Four eyes are better than two

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It might be as well, before I launch into my subject, to explain why I have taken the cryptic phrase 'four eyes are better than two', as the title of my paper.

I happened to be in Berne, Switzerland, in March, on the day when they put the cafe tables and chairs out on the pavements for the first time this year, and a newspaper headline caught my eye. 'Zwei Piloten im Cockpit nötig' it said. My mind immediately spotted a reference to one of my hobby horses — the revision of translations — so I eagerly read further.

There had, it appeared, been three fatal accidents in the last 10 years involving Swiss business aircraft. In 1976 a commercial air-taxi had crashed at Shannon, killing the pilot and four passengers. In 1983 a second aircraft had crashed on take-off from Grenchen under appalling weather conditions, and a third plane had crashed in Klagenfurt with one fatality. In every case, the aircraft was being flown by a lone pilot.

The newspaper article emphasised that there should always be two pilots in the cockpit for every passenger-carrying flight. 'With two people in the cockpit' the article continued, 'both experience less stress, because they share the work involved. They monitor each other's performance and have time to recognize impending danger. In addition, if one pilot has a heart attack the other can take over immediately.'

While not suggesting that a translator or reviser is especially prone to heart attacks while working on a translation, and while agreeing that, were it to occur, the results are not likely to be fatal for other people, I am sure you now see the point of saying 'four eyes are better than two' in connection with the revision of translations.

A DEFINITION OF REVISION

What is revision? It is always a good idea to define one's terms and, although I do not propose to insult you by attempting to define translation, I think we should try to define the revision of translations. What about this?

> The revision of a translation is a procedure by which it is examined and reviewed by a person or persons other than the translator, with or without consulting the latter, in order to ensure that it is an accurate and faithful rendering of the meaning of the original text into the language of the translation, in a style equivalent to that of the original.

This is rather a long-winded definition, but I have tried to cover all eventualities, since there are in fact two quite distinct revision procedures, one in which the reviser discusses proposed changes in the text with the translator, and the other in which he or she normally revises the translation in a sovereign manner without consulting the translator at all.

The first procedure can be compared to an aircraft flying to a given destination with a pilot and a co-pilot who plot the course and pilot the plane together. The second is more like a guided missile which is fired towards its target by the translator: the reviser intervenes like a control system which monitors the flight of the missile and changes its trajectory if necessary in order to ensure that it lands accurately on target.

There can also be a situation in which a translation is produced by a group of linguists working together and discussing the text as they go along, as in a translation workshop. While revision is very definitely involved here, it would normally be impossible to determine afterwards who revised what, so I am leaving this case out of consideration. Neither do I propose to consider literary translation, where revision would normally be out of place.

INFORMATION, INSTRUCTIONS AND LEGISLATION

In fact, everything which now follows relates solely and specifically to the revision of translations of texts which have been written in order to provide information, to give instructions or to enact some form of legislation.

This definition covers most texts produced by freelance translators or translation agencies or companies, by industrial or commercial translation departments and by the translation services of governments and international organisations.

While there are honourable exceptions, it appears, as far as I can assess the situation, that freelance translators and translation agencies do not normally have their translations revised. I know of only two freelance linguists who spend all or part of their time acting as professional revisers.

The same is true of industry and commerce. While I do know of some

translation departments in this category which revise all or some of their work, I spent eight years as a technical translator in the earlier part of my career without ever having my translations revised or being asked to revise translations produced by my colleagues, and this seems to be a typical situation.

REVISION IN GOVERNMENT DEPARTMENTS AND INTERNATIONAL ORGANISATIONS

It is in fact only in government translation services and in international organisations that translations are usually revised. In the 'Conference of Translation Services of West European States', for example, there are now 26 Member Services from 12 countries, plus three international organisations, including the European Communities. In every one, revision is practised and is regarded as essential.

In most of these services the trend is now towards revision in the form of a dialogue between translator and reviser (the 'co-pilot' system) but in the Council Secretariat we apply the 'missile' method of revision, in that every translation we produce, ranging from legislation which affects millions of people throughout the European Community to staff notes concerning the most mundane topics, is revised without the reviser consulting the translator at all. Since the revisers always use a red ballpoint pen to exercise their craft and translators always make manuscript corrections to their typescript in blue or black it is the simplest thing in the world, when examining the revised translations returned from the typing pool, to see where the reviser has intervened.

