

# THE TRANSLATOR IN THE OFFICE OF THE FUTURE

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## The pace of change

Few people would dispute that the pace of change is accelerating. In the past it was not necessary to be aware of the newest inventions; they entered our lives gradually, and one decided when or whether to adopt them. Take the development of cars and television, which have so radically influenced our way of life; they started as new-fangled curiosities and only very slowly became accepted as everyday items.

Many translators continue writing by hand, despite the existence of typewriters and dictating machines, but the pace of innovation today is so great that only a translator on the verge of retirement (do we ever retire?) can afford to dismiss current technological developments as irrelevant to his trade. Until now, the principal cost of running an office has been manpower; tomorrow, it will be equipment. In the past, offices have been under-capitalized, but this will change, bringing with it a drop in manpower levels. What calculators and computers have done for bookkeeping and accounting, word processors and communications networks will do for the creation, processing, collecting, storing, transmission and displaying of texts.

How will all this affect translators?

When firms cut their white-collar staff, staff translators are at risk, and there is an increasing trend towards sub-contracted labour. Translation departments should not be content to sit quietly using old typewriters, and hoping to escape the axe by not being noticed. On the contrary, they should speak out and ensure that their departments are seen to be increasingly productive and respected by having modern equipment.

Although collectively freelancers should benefit from reductions in staff teams, they are individually even more vulnerable to commercial factors and fashions than their staff colleagues. What freelancers have to fear is large

agencies who can afford highly sophisticated, expensive equipment. High-volume, low-quality machine-assisted translation with a certain amount of pre- or post-editing may prove economical and attractive to clients, perhaps as a preliminary to having the job done "properly" later. But acceptance of the second-rate can grow, and "real" translators may have gone out of business by the time an improved or edited version is required. There is a serious danger that people will come to accept cheap, poor translations done quickly rather than wait and pay for a good job.

## Word processors

At present we all probably use a typewriter, telephone, dictionaries, filing cabinets and the post. These are being superseded, to a greater or lesser extent, by one piece of equipment — the word processor. The term "word processing" started in German as *Textverarbeitung*; similarly *traitement de texte* in French. "Text processing" would really be a better term, but more advanced work-stations have now been developed called "text" or "information" processors. I shall be interested to see how they will be translated into French and German. Perhaps I should not assume that you are all familiar with word processors, so will those of you who use them already bear with me, while I describe what they can do, for the benefit of the others.

I will talk about their general capabilities, although some models have certain features and lack others.

You are presented with a keyboard which functions like an ordinary typewriter. It will be in QWERTY or AZERTY configuration, or take the form of any other Roman alphabet keyboard. Versions are available for all West and most East European languages with the usual diacritics, etc. There are a number of additional keys at the sides of the keyboard, and some keys have not only dual functions (as in typewriters, ie upper and lower case), but perform a further function after use of a code key. Your keyboard can be quite small and is often separate from the rest of the machine. It may even be portable (30 x 20 x 4 cm), weighing 1.5 kg, in the form of a "Type Recorder" which you can take

on a train or plane to type your text onto a microcassette. It has a readout strip and when you get home you plug your keyboard into the rest of the word processor.

But let's get back to our office.

What you type into your word processor appears on a screen, on paper, or simply goes into store, either temporary or permanent. It can appear on someone else's screen or paper in a printer (part of a word processor) at the end of any telephone line in the world. This is useful when asking a colleague "What do you think of this passage?" You can show him the whole page in a flash, on his screen.

Now let's get down to work. We are doing our translation. We give the job a title for filing and reference purposes. We can use any kind of alphanumeric system we wish, to recall this text from store at any time. Type your translation in the normal way. I find touch-typing with eyes shut the most restful, but you may be a two-finger merchant. Assuming that, like me, you make mistakes, slips, and change your mind, this is where the word processor really comes into its own. By back-spacing and overtyping you correct permanently, no more Snopake, Tipp-Ex or bits of sticky paper!

