

## 8 The deep structure of discourse and the use of translation

The purpose of this paper is to explore, in tentative fashion, different ways of looking at the process of translation with a view to discovering their potential utility for the teaching of foreign languages. The use of translation as a teaching technique has long been viewed with suspicion by language teachers and many, of course, proscribe it altogether as a matter of principle. I want to argue that translation, conceived of in a certain way, can be a very useful pedagogic device and indeed in some circumstances, notably those where a foreign language is being learnt for 'special purposes' as a service subject, translation of a kind may provide the most effective means of learning.

As is pointed out in Catford (1965), the central problem in the theory and practice of translation is concerned with specifying the nature of equivalence in respect of two pieces of language. Clearly, what counts as equivalence will be determined by the model of linguistic description which is being used in the translation process. Thus a model which accounts only for the surface structure of sentences will only be able to assign equivalence to two sentences from two languages if they both exemplify overt grammatical features which the model specifies in some way as being common to both language systems: such features might include tense, aspect, voice, and so on.

Let us suppose that English is the source language (SL) and French the target language (TL) and that we wish to make use of a taxonomic structuralist model to establish translation equivalents between the two languages. Such a model will assign different structural descriptions to the following sentences in the SL:

- 1 The postman opened the door.
- 2 The door was opened by the postman.

It will also assign different structural descriptions to the following sentences in the TL:

- 3 Le facteur ouvrit la porte.
- 4 La porte fut ouverte par le facteur.

Now, with reference to this model, one might say that 1 is equivalent to 3 and 2 to 4 on the grounds that these pairs exemplify common grammatical features: both 1 and 3 expound (to use Halliday's term) active voice and simple past tense whereas 2 and 4 expound the passive voice with the simple past tense. To say this, however, is to make certain assumptions which, on examination, are of very doubtful validity. To establish these equivalences one has to argue in the following way: in the system of English the simple past tense contrasts with the present perfect in the same way as the *passé simple* contrasts with the *passé composé* in the system of French, so that in Saussurean terms they have the same value (*valeur*) in their respective systems. The same argument would apply to the active and passive in the systems of the two languages. But although the terms may *appear* to be comparable, their value derives uniquely from the manner in which they contrast within each system and there is no principled way of establishing their equivalence across systems (for a more detailed discussion, see Van Buren 1974).

One difficulty with the taxonomic structuralist model, then, is that it provides no way of establishing equivalent formal value of a Saussurean kind. Another difficulty is that it cannot account for communicative or functional value. Even if one were able to set up a formal correspondence which established an equivalence relation between 1/3 and 2/4, to do this would be to ignore the fact that the *passé simple* is used very restrictively in French and does not have the same value in respect of range of use as the simple past in English. If one is thinking of equivalence in terms of communicative value then one would be inclined to reject 3 and 4 as translation equivalents of 1 and 2 in favour of the following:

- 5 Le facteur a ouvert la porte.
- 6 La porte a été ouverte par le facteur.

The kind of linguistic model we are considering, however, would be likely to invoke some measure of structural similarity to relate 5 and 6 not to 1 and 2 but to the following sentences in English:

- 7 The postman has opened the door.
- 8 The door has been opened by the postman.

Furthermore, of course, in some contexts, 5 and 6 would indeed have the communicative value which would require 7 and 8 as equivalents and not 1 and 2.

If we are using a taxonomic structuralist grammar as a descriptive model, then there would appear to be no principled way in which we can account for the equivalence in terms of either formal or functional value. What such a model does, in effect, is to elevate a number of

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overt grammatical categories like tense and aspect to the status of universals and to assign formal equivalence by reference to some *ad hoc* measure of similarity in the realizations of these categories. Such a procedure yields the following equivalent pairs:

1 - - - - - 3  
2 - - - - - 4  
5 - - - - - 7  
6 - - - - - 8

Let us now consider equivalence in relation to a transformational-generative grammar such as is outlined in Chomsky (1965). Such a model of description will represent 1 and 2, 3 and 4 as equivalent in relation to a common deep structure. This will presumably allow us to say that 1 may be equivalent to 4 and 2 to 3. But (as is observed in Kac 1969) a grammar of this kind will also represent a whole range of different surface structures as equivalent and these will include in the present case:

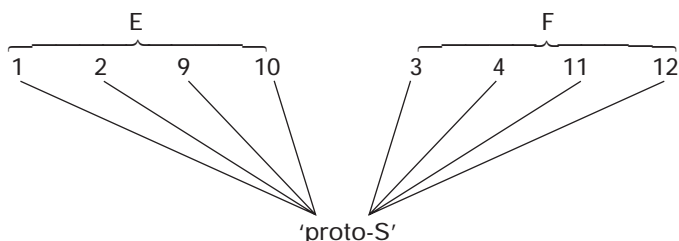
- 9 It was the postman who opened the door.  
10 It was the door that was opened by the postman.

