

Are you being served? User friendliness of CAT systems

Ulla Magnusson Murray

*Magnusson Murray Consultants, Sawbridgeworth, Hertfordshire,
UK*

INTRODUCTION

In the present era of information explosion, the demands put upon translators, buyers of translations (i.e. clients) and manufacturers of hardware and software used for translation purposes are indeed heavy. 'Efficiency' is the buzzword followed closely by 'cost effectiveness'. Competition is fierce and the rat race is on.

My paper will attempt to bring together the goals and needs of the translator, his or her client (the buyer I referred to) and the equipment manufacturer, and to look at the service they are getting and providing.

First, what are we, as translators, being served up from equipment manufacturers, clients, termbanks and databases in order to enhance our efficiency? Are we adequately served by the manufacturers in order to properly serve our clients? Should we blindly believe that MT as we know it will cure all our ills and is the way forward? Are manufacturers in turn being served by translators to make *their* product more efficient?

I shall examine the objectives of these three parties, and deal with the associated problems and possible ways of approaching them in as open-minded a way as possible. I do not propose any conclusions or solutions – I aim merely to stimulate us into thinking about these issues.

THE TRANSLATOR AS EXPERT

The past seven to eight years have seen a dramatic increase in the awareness among translators of the use of computers and other machine aids in translation.

Personally, I have been in the fortunate position, when, as Manager of the Translations Centre at ITT in Harlow, England, I was given funding and the go-ahead to install Europe's first computer-assisted translation system in 1982. I was also in the enviable position of working with some of the most talented technical translators in Britain. We used the Weidner system. I reported our early experiences with this system at the 'Translating and the Computer 5' conference. To me, those years of MT involvement were, so far, the most exciting in my translation career. It taught me a great deal about computers in general, their linguistic capabilities and limitations, the technological evolution, ergonomic aspects, efficiency and people's expectation of such technology. Most important of all, it gave me the basis for growth towards a more discerning approach to the whole area of computers in translation. After nine Aslib conferences on this subject, has the translator at last arrived?

Let's take a closer look at what type of equipment the market offers our expert translator today (see Figure 1). Putting aside for a moment the question of whether the translator has arrived or not, it is beyond doubt that the