When you have finished a sentence, paragraph or page you can check it on the screen and make any changes at this or any other stage. If your text does not require editing it is ready to store, print or send as you wish.

Tell the machine to "print", and the printer, which may be in the next room and shared by other people, types it out in the format you have chosen, ie margins, type-faces, pitch, centred headings, pagination, line spacing, etc. If your client is waiting for the job you phone and tell them it is ready for transmission to their printer — no matter if someone else is using their keyboard. In the meantime while it is being transmitted you can go on working on your machine or go for a cup of coffee — your word processor will not make it for you!

Perhaps this job needs editing; perhaps you have missed out a passage, maybe there are clumsy turns of phrase, you have repeated yourself too often or you realize that where you translated *Meßverfahren* as "measuring process" this client calls it "test procedure". Furthermore you realise that "Plexiglass" which appears several times throughout the text should have had a capital letter.

You tell the machine to search the text and make these changes. You remember to tell it that "Measuring process" with a capital letter should be changed for "Test procedure" with

a capital too, as it only recognizes an exact equivalent. You must, of course, when changing Plexiglass, tell it to change the whole word, if you just tell it to change a small "p" to a capital it will do that through the text. Your word processor cannot reason, only obey!

Even if you are printing out or sending the text you will probably wish to keep a record of it on file. You can store it on a floppy disc which could hold 150 pages. The discs come in protective cardboard covers, are compact and easy to file. Or you could store the text in your machine, which might have a random access memory of 130,000 bits.

If you file on disc when you are asked to update a translation, by putting two discs in the machine at the same time, you can copy and transfer text from one disc to another, changing as and when necessary. Translators are not as likely as some people to move whole paragraphs or sections from one part of the text to another, but for original writing this is a very useful feature. I know of at least one author who has a word processor already. Translators are not usually concerned with figure work but all too often one has to type columns of figures in tables. This is a dreadful chore unless you have an Optical Character Reader (OCR) - more about this later, but a word processor will take a lot of the grind out of tabulation.

Prepared programmes are unlikely to be useful in the everyday translation of texts, but for sending out invoices or repeat letters this feature can be extremely timesaving and valuable. Your machine will paginate as you go along, and it can do a line count for you. This will surely see the end of the time-wasting word-counting still practised by some. If you need to remember a certain spot in the text you can ask the machine what is the number of that line and word so that you can find it again when you want.

When working on a draft you will sometimes need to enter comments for editing but you do not want these to appear in the final document. Of course, you could always delete them later, but by telling the machine beforehand that it is only a "comment" it will know not to include it in the print-out. Should you wish to highlight revisions, perhaps for proof-reading purposes, the machine will highlight each revision in the margin. A common form of error when typing fast is character transposition, ie two letters have swapped places. Instead of deleting both letters just tell the machine to transpose them. If you have

a pet mistake you can tell the machine to look for it.

If your text constantly repeats some dreadful word such as "2:4-dinitrophenylhydrazone", or worse, or it is all about "The Scott Patterson Multichannel Oscilloscope Sweep Frequency Display Unit", tell the machine that these are code items and give it the code 1, 2 or whatever, each time, instead of typing it out — the machine will print it for you when the time comes. Your machine can be made to query unknown words (very useful for bad spellers!). You start off with a 25,000 standard vocabulary then add another 20,000 of your own which should last you for a while. If you need to leave blank spaces for diagrams, block holes in the text, etc., just tell the machine where to start and finish the lines.

The communicating facility of a word processor is one of its most exciting features. We have already spoken of transmission via a telephone line, which can be at speeds of up to 600 characters per second. You can of course link direct from other compatible systems, or via an acoustic coupler with many others. One can see the advantage of transmitting and receiving text, especially for freelancers whose principal clients are equipped with communicating systems. But we may also need to access computers and data retrieval and information networks (there are already some 500 in Europe). A system such as the Euronet DIANE offers hosts which provide information on an increasing range of fields such as patents, banking, medical research, and for agriculture there is a four-language thesaurus. Other multilingual glossaries and dictionaries will soon be available.