Similarly, one can cite sentences in French which might be said to represent different surface realizations of a common deep structure source. Thus one might regard the following as equivalent to 3 and 4:

- 11 Ce fut le facteur qui ouvrit la porte.  
12 Ce fut la porte qui fut ouverte par le facteur.

We have now, as it were, extended the range of equivalence, and it would be convenient if we could say that the underlying structure of 1-2 and 9-10 is equivalent to that of 3-4 and 11-12, so that any of the English sentences can count as equivalent to any of the French ones. Unfortunately, to do so would be to make the same mistaken assumption as before: that is, that the categories which appear in the deep structure of a Chomsky model (1965) are realized in the same way in both languages.

At the same time, the fact that translation is possible at all suggests that it should be possible to arrive at a semantic base which would generate a proposition of which all of the sentences cited so far are alternative realizations. I do not wish (and in any case I do not feel competent) to discuss what form such a deep structure should take (see Krzeszowski 1975), but in principle it is possible to conceive of a deep structure which would serve as an underlying propositional reference for the sentences that we have been considering. We might call this (without, however, invoking temporal associations) a kind of 'proto-deep structure' and represent it as follows:



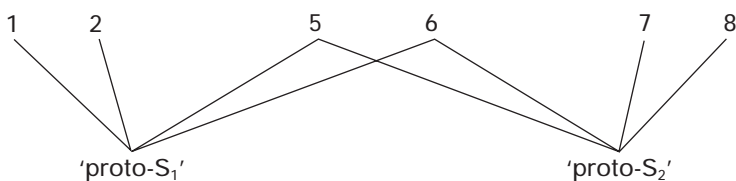
Of course, each of these surface forms can be differentiated from the others by reference to the transformational rules required for its derivation, but they can all be regarded as linguistically equivalent at the deeper level of analysis in that they are all paraphrases of each other (see Katz and Postal 1964: 157). It is, of course, the unique feature of this model of description that it provides for covert equivalence of this kind.

But although it is possible to claim that all of these sentences are equivalent in terms of basic grammatical properties, they clearly have different functional value: they are not in free variation as potential utterances. This difference can be accounted for in a number of ways. One can distinguish between different linguistic functions as Halliday does (Halliday 1967/1968, 1970a, etc.) and say that these sentences are equivalent in respect of ideational function but not in respect of textual function. Alternatively, one might say that they are equivalent in that they all express the same propositional content, but not so in that they differ in topicalization (Fillmore 1968) or in focus (Chomsky 1968). In both cases what one is saying, essentially, is that the different forms are equivalent as sentences in isolation but not as utterances or kinds of message. I shall return to this point presently.

Meanwhile, let me recapitulate. A descriptive model which deals only in surface forms will only assign equivalence between sentences within and between languages if these sentences are held to expound (to use Halliday's terms) common ideational, inter-personal, and textual features. A model which distinguishes between deep and surface levels of analysis will assign equivalence to sentences which exemplify common ideational and interpersonal features irrespective of their textual differences. The two models are alike, however, in that neither will allow equivalence to sentences which differ ideationally or interpersonally. As with the taxonomic model, it is difficult to see how the transformational-generative model can give explicit descriptive sanction to our feeling that 1 has the same general communicative value as 5, or provide us with any principled way of regarding them as translation equivalents. Clearly we cannot say that they derive from the same deep structure because to do

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so would be to conflate 1 and 7, which have different values, both from the communicative and grammatical points of view. We cannot simply add 5 and 7 as derivatives from our 'proto-S': the relationship between these sentences has to be represented differently:



It would seem then that the transformational-generative model of description will assign grammatical equivalence to certain forms which have different communicative value and will deny equivalence to certain forms which have the same communicative value. Thus it will allow us to translate 1 as 4, 9 as 12, and so on, even when the context makes it inappropriate for us to do so, and it will prevent us from translating 1 as 5, 2 as 6, even when the context requires us to do so.