If the reviser and translator also used different coloured ballpoints in collegial or 'co-pilot' revision of translations, it would similarly be evident which changes had been made by the reviser. In this case, however, since the reviser has consulted the translator about the proposed changes, the red marks would normally indicate a change proposed by the reviser and then accepted by the translator.

A METHOD OF ASSESSING THE QUALITY OF REVISION

Having defined revision and seen where it is currently being applied, I would now like to describe a method of assessing the quality of revision which I have developed and applied during the past 10 years or so in the English Division of our Translation Directorate at the Council of the European Communities in Brussels.

In the Council's Translation Directorate the Heads of Division are the 'first reporting officers' for all staff in their division, which means, among other things, that they have to be able to make an assessment of the quality

of linguists' work under five possible categories in order to complete the required biennial reports on their performance as European Community officials.

The five categories defined on the report form are: 'outstanding', 'very good', 'good', 'acceptable' and 'unsatisfactory'.

In the past, linguists were classed either as translators or as revisers, so that the Head of Division was required simply to assess the quality of a translator's translation and of a reviser's revision. Since 1978, however, all senior linguists may be called upon either to translate or to revise texts, depending on the requirements of the service at any given time. This means that for an increasing number of linguists the Head of Division must assess the quality of their work under two distinct functions, i.e. translation and revision.

It is the practice to involve revisers in the preparation of reports on the translators in a particular division. Since, by the nature of their task, revisers are able to assess the quality of a translator's work on the basis of their day-to-day acquaintance with it, there is no difficulty in assessing a linguist's translation, even if it is only one of that linguist's functions.

I had difficulty, however, in assessing the quality of linguists' revision. This was because no-one in the division normally looks at revised texts, so that the only people in any position to comment on the quality of the texts leaving a division are the national officials, and the Council officials, who use them in their work. Since there were very few complaints about the texts produced by the English Division, I had to assume that all the revisers' work was at least 'good', i.e. reached the high standard expected of a Community official, but I still needed to know whether any linguist's revision was 'very good' or 'outstanding'.

Accordingly, I started thinking about this problem and developed the idea of producing a 'revision profile' for each reviser on the basis of a study of translations which he or she had revised.

To have a completely accurate picture of the quality of a linguist's revision it would be necessary to assess all the revision he or she had done during the two years covered by the report for which the assessment is required. This is obviously impossible, as the necessary reviewing of revised texts takes at least as long as the revision itself has taken and so resort must be had to sampling techniques.

A little reflection, however, will show that it is not enough simply to judge a linguist's revision on the basis of a given number of pages of revised translations, because the number of interventions which a reviser has to make depends very much on the quality of the translation.

I therefore decided to take a sample of each reviser's work from his or her collected output for one month, and review as much as was necessary in order to examine 200 separate interventions on his or her part. By 'intervention' I define a point in the translation at which the reviser has changed

the translator's text, or has failed to correct it where it should have been corrected.

One would hope that every time revisers change a text they introduce a necessary correction or a helpful improvement in style, but experience shows that this is not always the case. In fact, revisers may fail to correct substantive mistakes, or may even introduce them and they may also leave or introduce 'formal' errors of translation or layout which do not distort the overall meaning of the text, or which the typing pool will often correct, but which nevertheless detract from the accuracy of the translation or the ring of its timbre. In addition, all revisers intervene unnecessarily now and again, some more often than others.

In my first attempt to produce 'revision profiles' for the revisers in the English Division in 1977, I classified each of each reviser's 200 interventions (including failures to intervene) under five categories.

For each reviser I plotted the number of interventions in each category as a length on a bar chart 200 mm long, obtaining a 'revision profile' of the type shown as Figure 1 below.
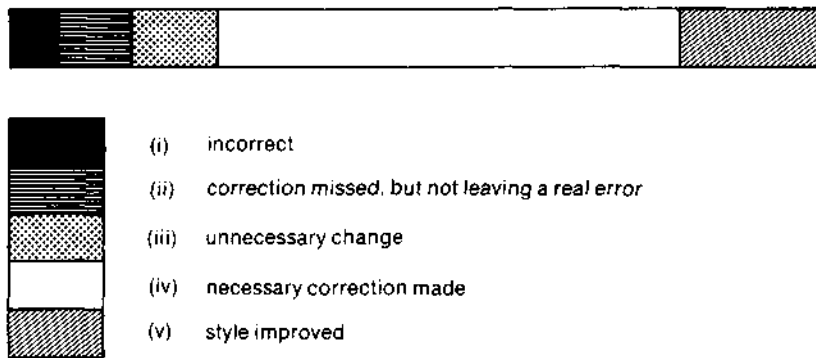

	(i)	incorrect
	(ii)	correction missed, but not leaving a real error
	(iii)	unnecessary change
	(iv)	necessary correction made
	(v)	style improved

Figure 1. Example of a revision profile

From left to right on this revision profile, the black section represents 'incorrect' interventions, i.e. interventions (or failures to intervene) which left a substantive error in the translation. The next section, with horizontal shading, indicates corrections missed, but not leaving a real error in the text. The dotted section represents unnecessary changes. The white section represents necessary corrections and the last section, with diagonal hatching, represents interventions which resulted in an improvement in the style of the translation.