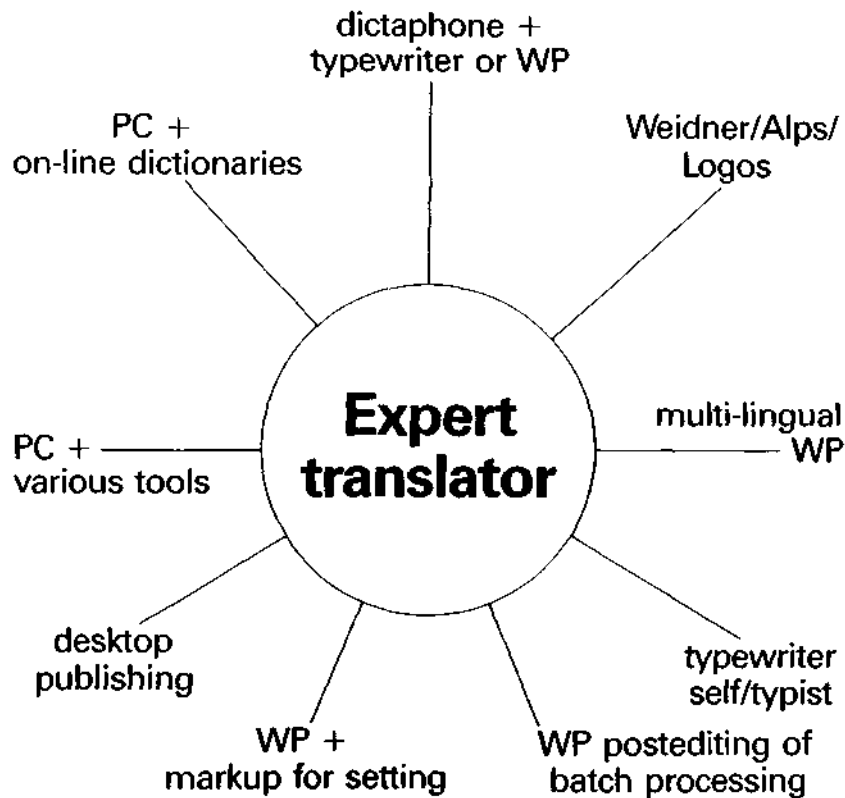


Figure 1. The expert translator's tools

emergence of all this equipment has had a tremendous influence on translators' practical work as well as on their training and education. However, without technical guidance, choosing suitable equipment from among all that is available can be quite overwhelming. Many systems are chosen by chance and many staff translators have systems planted on them. How can I know which is the best for my type of translation work? Is my client best served by this particular equipment, and so on?

OBJECTIVES AND GOALS

At this point it is useful to examine more closely the requirements and goals of the three parties I mentioned earlier – buyer, manufacturer and translator.

The goals of the translation buyer

The goals of the translation buyer are:

- low price
- speed
- efficiency
- translation on paper
- translation on diskette
- equipment compatibility for, e.g. client's own editing and/or electronic publishing
- quality (?)
- marketing/documentation driven*

The buyer's primary goal is naturally to enhance the sales of products by having the documentation or software translated. Translations are therefore usually marketing driven. It is worth stressing, however, that the average buyer has usually very little experience in the translation field. It follows therefore, that often the buyer is in no position to judge quality, but leaves this to the translator and sometimes to a foreign distributor. Hence the question mark against 'quality'. Furthermore, in the average buyer's mind, improved efficiency is guaranteed by the use of, for example, word processors.

The goals of the manufacturer

Next on the list is the manufacturer's goals. For the purpose of this paper, I will deal principally with the manufacturers of computer-aided translation (CAT) systems.

Until now, research, development and manufacture in commercial CAT systems companies have largely been computer-expert driven, with the assistance of computational linguistics and parse-string holders – in other words, high tech, high finance and re-revised linguistic theories. Promise of increased productivity for the user is the ultimate goal.

Other goals are:

- efficiency
- speed
- easy terminology building, updating and retrieval
- terminology consistency
- integration into electronic publishing and communications networks
- reasonable output – end quality with user
- some flexibility
- challenge – computers; computational linguistics
- computer-expert driven*

Since the linguistic quality of the various commercial systems does not vary to any significant degree, the subject of quality is again somewhat unclear. It is ultimately up to the user to decide on the quality.

The goals of the translator

Let us now consider a brief outline of the translator's goals, whether he or she be a freelance or a staff translator. These are:

- quality
- efficiency
- speed
- creativity
- terminology consistency
- clarity in original text
- access to termbanks
- access to subject expertise
- translator driven*

Any translator's main goal must invariably be to produce a *high-quality* product. Productivity is naturally also vital and it is particularly in this area that the translator needs to cooperate with buyers and manufacturers.

Problems of the everyday translator

Later, I shall discuss whether there are ways of achieving concordance between these objectives we have just considered. Are we in a position to combine the goals of our three parties into a realistic requirement specification? Can we identify some common elements by which they can be served?

Before I go on to that in some detail, I would like to look at certain problems that today's translator, as well as the buyer and manufacturer, has to face. First of all – some general language problems. Assume, for the moment, that our translator is using a CAT system; one of the most frustrating problems is a bad original.

If a switch designator occurs outside the scope of a quantity entering into a designational expression in the switch list, and an evaluation of this switch designator selects this designational expression, then the conflicts between the identifiers for the quantities in this expression and the identifiers whose declarations are valid at the place of the switch designator will be avoided through suitable systematic changes of the latter identifiers.

What chance will the computer have of solving this rubbish? Or this:

A copy job can be filed for later use while the duplicator is running or not.

Or this one (which was heard on the radio):

Mrs Thatcher has no intention of retiring herself.

And what about terminology? How many times have you heard your foreign distributors point out that they *do not* want to use the term in their indigenous language? – incidentally, the one you were so proud of having found or invented! They prefer the English technical terminology, for example, for compiler ‘compiler’ or for software ‘software’. They prefer a noun phrase translated as a verb phrase and so on. In technical texts, in particular, examples are legion. The buyer is piggy in the middle and can be of little help. Do you, as a translator, enter these loan words in the computer dictionary? What grammatical features do you give them? If translation is automatic, how do they inflect? Where will they turn up in the target sentence?

