to provide input as to the most efficient and cost-effective workflow. The perceived high price of translation often has to be justified by this type of supplementary advisory role.

Translators may even have to provide this type of consultancy if they want to retain their own level of productivity and not fall victims to their client's inefficient set-up. Notions such as reference documents, version control, revision marking, and optimum release point are often new to organisations not used to dealing with multilingualism.

7 New strategic alliances

This multitalented person, the modern translator, must therefore be a technically oriented person, capable of mastering from one day to the other the client's favourite software, able to dispense multilingual document production consultancy, while being good at marketing in order to compete in a difficult marketplace threatened by translation dumping.

Oh, and incidentally, lest it become drowned in the sea of other skills required: he or she has to be a specialist in one or more subject matters, and a master craftsperson of the language.

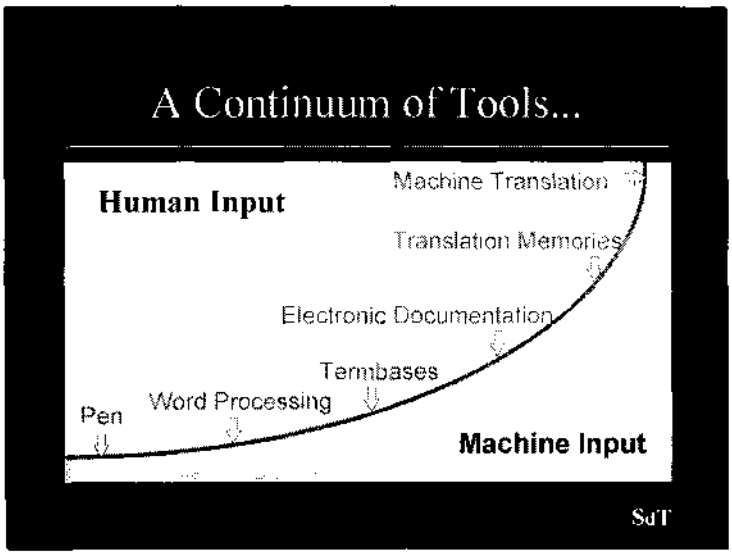
The individual translator is inevitably heading exactly towards the same destination as the individually-owned grocery store at the corner.

His or her place will be taken up by larger organisations able to afford the division of labour necessary to keep up to the demands of modern technology. Their personnel will be able to specialise in narrower fields of expertise and thus provide the competitive advantage necessary in today's global market. The modern-day catchword "consolidation" holds also true of the language industry. The localisation business is a prime example of collaboration between translators, linguistic assistants, computer specialists and technical marketing experts.

If individual translators are to survive in this climate, they will have to specialise and capture niche markets, and offer the individually-tailored service that the grocer store has had to provide.

8 The delicate balance between human and machine input

Today's linguistic technology provides great diversity of tools available: pen, word-processor, termbases, automatic lookup of termbases, electronic documentation, automatic documentation extraction, translation memories, post-edited machine translation and fully automatic machine translation. These constitute a veritable continuum of tools.



Quality and cost-effective translation is now mainly a matter of choosing the right mixture between human and machine input.

9 A new era

In the late 1800s machines took over repetitive manual tasks. The industrial revolution created serious social problems. In the end however, many menial tasks disappeared and were soon considered to be below the dignity of the human being.

In the 1960s, computers thankfully took over repetitive arithmetical calculations. The image of number-crunching mainframe computers

churning out kilometres of paper listings full of numbers must still be vivid in the minds of those old enough to remember.

We are rapidly approaching the year 2000: the era of text-crunching. Language can already be translated, summarised, and scanned for information with the help of computers. Obviously this works better with simple, repetitive, thematic language, but judging by the progress of language technology in the past few years, the time is not far when these constraints will be lifted.

The translator will have to adapt to the new scenario. His or her services risk being judged by their added value compared to machine output. Human translation quality requirements will obviously rise.

All these changes are already taking place in our profession, whether we like it or not, for good or for bad. It is up to us to rise to the challenge posed by new technology, and to make the best use of the tools on offer.

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