The actual profiles obtained for the 12 revisers in the English Division at that time are shown in Figure 2.

From this group of profiles you will see, as you would expect, that there are widely differing styles of revision among the 12 revisers.   All of them

made a number of what I considered to be unnecessary interventions, i.e. they changed words or word order without correcting the sense or improving the style of the text, but some made a larger proportion of such changes than others.

While, by definition, these interventions did not introduce errors, they were a waste of time and annoyed the translators, who normally have their revised work returned to them after the pool has typed it.

You will also see that one or two revisers (the second from the top and the fifth from the bottom) made particular efforts to improve the style of
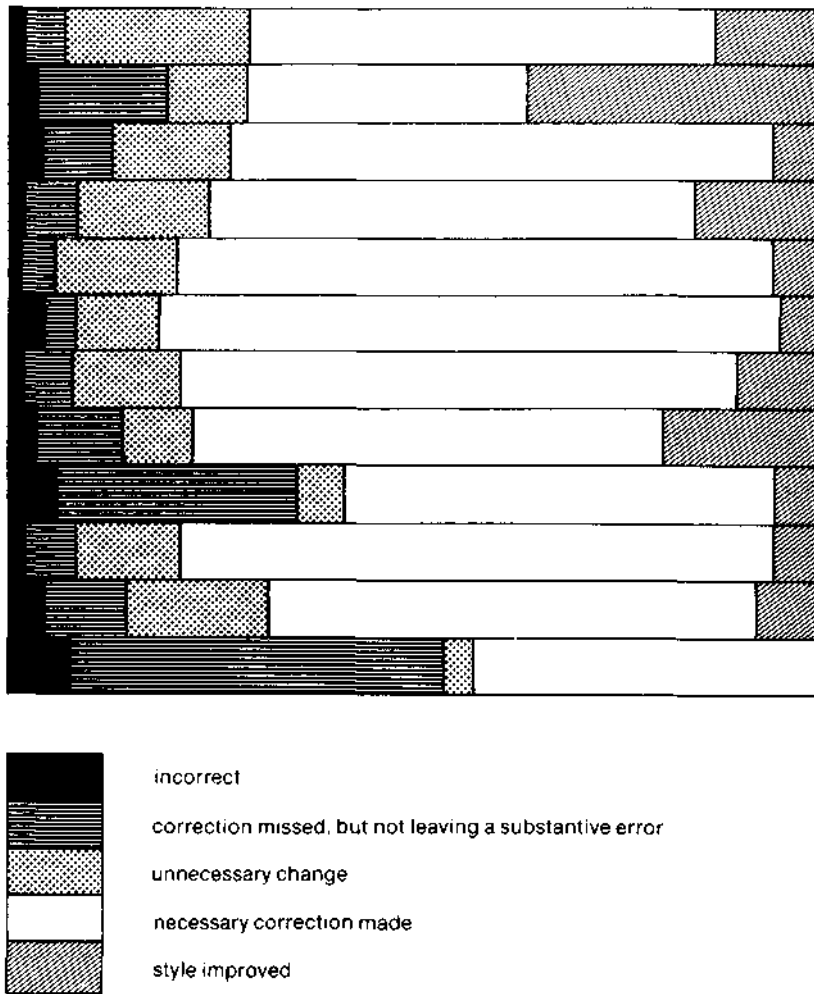

incorrect

correction missed, but not leaving a substantive error

unnecessary change

necessary correction made

style improved

Figure 2. Profiles for the 12 revisers in the English Division in 1977

the texts on which they were working. Others missed making formal corrections but, as already noted, their failure was in fact partly mitigated by the staff in the typing pool who often corrected the layout and even the sense of the text where the mistake was obvious.

For various reasons I did not use these profiles for producing revisers' reports in 1979 but I was sufficiently convinced of their possible value to repeat the exercise in time for the biennial reports covering the period from October 1979 to October 1981.