Moving on to the technical areas, we encounter a host of other problems:

- are the buyer’s WPs compatible with the translator’s?
- is the buyer’s CAT diskette compatible with the translator’s WP diskette?
- are the keyboard layouts compatible? The translator with many clients can have serious problems here.
- is there compatibility between WP, CAT and phototypesetting equipment?
- and as far as electronic communication over public networks is concerned
 - will all diacritics carry across?
- and – who will maintain my hardware and software? Where is the mechanic?

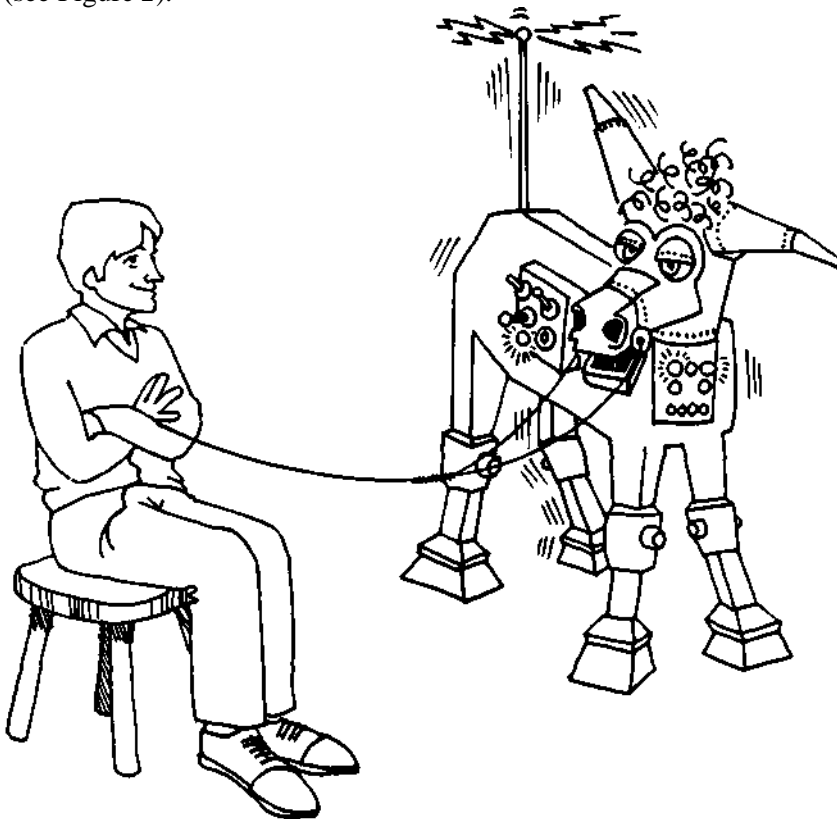
Those of you with experience in using CAT systems undoubtedly recognise these problems.

And what about software? Now, here is an area which could almost warrant an Aslib conference in its own right. Fortunately, software developers are more and more making allowances for their software to be translated by introducing elasticity to accommodate language expansion. But is there an ‘efficient’ way of translating software? Up to now, approaches vary from translation onto paper, which then has to be entered into the computer by the client, to translation superimposed into the machine. However, the latter approach does involve the translator in having to learn to use different types of equipment on a regular

basis. This obviously distracts heavily from the main translation task and is not desirable. And how do you decide what to translate in software? Commands, prompts, function keys? The habits vary considerably from company to company, and country to country.

POSSIBLE WAYS TO CONCORDANCE

Perhaps you might gather from what I have said so far, that I believe that different types of translation require different types of equipment and approach. None, of us, I am sure, would like to be considered a machine-minder (see Figure 2).



Do you mind machines?