These observations suggest that we should distinguish between three kinds of equivalence. The first of these, which I will call structural equivalence, involves the correlation of the surface forms of sentences by reference to some *ad hoc* measure of formal similarity. The second, which I will call semantic equivalence, involves relating different surface forms to a common deep structure which represents their basic ideational and interpersonal elements. The third kind of equivalence is one which involves relating surface forms to their communicative function as utterances and this I will call pragmatic equivalence. Whereas semantic equivalence has to do with the propositional content of sentences, pragmatic equivalence has to do with the illocutionary effect of utterances. We may now say that 3 is a structural translation of 1 and 4 of 2, that either sentence from the English set 9-10 (and any other sentence relatable to the proto-S) is a semantic translation of either sentence from the French set 11-12, and that 5 can be (but is not invariably) a pragmatic translation of 1 and 6 of 2. We cannot, of course, by definition establish pragmatic equivalence by considering isolated sentences but only by considering what utterances count as in context.

I want now to place the foregoing discussion into broader perspective as a preliminary to relating it to pedagogic issues. When I say that pragmatic equivalence can only be established by considering what utterances count as in context what I mean is that the context, whether linguistic within the discourse or extra-linguistic within the situation,

will provide the conditions whereby an utterance can be interpreted as representing a particular message or communicative act. I am not thinking of context in the raw state, as it were. I am not suggesting that the meaning of an utterance is discoverable directly by associating it with features of the context in which it occurs, but that its value as a communicative act derives from its satisfying the kind of conditions specified in Searle (1969), Labov (1969a, 1970), and which certain features of the context (though not all) provide for. Pragmatic meaning is therefore not the same thing as contextual meaning, as neo-Firthians appear to use this term, and by the same token, the communicative teaching of language is not the same thing as contextual language teaching as this notion is generally understood.

The distinction made in the previous paragraph enables us to characterize utterance types by reference to specific sets of conditions which are contextually realized rather than by reference to an unspecific (and unspecifiable) number of 'contexts of situation' *per se*. This allows us to set up communicative acts as utterance types which are defined independently of particular contexts and to provide a list of their most common linguistic realizations, either in relation to general use or in relation to particular universes of discourse. (There is a crucial distinction here which I shall return to presently.) Thus we can say, for example, that the following are pragmatically equivalent (though not equivalent in other respects) in the sense that they can all serve to perform the act of instruction:

- 13 Press the button twice.
- 14 The button must be pressed twice.
- 15 It is necessary to press the button twice.
- 16 The button is pressed twice.

Now there are differences in 'focus' here, and we may wish to speak of different kinds of instruction. But just as difference of focus does not prevent sentences 9-10 and 11-12 from being equivalent at a deeper grammatical level, so the differences here (which might be associated with Labov's 'modes of mitigation and politeness') need not be inconsistent with establishing pragmatic equivalence at a deeper rhetorical level. Notice that as with the case of 1 and 5 discussed earlier, not all of these potential utterances can be equated semantically. 16, for example, as a sentence can also be (and would usually be) formally linked with a sentence of the form:

- 17 (Someone) presses the button twice.

It would seem reasonable to say, then, that 16 is semantically equivalent to 17 but pragmatically equivalent to 13, 14, and 15 in so far as these utterances meet the necessary conditions. Other conditions can be specified

which would establish 16 and 17 as pragmatically equivalent, as realizations of a different communicative act.

What I am proposing is that we might think in terms of two kinds of deep structure by means of which the two kinds of equivalence—semantic and pragmatic—can be established. Rhetorical deep structure, which accounts for pragmatic equivalence, is most naturally formulated as a set of conditions defining a particular communicative act such as Searle and Labov have made familiar. By reference to such a deep structure (as with the case of grammatical deep structure) we might proceed to set up equivalences across languages. Corresponding to the English set of utterances represented by 13–16 we might cite the following French equivalents:

- 18 Appuyer deux fois sur le bouton.
- 19 Appuyez deux fois sur le bouton.
- 20 Il faut appuyer deux fois sur le bouton.
- 21 On doit appuyer deux fois sur le bouton.

