

Principles and working procedure in  
technical translating

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Principles

The first principle of good technical translating is to translate ideas and not words. When a competent translator sees the word Funktschweissmaschine it should serve to evoke before his mind's eye an image of something which he will then proceed to describe in English as a spot welding machine, but he should not merely equate these terms in the two languages without visualizing what they represent. It is true of a concrete noun it is truer still of abstract and idiomatic parts of speech, for in scientific as distinct from purely literary writing forms of words are not an end but a means - an imperfect means - whereby the writer endeavours to transmit ideas from his mind to other minds. His skill in doing this, even in his own language, bears no necessary relation to the validity or importance of those ideas, and if the original author's expression of them is obscure or otherwise defective it is the translator's duty to disentangle the author's intended meaning and express it in the best possible English, trying, if possible, to make the stream rise higher than its source. A technical translator must, therefore, combine three faculties: (1) he must be versed in and able to reason about the subject matter of the translation; (2) he must be able to read the language he is translating from so well that he can go out to meet the author half-way and apprehend the author's intended meaning even if this is badly expressed; and finally (3) he must himself be able to embody the meaning in lucid, terse and euphonious English prose. A good translator does not allow the wording of the original to carry forward into the English. In French, for instance, there are so many words (actuel, assurer, brutal, demande, délai, éventuel, important, intéressant, prétendre, profession, revanche, etc.) similar in form to English words but subtly different in meaning that the chances are against any passage being correctly translatable in this facile way. In German, similarly, there is the word sogenannte which an unfastidious translator may render as "so-called" without appreciating the slight suggestion which attaches to this English but not to the German word, that the thing in question ought not properly to be so called.

The translator's responsibility is, however, a delicate one; for his duty to be untrammelled by the author's wording does not license him to distort by one hair's breadth the author's intended meaning or the author's emphasis. Going further, there arises a question on which

I am myself undecided: if the translator is to ignore the word form of the original, while at the same time being scrupulously faithful in regard to meaning and emphasis, how far should he attempt to reproduce the precise intensity of emotional colouring which may be appropriate in the one language and appear odd in another? Was it right, in translating an Italian paper on structural engineering, to tone down the author's exuberant questo magnifico edificio to some such phrase as "this notable structure" which an English engineer might have used if placed at the author's standpoint?

Here, perhaps, lies the difference between technical and purely literary translating: the former should aim at a cold objectivity and its reader should be unable to detect what language it has been translated from, whereas in the translation of a French or German novel a subtle suggestion of Frenchness or Germanness in the English rendering may be pleasing and proper.

A duty which provides a real test of technical as distinct from linguistic knowledge is that of translating mathematical symbols which are governed by habits, customs and mnemonic devices current among engineers in each country and, therefore, are not international, so that they may confuse a foreign reader if not transliterated; hence the translator's job is not complete unless this is done. In reference to reinforced concrete, for instance, the French  $E_b$ ,  $E_a$  meaning coefficient d'élasticité du béton, de l'acier should be altered in an English text to  $E_c$ ,  $E_s$ , which will at once be recognized as "modulus of elasticity of concrete, of steel"; the French  $A$  for allongement (elongation) should not be left to puzzle an English reader who may think it stands for "area". Similarly in writing trigonometry the Germans put  $\tan$  where we put "tan", and instances might be multiplied indefinitely.

It is obvious, however, that transliterating the mathematical symbols adds so greatly to the labour involved that the translator cannot fairly be expected to do it unless his client appreciates this and is willing to pay accordingly. If this condition is not fulfilled, or if transliterating the symbols in the text would entail expensive amendments to illustrations, or if there is any doubt at all about the efficiency of the checking and proof reading, it is probably better to leave the mathematics as it stands, merely taking care that the meanings of the foreign symbols are clearly stated and that the little tricks such as the useful German habit of adding the suffix zul (meaning zulässig) to the symbol which stands for stress, when it is required to denote a "permissible" stress, are suitably explained.

A similar question arises as regards converting metric into British units of measurement. Unless the client is willing to pay for having this carefully done and rigorously checked, it is better not to do it. The necessity for such conversions depends upon the

purpose of the paper which is being translated, but as a rule it certainly is more difficult for an English engineer to visualise dimensions expressed in metres, or stresses in kilogrammes per square millimetre, than in units he uses daily. Common sense should be used in deciding how accurately to convert units: if, for instance, a foreign writer says that the water level fluctuates by three metres there is no point in rendering this obviously rough statement as 9 feet 10<sup>3</sup>/<sub>8</sub> inches, when what he means is "about 10 feet". An example which reveals whether the translator is himself a structural engineer is his knowledge or ignorance of the fact that English engineers are accustomed to think of stress values in steel as so many tons per square inch, but stresses in reinforced concrete as so many pounds per square inch, following the American habit. Other examples might be found in all branches of engineering, and no one should undertake translations outside his own province unless they are to be checked or edited by a specialist therein.