Figure 2. The machine-minder

Although machines are in no way a panacea for good quality translation, they have undoubtedly greatly contributed to the profession. We now have better professional recognition and status. We have means of organising our shoeboxes

of terminology and we can provide consistency and speed. But we want more. The types of problem I illustrated earlier – and many, many more – must be addressed and translators must be more *actively involved*. Otherwise they have little hope of being in a position to make decisions about the type of equipment *they* would benefit from. It occurred to me that so many translators are invisible – many only ‘exist’ at the end of a telephone line! Sometimes it may be comfortable to be invisible. But I am advocating for the translator to be seen and heard. There may in fact be a case here for some assertiveness training. Have you ever been on one of these assertiveness courses? Great fun – it teaches you, for example, how to deal with these undesirable little salespeople who use all their manipulative skills to have you buy their encyclopaedias. The only way to deal with them is to say *what you want* (or don’t want as the case may be) over and over again – the so-called ‘broken record’ technique. Try saying to clients, upper management, manufacturers, researchers and developers: ‘Yes, but as a translator *I know* about these issues and I could think of ways of solving them’. And again. And again. Insist on involvement in the documentation planning phases; at that stage you can put pressure towards a clear and consistent original. Insist on involvement in research and development of translators’ tools and equipment. With a few exceptions, not many research projects in CAT have chosen to involve experienced translators. Join organisations that further our cause – join the British ITI, for instance. Insist on regular access to expert advice on technical and other matters which are not within your field of expertise. Set up networks for languages and subject areas. Find a ‘translator’s friend’ in the upper management structure. Insist on ‘horses for courses’; it simply may not be sensible to use CAT in every instance. Even for technical texts, there are many instances where no machine can ever replace the creativity of human translators. Tell the world about the importance of the creative aspect. Insist on involvement in the setting and publishing process. And what about royalties – that rather sensitive subject? Demand product training. If you carry out software translation, suggest close cooperation with the software developers. Perhaps some of the translation could be done alongside development in its own environment, followed by beta-trials on the distributor’s premises. Last, but not least, emphasise *quality*. As the saying goes, the machine is only as good as its user. Reassure your client that with your experience, knowledge and intuition you can confidently offer the quality the end user expects.

Some joint goals

Perhaps we are now in a position to put together some joint goals – maybe even a loose requirement specification:

- quality
- efficiency
- all multilingual WP facilities

- flexibility – horses for courses
- realistic pricing/costing
- easy terminology building, updating and retrieval
- terminology consistency
- access to termbanks
- creativity
- equipment compatibility
- integration into electronic publishing and communications networks
- clarity in original text
- access to subject expertise
- involvement in research and development
- involvement in total documentation process
- translator driven*

Please do look upon these as mere suggestions. No doubt many of you disagree and would like to add and subtract.

So, can machines help us to achieve synthesis? There is no doubt in anybody's mind that the answer is an unequivocal YES! But rather than be dogmatic, and imagine that we are not progressive or technologically advanced if we do not use CAT, we ought to remember that however sophisticated, versatile and expensive our equipment is, we are not going to achieve our goals if we do not have the expert translators to control it. Machines are marvellous at many routine matters, such as editing and revising a translation; at terminology building, updating and retrieval; at sending material electronically and a number of other repetitious tasks. In other words, for those tasks that require many expensive human hours.

Let us see how we could possibly make a good match of our expert translator and our expert computer.

SUGGESTIONS TOWARDS SHARING OF EXPERTISE

Since there is such a vast number of different kinds of translation material, it would follow that they all need their own tailored solutions incorporated into different types of translator workstations. Also, one and the same translator often translates different types of text. A mainframe MT system, such as, for example, Weidner, may be well suited to large-scale technical documentation of a narrow and specialised nature. A translation agency, however, dealing with a hundred and one subjects every day, may not find this system efficient or cost-effective. Also, to install and successfully operate a commercial MT system requires major financial and human investment. The trend, however, now points to more PC-housing of systems such as Weidner and Alps, and the cost, although by no means insignificant, is within some companies' budgets. In addition to automatic translation, Alps offer the possibility of multilingual word processing with dictionaries. This enables each user to build and update

their own dictionaries and leaves them to compose their own translation. This type of system could be more suitable to a translation agency, for example, to a smaller company or to freelance translators working almost exclusively for one client. This level of sophistication, however, is hardly within the financial reach of the average freelance translator: a more realistic package in terms of price and usage would be a PC plus a glossary compilation facility. There are a number of these already on the market, such as Termex and INK. INK offers an additional tool – a context window. During dictionary building, the translator has the possibility of seeing the context of a term before making a translation choice. There are other tools around which freelancers might find helpful, for example, a search facility to allow search for frequency of occurrences of a technical term or phrase. On that basis, one could decide whether to include a term in the dictionary or not. Electronic mail and fax are useful for any translator, as are communication links and networking to clients, to databases, as well as to translator colleagues.

