

# AN ELECTRONIC DICTIONARY

by

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IN the course of his daily work a translator often comes across terms which he does not immediately know how to translate. Either he has not met a particular term before, or he has forgotten the equivalent he used last time, or he hesitates between possible alternatives.

In the first case he must find the equivalent he needs in a dictionary, glossary or reference book, or by asking someone else—perhaps a colleague, perhaps his client, perhaps an expert in the subject in question.

In the second case he should be able to find the answer in his record of terms used in the past.

In the third case he may find the answer in his own records or—if the doubt concerns an unfamiliar use of a familiar term—he may have to make further enquiries.

However he gets any new information he requires, a translator working on his own should always put it on record somehow, whether he pins notices to his office Walls, keeps a notebook, or has a card system. It is not enough to trust the memory. Once information is on record it is always at hand to supply the right answer and, amongst other advantages, to make consistent translation possible.

## Consistent translation

If it is difficult for an individual translator to be consistent in his use of terms, it is even more difficult in the translation department of a large industrial undertaking, and the problem becomes extremely important in international organizations. Such organizations may publish documents running to thousands of pages per year, including legal instruments of binding force, in up to four or five languages, and may have hundreds of translators on their staff.

With so much work to be done, and so many people doing it, how is the use of terms to be made consistent; This is not simply a question of using the accepted equivalents for single words and isolated expressions. In the mass of verbiage which all organizations spawn there are many phrases, paragraphs, titles, and even the text of whole documents, which keep recurring. To simplify matters all round, and to avoid confusion, a given text in one language should always be rendered by the standard equivalent in the other languages, unless the context demands otherwise.

How is this to be done—: How are, say, 30 people, all translating into one language—at times with four or five people working simultaneously on parts of one and the

same document—to be given access to the accepted "standard" translation of all terms which have been translated in the past activity of their organization? And this not only from one "input" language, but from up to three or four.

One of the classic attempts to deal with the problem has been to compile glossaries of terms in certain fields, and issue them to all translators. This system has two great disadvantages. Firstly, such glossaries are never up to date, even when issued, and cannot keep abreast of current developments. Secondly, since a single document may cover a wide range of subject matter, a translator may have to search through a number of glossaries or other reference works if he cannot find the term he wants in his own personal records.

More recent developments have included the use of computers to analyse linguistic material, but if the results are presented in printed form the disadvantages of the traditional glossary still remain.

What does a translator in an international organization require? He wants accurate information when he is in doubt. In an extreme case he may be working flat out, in the small hours of the morning, translating or revising an urgent document for an important meeting. He will be tired. He has no time to search bulky archives. He wants accurate, clearly-presented information, and he wants it at once. It appears to me that he could get it from the "electronic dictionary" outlined below.

## An electronic dictionary

In any organization employing the system, the "electronic dictionary" would consist, for each combination of "input" and "output" languages, of a master "card file" compiled and kept up-to-date by a central terminology bureau. The "card file" would consist of entries filed alphabetically under the "input" language and giving the "output" language equivalents used in the past for all terms, standard expressions, titles of documents and even whole "standard" passages, ever employed in any of the organization's official published documents. The individual "cards" would also carry information—context, source, etc.—which would enable a translator to decide between possible alternative translations of the term in question.

The "file" would be prepared by computer searching of documents, and by traditional terminological methods. The information on the "cards" would be recorded in a computer memory.

### Television access

The key feature of the system, however, lies in the means of access to this information. Not a single word would be printed out. Instead, each translator would have immediate access to the whole "dictionary" by means of closed-circuit television.

On a small console by the side of his desk, he would have a "typewriter" keyboard connected by cable or telephone line to the computer memory in which the "dictionary" was stored. To check on the translation of a term occurring in a document he would "type" the whole expression, in the input language, on the keyboard. This would produce a coded electrical signal giving the computer the "address" to search for in its memory. The information at this address, i.e. the contents of the appropriate "card" in the "file", would be read out in the form of television signals and transmitted to screen in the translator's office, on which it would appear in plain words.

The translator would, therefore, receive his information in exactly the same form as on a card in a normal card index, and in about the same time as it would take him to search for a card in a box on his desk. On the screen he would see, at the top of the "card", the expression that he had typed in the input language. Underneath he would see the translation, or possible alternative translations, in the output language into which he was working, together with any information on source and context which would enable him to make his choice.

If the precise expression which he had typed on his keyboard was not in the "dictionary", the translator would, of course, draw a blank, but he could then try allied or alternative terms in the same way as he uses a normal dictionary.

### Close co-operation

There would need to be close co-operation between the translation departments and the terminology bureau. For example, if a completely new term appeared in his text, the translator would obviously draw a blank when he typed his request for information. He would then be thrown back on conventional methods of finding the answer—consultation with colleagues, research in reference books, passing the question to the terminology bureau verbally or in writing—but when a satisfactory equivalent was found, it would immediately be entered in the "dictionary", so that all his colleagues would have it available at once.

Such an "electronic dictionary" would have enormous advantages. It would make information immediately

available to all translators and revisers within the organization. Everyone would have access to the same information, and this would make it much easier to obtain consistent translations.

### Not a translating machine

The "electronic dictionary" would not be a translating machine, but simply an up-to-date and efficient translating aid. Each translator could still keep his own records and do his own research—which is, of course, one of the more interesting aspects of translation—but it would be a very simple matter for the information he obtained to be fed back into the pool of common knowledge for all his colleagues to use.

The above description applies to a "dictionary" for a single pair of languages, working in one direction. In fact, if an organization used, say, four languages, there would be twelve input-output language combinations and it would be necessary to compile a separate "card file" for each. The internal electronics of the system—storage of information, coding out, etc.—would be more complicated, but all the translator need do, in addition to typing the expression in his input language, would be to type a simple letter code telling the computer in which language he wanted the output information.

The "dictionary" could also be used for storing and presenting non-linguistic information filed alphabetically under key words. Furthermore, if a standard system were developed and put into operation in several organizations, a translator in organization A could put through a call to the "dictionary" held by organization B as easily as to his own. This possibility would be very useful if organization A were suddenly required to translate in a field in which it had no experience, but which had already been thoroughly cultivated by organization B.

In addition, simultaneous interpreters at international conferences might find it useful to be able to refresh their memories in quieter moments by simply typing through to the organization's electronic dictionary from their booth. They would certainly find it useful to have access to the dictionary when preparing for a conference.

It appears to me that an "electronic dictionary" developed along the lines I suggest would be practicable with existing techniques, and that it would have many advantages over existing translation aids, without in any way adversely affecting the livelihood of translators, or the creative side of their work.

At the time of writing, I am not aware that any work is being done directly along these lines. If it is, I should be very glad to hear about it.