What will a word processor cost you? It is impossible to be specific, but if you think of the cost of an electric typewriter you can multiply it by ten, which will take you into the £5,000 and up range. To this you must add servicing charges, which will be considerably higher than for a typewriter, but costs are bound to fall in absolute as well as relative terms, as this is a highly competitive field.

In theory, communicating word processors will remove our need for telex, the postal service, filing cabinets, telephones and telecopiers, but in practice I imagine only telex will be made redundant initially when we all have communicating word processors. I hope we will never stop talking to each other on the phone, but many time-consuming calls will be rendered unnecessary by the mail box system. I have noticed that people who regard written memos as tiresome scraps of

paper, not worthy of attention, prefer to spend hours hanging on the end of a phone. But now the same individuals seem quite happy to read their mail when it appears on a screen and will even write the reply themselves, one finger at a time, on a keyboard. They would consider ordinary typing beneath their dignity! As you will appreciate, if your word processor can communicate with others you can write a memo and address it as required. Everyone has their own mailbox address. When you want to read your mail, you key in your password, no matter where you may be or where your "box" may actually be. The screen shows the titles of mail in the box" highlighting the items you have not yet "opened", if we think of them as letters. If you want a print-out, just press the print button; and so [ on. But this is not a particularly translator-related field so we will leave it and move on.

While we have been regarding word processors as a boon, they are of less interest to people who deal with non-alphabetic languages, or even with the non-Roman alphabets. A Cyrillic keyboard has been produced but, so far as I know, other alphabets have not yet been tackled. They are sure to come, but the ideographic languages have their own particular problems and for them facsimile transmission is more important, as it is for anyone who needs to transmit diagrams or charts. Telecopiers are highly practical and relatively inexpensive machines with greatly improved levels of quality. They are likely to play a vital role in offices for many years yet. At around £3,000 they are an indispensable piece of equipment for a translator who receives material which cannot come in on a word processor. You can stack up to 30 originals and tell it to send them. You can send on off-peak rates when your clients are not there and they will find the material when they get to their office in the morning. You can also use your telecopier to make a copy of an original. Which brings us to copiers and duplicators. These machines can be regarded together, as copiers now produce the sort of output formerly covered by duplicators. There are no doubt faithful old organ-grinding duplicators in attics and cellars churning out semi-legible screeds from typed rubber matrices, spattered with red "nail varnish" corrections, but I do not consider them a part of a modern translator's office! Some people may continue to take carbon copies of all their work. This is cheap and convenient so long as you do not need a reproducible copy, but once you need a clean copy, careful erasures

and corrections waste too much time. You would be better advised to get, or share, a cheap copier. You can buy reliable little desk-top models for a few hundred pounds. I know of one for £600 but you have to feed sheets into a slot. For less than £2,000 you can buy a very efficient, compact, modern flat platen copier or you can hire copiers. If you hire, the more copies you make the cheaper each one becomes, which favours sharing a copier between several users to give it a high workload, rather than everyone having their own. Hiring means that you can change your model without worrying about losing on the deal.

### Future developments

Moving into the future, we shall see developments of Voice Recognition Systems (VRS) in the next few years. At present, voices of different speakers can be recognized — a useful security feature. Imagine coming home to your front door and instead of using a key you tell the door "Hi Sesame, open up, it's me" and you hope, even if you have a sore throat, that it will recognize you and let you in!

Voice Recognition Systems (VRS) can pick up key words in a stream of natural speech, and they are used already commercially to accept commands. In due course I imagine they will be "taught" to convert written sounds to visual output to provide direct dictating machines; but you will probably have to wait till the Congress after next for someone to tell you about that.

There are also of course, "talking machines" from the ones that speak your weight to others called "talking translators". I have seen one advertised which can ask for a beer in French and only costs £180. Perhaps if one were so parched that one's vocal organs had completely dried up it might indeed be a life-saver, but I don't see the interpreters shaking in their booths at the threat from these little boxes. But who knows what the future holds; machine interpreters may well be with us one day!