In the same way as there is never only *one* good, useful and meaningful translation, there is not only one type of translator workstation. The sharing of expertise simply means that computers would be used where their capabilities make for more efficiency and cost-effectiveness, whereas the translator would use his or her talents primarily in the areas of quality, terminology compilation, creativity and so on.

CONCLUDING REMARKS AND THE FUTURE

Over the years, CAT has become a well-known catchphrase in translating circles. Dare I add – and forgive me for the unsavoury nomenclature – a RAT as head of the family? It does convey something more delectable – RAT would not be an addition to CAT, it rather embraces it. It stands for Rationalised Automatic Translation – a more positive rat race:

- sharing and pooling of expertise between computer and translator
- it also promotes a more translator-driven approach to the whole area of translation
- and it stands for an MT or CAT system that would be capable of evolving into an improved system that could handle whatever came along with the technological and linguistic evolution.

It further encompasses:

- customised MT/CAT software and hardware
- customer-specific types of translator workstation
- add-on facilities, such as the ones mentioned previously, as well as desktop publishing, mark-up handling, etc., which are now making inroads even among freelance translators
- less competition – more communication

And what of the future? Much of today's MT research is based on current linguistic theories and artificial intelligence. We have, for example, Eurotra, SUSY at Saarbrücken University, and various Japanese systems, as well as development work at Colgate and Carnegie-Mellon Universities in the United States. Research is also flourishing in industry – notably Rank Xerox here in the United Kingdom. Very valuable work is under way, of which I am proud to say that I am now a part. The impetus and encouragement has predominantly come from Mike Scott, an enthusiastic man with a computer background but with an admirable interest in the translation business.

One last thought to stimulate you: in the name of efficiency, could we visualise a future production environment with our pressured translators in a situation where their knowledge would be transferred to the machine, as they were interacting with it? I mean, for example, semantic knowledge and knowledge of the world around them. In that way we would all benefit by improving our understanding of what knowledge a translator actually needs in order to translate. (This is all total pie in the sky, you realise.)

For *Translating and the Computer 5*, I completed my paper with an illustration of ITT's method of rendering translations more cost-effective (see Figure 3). However, four years on, I am taking a more pleasurable approach to efficiency (see Figure 4). Is this perhaps something to quietly dream of? This is what I call service!