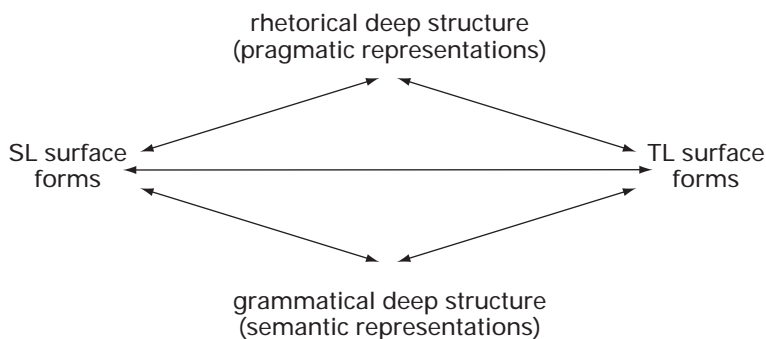
One might say that these are potential utterances which are representative realizations of the communicative act of instruction and as such are pragmatically equivalent to 13–16 cited above (although, as with the English utterances, this does not preclude the possibility of making more 'delicate' distinctions).

Turning now to pedagogic issues, let us consider what implications can be drawn from the preceding discussion for the use of translation as a technique in language teaching. The objections to the use of translation seem generally to be based on the assumption that it must necessarily involve establishing structural equivalence. It is said, for example, that translation leads the learner to suppose that there is a direct one-to-one correspondence of meaning between the sentences in the TL and those in the SL. Another, and related, objection is that it draws the attention of the learner to the formal properties of the TL sentences and distracts him from the search for contextual meaning—that is to say, meaning which is a function of the relationship between sentences and appropriate situations. But if translation is carried out with reference to grammatical deep structure, as an exercise in establishing semantic equivalence, it is not open to the first of these objections; and if it is carried out with reference to rhetorical deep structure, as an exercise in establishing pragmatic equivalence, it is not open to the second of them.

There would appear to be a case for overtly relating surface forms in two languages to deep structure 'proto-forms' of both the semantic and the pragmatic kinds. What this might involve can be seen from a consideration of the type of syllabus proposed in Wilkins (1972). What Wilkins does, essentially, is to represent the content of a language teaching course as consisting of categories of what I have called grammatical and rhetorical deep structure. He gives them the subordinate label

'notional categories'. This label is (I venture to suggest) somewhat misleading since what he calls 'semantico-grammatical categories' are elements from grammatical deep structure and are quite distinct from his 'categories of communicative function' which are pragmatic in character and are elements of rhetorical deep structure. Wilkins invokes these notional categories as a principle of selection. The use of translation would invoke them as a principle of presentation. To do this would be to provide the learner with a representation of his existing knowledge and through this representation to link up what he already knows to what he has yet to learn.

We can think of translation, then, in terms of three alternative processes, which might be shown diagrammatically as follows:



If one follows the path through semantic representations one can demonstrate how sentences in the SL and TL relate to a common deep structure such as is, for example, partially realized in the common propositions of case grammar, deliberately grouping together sentences in the two languages which are structurally distinct at the superficial level of analysis. If one follows the path through pragmatic representations, one teaches communicative acts and shows how they may be realized in formally diverse ways in the SL and TL. Notice that although I have used the terms SL and TL, semantic and pragmatic translation (unlike structural translation) mediates neutrally between the linguistic forms which it relates: there is no 'direction' from one language to another since the translation is carried out with reference to conceptual patterns and social acts whose definition is independent of any particular linguistic structure.

Although such a deep structure approach to translation might seem plausible, there are, however, certain difficulties when it is applied on a large scale to relate two languages. To begin with, there is the assumption that conceptual patterns and social acts which are represented in the

grammatical and rhetorical deep structures are invariant across and within speech communities. Now we do not have to embrace a strong form of the Whorfian doctrine to recognize that the fact of language variation itself points to considerable variation in cognition and social behaviour. It would be very odd indeed if language behaviour were the *only* thing that varied and the fact of language variation would be quite inexplicable. Within a single speech community there are groups of language users—scientists, for example—who acquire ways of structuring reality which are not shared by other users of the language, just as there are communicative acts like, for example, scientific explanation or the drawing up of certain legal forms of contractual agreement, which are restricted to specific kinds of social activity. In fact there is likely to be more in common between certain ‘varieties’ in different languages than between different ‘varieties’ within the same language. Scientific discourse expressed through one language, for example, is likely to be closer semantically and pragmatically, to scientific discourse expressed in another than to other areas of discourse expressed in the same language. Hence translating scientist-to-scientist discourse from an SL to a TL is likely to present far fewer problems than translating it into a different kind of discourse within the same language: that is to say, as far as scientific material is concerned at any rate, translation for peers is easier than simplification for a popular readership.