In order to do this I arranged for all the texts revised in the period from mid-June to mid-July 1980, and again during a period in 1981, to be collected and filed under the names of the various linguists engaged in revision.

I repeated the process of analysing 200 interventions (or failures to intervene) made by each reviser but this time, after further reflection, I reduced my classification to four categories. These were:

   —substantive error left or introduced
   —formal error left or introduced
   —unnecessary intervention
   —necessary correction of sense or improvement in readability

The first three categories correspond to the first three categories employed in 1977 and the last is equivalent to a combination of categories (iv) and (v) used in that year. Consequently the profiles produced in 1980 and 1981 are comparable with those produced in 1977.

This is most important because the earlier results could then form a basis against which the accuracy of the new results could be checked.

The new results, i.e. the set of profiles obtained in 1980-81 for the 12 revisers whose 1977 profiles are given in Figure 2, are plotted in the same order in Figure 3.

An indication that a sample of 200 interventions is large enough is provided by the pairs of profiles given in Figure 4 for two revisers. These were produced by analysing two separate samples of 200 interventions in translations revised by each of these two revisers in the period from October 1980 to October 1981.

Having established to my satisfaction that the revision profiles I had produced were sufficiently representative of revisers' work, I examined the 1980-81 profiles to see if they gave any clear indication of where the boundary should be set between 'good' revisers and 'very good' revisers. I considered that all the profiles represented at least a 'good' quality of revision, for the reasons I have already explained, and if there were any 'outstanding' revisers, distinguishing them from the 'very good' ones would be a further stage to be tackled later.

From Figure 3 you will see that the four categories of intervention are defined from top to bottom as:

X = substantive error left or introduced
F = formal error left or introduced
U = unnecessary intervention
C = necessary correction or improvement in readability

Perfect revision would obviously be indicated by a blank profile, i.e. one in which there were no interventions at all in categories X, F or U; in this case all the interventions would be 'desirable'. In practice, however, all the profiles show some 'undesirable' interventions, the highest quality of revision being represented by the profile which has the smallest proportion of 'undesirable' interventions and the lowest quality of revision being
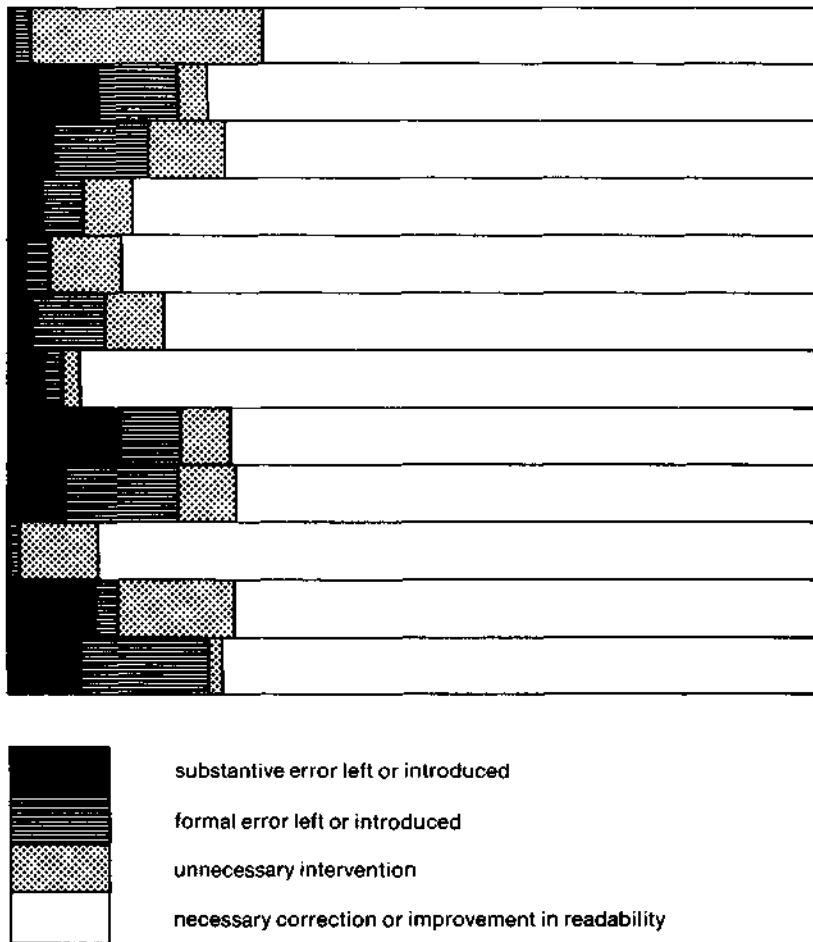