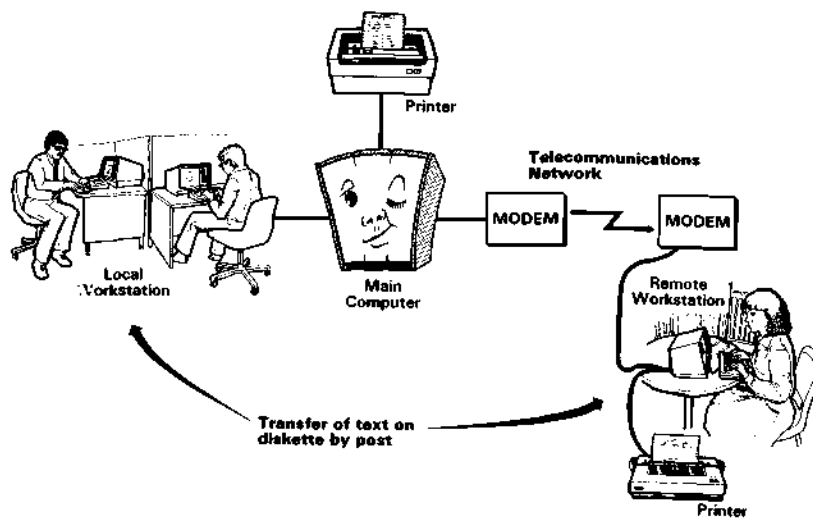
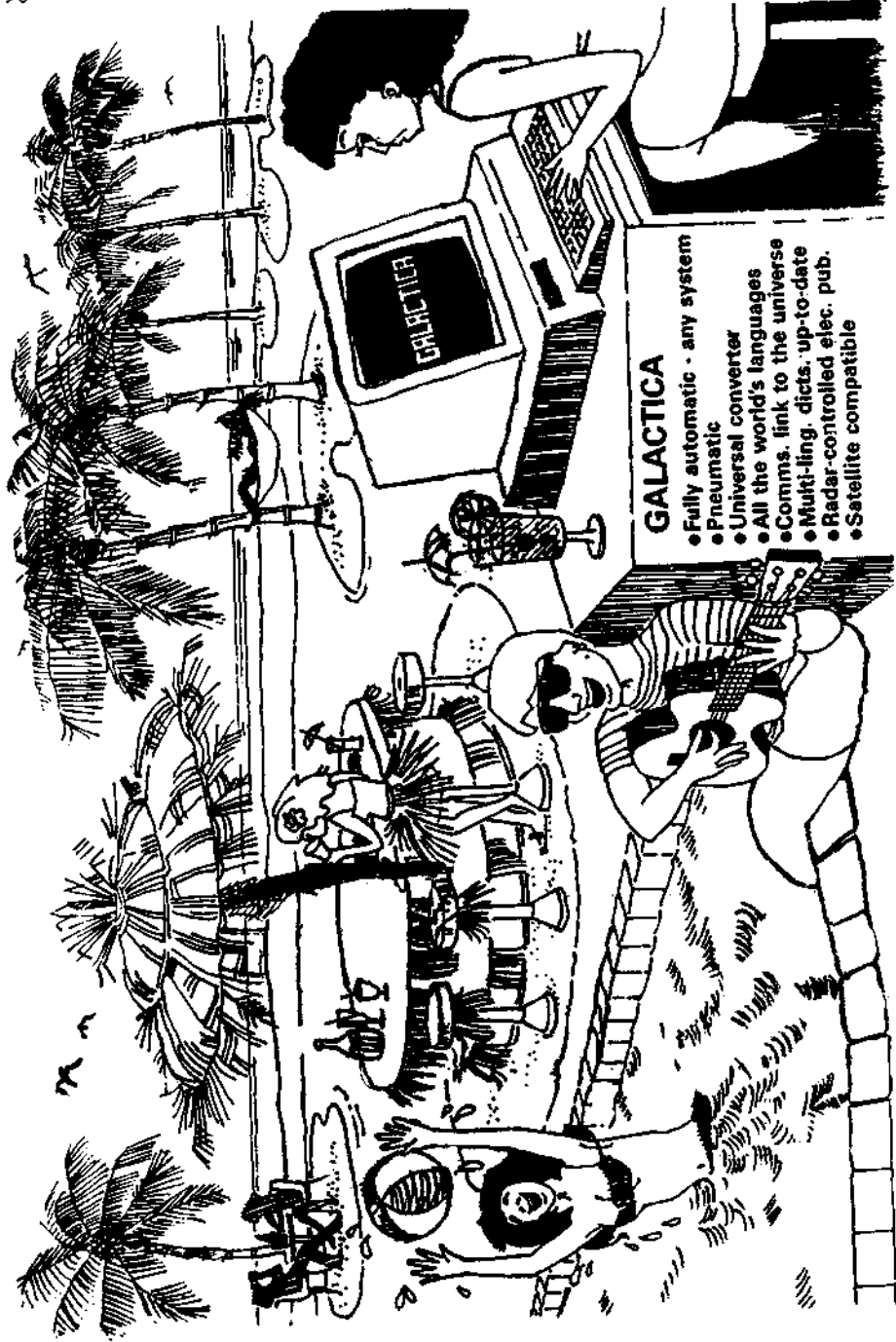


Figure 3. Cost-effective translation



- GALACTICA**
- Fully automatic - any system
 - Pneumatic
 - Universal converter
 - All the world's languages
 - Comms. link to the universe
 - Multi-ling. dicts. up-to-date
 - Radar-controlled elec. pub.
 - Satellite compatible

Figure 4. The translator's oasis