Another moot point is whether or ~~when~~ titles such as Ingénieur-en-chef des Ponts et Chaussées or Regierungsbaumeister should be translated; some of them are practically untranslatable.

#### Working procedure

According to Kelly's Directory there are in London altogether 61 established translating bureaux, of which seven state that they do technical work, in addition to a great many secretarial bureaux which advertise incidentally that they undertake translations. My own point of view is that of a private worker who does a great deal of translating in his spare time and is confronted occasionally with the problem of so planning the use of a limited number of hours a day as to yield the greatest possible output of work in a period of some weeks or months.

The maximum number of distinct phases into which it is possible to sub-divide the work of translation - assuming that it is desirable to do so - are the following nine:

- A. Reading the original.
- B. Elucidating any unknown or doubtful words.
- C. Drafting the English version.
- D. Recording the draft.
- E. Correcting the draft.
- F. Typing the final copy.
- G. Inserting mathematics.
- H. Examining the final copy for mistakes.
- I. Correcting any such mistakes.

The question for discussion here is the best way to plan each of these operations, either by the translator single-handed or with collaborators, so as to economise effort and maximise output.

It is just possible, indeed, to combine all nine of these phases in a single operation provided the work is not too difficult; when work has to be done in a great hurry and occasional crossings-out in the fair copy can be tolerated the best plan may be to translate direct from the original on to the typewriter, simply drafting each sentence in one's head before typing it and pausing as necessary to use the dictionary.

As a rule, however, it pays at least to separate the phases A, B, C and D from the phases E, F, G, H and I; in other words it is best to make a rough draft and have the final copy typed from this after correction. The translator's time is more valuable than that of a typist knowing only English, and it is economical to arrange for the typing to be done by contract or otherwise, rather than to do it oneself if one is busy. The next step in subdividing the work, if it is desired to make one translator's key knowledge cover as large an output as possible in a given time, is to let items G and H be done by a third person (or, alternatively, for them to be done by the typist if she is competent): someone who can read the foreign language (not necessarily as well as the translator himself) may read through the final copy to make sure that nothing has been left out and that any mathematics, bibliographical references, etc., have been correctly copied, marking any mistakes or points on which he is not certain with a soft pencil in the margin, but leaving it to the translator himself to fulfil his responsibility by making the corrections, deciding the doubtful points, and rubbing out the pencil marks. The employment of an assistant to check back against the original is preferable to doing it oneself because, apart from time saved, mistakes or omissions are more likely to be noticed by an independent person. It also affords a means of training translators.

The copying-in of mathematics, item G, may well be done by someone whose time is less valuable than the translator's provided it is checked by the latter, and if all symbols are thus inserted by hand amid the typewritten text it is a help to the printer who has to set up the symbols in italics.

Let us now revert to the items A, B, C and D: is it possible or expedient for these to be divided up among more than one person? Clearly it would not be economical to take up two people's time if one could do the job as quickly by himself, but there may be cases where a partnership between one man who is predominantly a linguist, another who acts as the specialist technical consultant, and perhaps even a third person who is better than the first two at composing English, would be the best way of working.

Item C is intended to cover the act of deciding how the ideas are to be expressed in English, and Item D the act of putting on record the expressions so decided upon with a view to the later operations which we have already discussed. C and D may be performed by the same person or by two persons, and the following possibilities are open.

(1) If the translator who carries out C is later going to perform operation F by himself, he can scribble down his rough notes as roughly and illegibly as he likes, using whatever abbreviations he chooses, and rely on his memory to interpret them (aided by reference back to the original language if necessary) when he comes to type them out. There is a good deal to be said for this method, because if the translator does his own typing he can, to a great extent, combine F with E. The question really depends on whether he likes typing.

(2) If the translator is able to write shorthand of a kind which the typist is able to read, then this will probably be the best plan to adopt.

(3) Failing either shorthand or willingness to do one's own typing, the other way is to write out the draft in longhand, which is tedious but straightforward, satisfactory and easy to revise.

(4) The translator may dictate the draft to a shorthand-typist, afterwards correcting her transcript and having it retyped, as already explained. The objection to this is that the translator and the typist must work the same hours, and yet the typist must have time to do her typing.

(5) What I find the best and most economical method in my own case is to record the draft on a dictating machine. The actual dictation takes about one-sixth of the time required to write out the draft in longhand, and even allowing for correcting and improving the draft as transcribed before it is finally retyped, the total demand on the time of the translator himself is only about one-half of that otherwise required. Before the war such a machine cost £65, so that allowing 5 per cent interest and 20 per cent depreciation, together with an allowance for the cost of the records, the total came to an average of about a shilling a day. In other words, one need only do a fraction of a page a day more of technical translating at the usual rate of payment for such work in order to cover the cost of a dictating machine, and in return for this one's rate of output is doubled.