substantive error left or introduced

formal error left or introduced

unnecessary intervention

necessary correction or improvement in readability

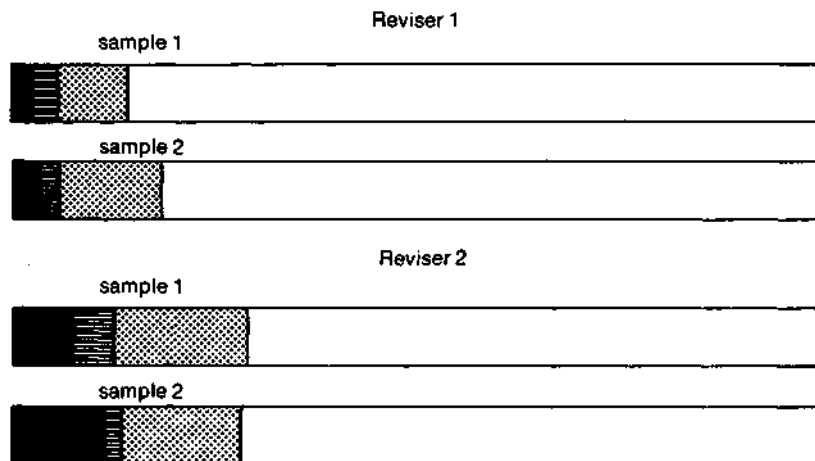**Figure 3. Revision profiles for the same 12 revisers in 1980 – 81**

Figure 4. Comparison of sample profiles for two revisers

represented by the profile which has the largest proportion of 'undesirable' interventions.

The most undesirable interventions are obviously those in category X, since these involve leaving or introducing a definite substantive error. Those in category F can be regarded as less undesirable, representing merely 'formal' errors, while those in category U are undesirable only in the sense that they are a waste of the reviser's time and annoy the translators when they see their revised translations.

Consequently, rather than attempting to mark lines on the revision profile in order to set boundaries between good, very good and outstanding revision, it seemed a better idea to give weightings to the numbers of interventions made in the various categories and to add these weighted numbers together to give each reviser a 'score'. The best revisers would obviously have the lowest scores.

After a certain amount of experimenting I decided, for each reviser, to take the number of X interventions as it stood, divide the number of F interventions by two, divide the number of U interventions by three and add the results together, so that the reviser's score, S, for 200 interventions is:

$$S = X + \frac{F}{2} + \frac{U}{3}$$

The application of this formula to the 12 revision profiles obtained in 1977 gave scores ranging from S = 17 to S = 65; when applied to the 1980 - 81 profiles it gave scores ranging from S = 8 to S = 40. You will find the scores obtained for all 12 revisers (A to L) in 1977 and in 1980-81 in Table 1.

	1977				1980-1981			
REVISER	Weighted interventions			Score	Weighted interventions			Score
	X	F/2	U/3	S	X	F/2	U/3	S
A	3	5	15	23	2	2	19	23
B	7	16	7	30	23	10	2	35
C	8	9	9	26	12	12	6	30
D	4	6	11	21	10	5	4	19
E	2	5	10	17	5	3	7	15
F	9	4	7	20	7	9	5	21
G	4	6	9	19	11	2	1	14
H	7	11	6	24	29	7	4	40
I	13	29	4	46	16	13	5	34
J	5	6	9	20	1	1	6	8
K	10	10	12	32	19	4	10	33
L	16	46	3	65	19	16	1	36

Table 1. Scores for the 12 revisers in 1977 **and 1980-81**

Re-arranging the revisers in order of their scores for 1977 and also for 1980-81 (lowest score = highest quality) we have the result shown in Table 2.

When we examine Table 2 we see that there are differences in the order of the revisers for the two periods, either because the profiles are not absolutely representative of the quality of the revisers' work, or because the quality of their work does change from one two-year period to another or, more probably, because both factors come into play.

For our present purpose, however, which is simply to distinguish the 'good' revisers from the 'very good' revisers, it is highly significant that in both lists the top six positions are occupied by the same six revisers (A, D, E, F, G, J), i.e. that the revisers fall into two clear groups separated by reviser A who occupies sixth position in both lists.