Let us explore this point a little further. In speaking of semantic and pragmatic equivalence I have made appeal to the notion of universals. This notion is a very tricky one to deal with. On the one hand the possibility of translation would appear to point to the existence of universals of one sort or another. On the other hand, universals have proved extremely elusive of definition. What I should like to suggest is that it may be that we have been looking for them in the wrong place. The grammarian’s idealization of data allows him to postulate an abstract system which he represents as underlying the variation of actual language behaviour. Further abstraction leads him to postulate a universal base which he represents as underlying the variation of different language systems. I suggest that universals might be more readily discoverable not as properties of idealized abstractions but as properties of actualized language in certain areas of use, as features, in fact, which distinguish a particular universe of discourse independently of the different language systems which are used to realize it. What I am suggesting, then, is that there are universals of a communicative kind pertaining to certain universes of discourse which are independent not only of particular linguistic systems but also of any general system which underlies them at a deeper level of abstraction.

Let us, for example, consider the universe of discourse which we can, for present purposes, loosely describe as ‘scientific’. From the

grammarian's point of view, this can be regarded as a variety of the particular language he is concerned with and in consequence is idealized out by a process of standardization (see Lyons 1972). But scientific discourse represents a way of conceptualizing reality and a way of communication which must, if it is to remain scientific, be independent of different languages and different cultures. If one looks at scientific papers written in different languages one notices immediately that a considerable part of the information they convey is communicated by means of symbols, formulae, and diagrams which are a part of the universal metalanguage of science. It seems reasonable to suppose that the verbal component of the discourse with which these non-verbal forms are related (both verbal and non-verbal elements being constituent parts of the discourse as a whole) must also represent concepts and methods which are universally recognized as the defining features of scientific inquiry.

It seems obvious that the learning of science must involve the acquiring of a 'superposed' knowledge of certain universal concepts and methods. The concepts constitute the grammatical deep structure and the methods the rhetorical deep structure of scientific discourse, whether this be superficially realized by Japanese, Russian, French, English, or any other language. Thus, if any language is to serve the needs of scientific discourse it must have the means of expressing such deep structure concepts as, for example, the relationship between solids, liquids, and gases or between acids, bases, and salts which are instances of the universal semantic structure of science. The representations of such a universal semantics would presumably be expressible in terms of symbols, formulae, and conventionalized diagrams which already have the status of an international metalanguage. Such non-verbal devices would, then, serve as the elements of grammatical deep structure of scientific discourse. The pragmatic of rhetorical deep structure would be represented by sets of conditions defining such communicative acts as classification, description, explanation, and so on which constitute the basic methods of scientific investigation and exposition.

What I want to suggest is that semantic and pragmatic translation can be used as a teaching device for learners who need the TL as an additional medium for scientific communication. Its use involves the overt demonstration of how the surface forms in the TL and the SL are alternative realizations of scientific concepts and methods of inquiry which constitute the grammatical and rhetorical deep structure of scientific discourse and which are, by definition, neutral in regard to particular languages and cultures. I have taken science as the most obvious instance of a neutral area of language use, but there are obviously several other domains of what I have called superposed knowledge which extend over cultural and linguistic boundaries and these would include most of the

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disciplines and technologies of tertiary education, that is to say, most of the special purposes for which a foreign language is learnt as a service subject. Instead of thinking of the language use associated with these domains as being varieties of a particular language it would be more profitable (pedagogically at least) to think of them as universes of discourse which therefore provide universals of a semantic and pragmatic kind by reference to which superficially different realizations in two languages can be related.

In this paper I have been feeling my way, very tentatively, towards some clarification of what might be involved in the process of translation and of how this process might be pressed into pedagogic service. It has been an attempt to discover some rational grounds for two beliefs. The first (expressed in Widdowson 1973) is that the process of learning a foreign language should be presented not as the acquisition of new knowledge and experience, but as an extension or alternative realization of what the learner already knows. The second is one which I have also expressed, not very satisfactorily, elsewhere (Widdowson 1968): that language learning is more likely to be successful when it is associated with particular areas of use, or universes of discourse, which cut across linguistic and cultural boundaries.

### Notes

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