Long before VRS becomes fully operational, however, we shall see increased use of Optical Character Readers (OCR). They operate already to a high standard on certain types of print. We have all seen the clumsy numbers on cheques which can be read by the bank's computer. There is a standard OCR readable golfball typeface, and as systems improve so will an increasing range of material become machine-readable. Input to your word processor can be from an OCR, which saves typing in the text.

For filing and, more important still,

finding or retrieving information from your files, we now have "electronic archives" which operate from "Laser-vision" video discs. Lasers can write up to a quarter of a million pages, or the contents of several filing cabinets, on an optical disc and read it back, as and when required. The system can put your material on a transfer memory and display it on a VDU (visual display unit), send or print the required bits of text. Or you can use an OCR to scan material and print it out on an "intelligent" electronic laser printer anywhere — I was going to say "anywhere it wants", but that was a Freudian slip — at least we can still say "anywhere it is told", for we do still control the operation of all this equipment

With some of the modern machines one feels they are almost beginning to take over, but this is one very good reason for finding out about the gadgets, and I deliberately use a derisory word to reassure myself that human beings are still in charge. I think people are less afraid of machines when they are aware of what they can do and, just as important, what they cannot do.

As I said earlier, it took many years for people to become familiar with items which we now regard as household equipment such as telephones and radios, but now we cannot afford to wait to assimilate new processes gradually or leave them to make their impact on our way of life; we must go out and find them and see what they can do for us.

The need for translators to provide themselves with expensive equipment will, I think, encourage and perhaps even force freelances to combine into partnerships, co-operatives and other forms of collaboration to a far greater extent than ever before. Ours has on the whole been a "lone wolf" profession. Some people regard that as one of the attractions, but those of us who cannot afford to spend thousands of pounds, dollars, zlotys or whatever on equipment, would do well to consider pooling resources to equip ourselves with machines which can work, if not round the clock, at least for many more hours a day than I hope any translator needs to do. You would share your word processor with say, three colleagues; the early bird would work from 8 to 12, one of the partners would take his share from 12 to 4, a third might take from 4 to 8 and the night owl comes along from 8 till midnight, or whenever he wants. You thus divide the cost of the machine by four. Similarly if sharing the facility of a telecopier, and possibly business telephone and office assistant,

you can share a central control unit possibly with others.

Accepting present realities, we are likely to continue commuting to our place of work daily but with the development and extension of networks that will change.

Intra (between) and inter (within) company communication networks have been in existence for years, we are all familiar with public telephone systems, and all offices of any size have some sort of intercom arrangement; but the type of networks being developed open vistas to the horizon and beyond. They will permit interaction between a variety of equipment such as word processors, computer terminals, personal computers, electronic printers, mailbox service units or other work stations not yet introduced and not yet dreamed of, Messages will circulate at breathtaking speeds, such as 10 million bits of data or 500 pages of text per • second, so there will be room for everyone on the lines. Local networks linked with private or Post Office lines permit communication with anywhere in the world, or, taking orbiting satellites into account, we can well say beyond.

I see the translator of the not very distant future, living in some secluded spot — if that is what he enjoys. At first sight his work environment would look quite familiar. He will probably still use a keyboard to output his translation until we reach the stage of dictating into print. His "office" will be pleasantly empty of paper or noise. Translators (both staff and freelance) will share a printer with colleagues but it could be in the office in town. That office would be open to clients and staffed by someone who handles the public relations aspects of the work. Most of the output will be transmitted direct to customers and received on their own word processors. Our workplace of the future will be pleasantly uncluttered, the only books will be leisure reading; gone shelves groaning with ancient and modern dictionaries (for who dares throw one away?). Reference material will be our personal glossaries stored in a computer memory and when stuck we ask a universal data bank.

We hope our translator will look happy, relaxed and be comfortably off. The way things are going it will soon be considered a privilege to work and selfish to spend more than a few hours a day making money. Is this a Utopian dream? No, I think not, it could well be reality.

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