It seems reasonable to class the first group as 'very good' (which includes possible 'outstanding' revisers), the group below reviser A being classed as 'good'. This suggests that, as a rule of general application, the boundary

between 'good' and 'very good' revisers should be set at a 'score' of 25 points, calculated according to our formula, i.e.

$$S = X + F/2 + U/3$$

for revision profiles prepared on the basis of 200 interventions in the same way as in 1980-81.

It only remains to determine whether any reviser's work can be assessed as 'outstanding'. A glance at the set of profiles for 1980-81, and at the revisers' scores, shows that reviser J left very few errors indeed and also came top on the list, so I feel justified in assessing the quality of his or her work as 'outstanding'.

This suggests that the boundary between 'outstanding' and 'very good' revision can, as a rule of general application, be represented by a score of 10 points.

You will notice that, because of the particular circumstances in which I developed this method, I have not so far attempted to define a minimum level which a reviser's performance must reach if he or she is to be allowed to revise other people's translations.

1977		1980-1981	
Reviser	Score	Reviser	Score
E	17	J	8
G	19	G	14
F	20	E	15
J	20	D	19
D	21	F	21
A	23	A	23
H	24	C	30
C	26	K	33
B	30	I	34
K	32	B	35
I	46	L	36
L	65	H	40

Table 2. Revisers listed in order of quality of work

The only occasions on which I have done this were in three open competitive examinations which we held in the early 1970s in order to recruit revisers from outside the Council Secretariat when we were building up the English Translation Division following the United Kingdom's accession to the European Communities in 1973. The examination involved the translation of difficult legal and economic texts into English from other Community languages, and also the revision of difficult translations into English from *three* other Community languages.

Of course, these were specially fabricated translations with cunningly devised errors sprinkled through them; the candidates had to achieve a mark of at least 12/20 in this revision paper, but there was no attempt to analyse the type of revision interventions which they made. It would require further work to find out how this type of examination paper — which has given very satisfactory results, as judged by the performance over 12 years of the revisers we recruited then — would fit into my overall system.

I hope I have described my system in enough detail, and with sufficient clarity, for those of you who are concerned with the quality of revision to use it, and perhaps to adjust it to meet your own circumstances. There is nothing sacred, for example, about the limiting values of 25 and 10 which I decided to use in order to classify a score on the basis of 200 interventions. It is obvious that a review of 500 interventions, for example, should give a still more accurate result, and would require the limiting values of the score to be changed as well.

If you do experiment in this way, I would be grateful to receive your results and hear your comments, so that we can extend both the theoretical and practical background to the system.

THE TRAINING OF REVISERS

I have also been asked to talk about the training of revisers; this is both a very simple and a very difficult task. It is simple because there is at present no such thing as the deliberate training of revisers, and it is difficult because I have only two minutes in which to present a possible training scheme.

The most up-to-date and reliable evidence on the position occupied by revision in government translation services and international organisations which, as I pointed out earlier, are almost the only bodies to revise their translations systematically, is to be found in two reports recently submitted to the biennial Assembly, in London, of the 'Conference of Translation Services of West European States'.

One working party, which was asked to report on 'access to the function of reviser' concluded after analysing relevant information from all 26 Member Services that, while revisers were always selected from among

experienced translators who had clearly demonstrated the quality of their translation work, there was no provision anywhere for training revisers, and only a very few Services made any attempt to monitor the work of new revisers or to assess the quality of the revision being applied to their translations.

The working party's report makes it clear that revisers are still learning their craft 'on-the-job' as they always have done. This has normally given satisfactory results but it does now seem that the method of assessing the quality of revision which I have just described not only makes it possible to select suitable linguists to work as revisers, to monitor their progress during a probationary period and to determine the quality of revisers' day-to-day work, but should also be of assistance in studying the nature of revision itself and devising programmes for training revisers, and even in using revision exercises as an element in language teaching and in University translating courses.

To close I should like to quote a few verses which originated and were revised (with apologies to William Shakespeare), in our English Translation Division some 18 months ago when we were discussing the question 'Who is a reviser?' — that is, how were future revisers to be selected?

> Who's a reviser? What is he (or she),
> That our Head of Division commends him?
> L/A 4 or 5 is he:
> The heaven such grace did lend him,
> That he might red-biro'd be.
>
> Fault he finds, yet he is fair,
> Though clangers dropped are endless:
> Red doth to the page repair
> To right the errors mindless;
> Red, being scrawled, inhibits flair.
>
> Then to Reviser let us sing,
> Reviser is excelling:
> He corrects each mortal thing,
> The Typing Pool the spelling.
> To him (or her) let us translations bring.

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