PEDAGOGICAL IMPLICATIONS OF CONTRASTIVE STUDIES

Walter Marton
Adam Mickiewicz University, Poznań

Current views on pedagogical applications of contrastive studies are marked by disappointment and pessimism. The pendulum has swung to the other extreme, which has always been so characteristic of developments in language teaching methods, so that contrastive studies, originally regarded as a panacea for all the problems in language teaching, are now treated by some educators as of no pedagogical use at all. A typical representative of the latter attitude is Leonard Newmark (1970: 225-6), who says, "...the cure for interference is simply the cure for ignorance: learning. There is no particular need to combat the intrusion of the learner's native language -- the explicit or implicit justification for the contrastive analysis that applied linguists have been claiming to be necessary for planning language teaching courses."

According to these opponents of contrastive analysis, its application to the construction of teaching materials may be even harmful, because it may lead to overemphasizing certain elements in the target language, and, consequently, to learning some fragments of that language only, instead of the whole system.

Even attitudes favourable towards contrastive studies lack the enthusiasm so characteristic of the earlier approaches. Ronald Wardhaugh, in his paper at the TESOL Convention in San Francisco in March 1970, stressed that CS can be of only very limited use for language teaching and learning. The same opinion is given by William E. Norris (1970) in his "state of the art" paper, as characteristic of most language teachers and educators today. Similarly, the conclusions of the CS Section at the 10th FITFlV Congress in Zagreb (April 5-9, 1968) state that contrastive analysis certainly is not a panacea, but only one of the factors contributing to the preparation of better teaching materials.

The advocates of error analysis have also become more militant lately. One of them is Peter Strevens (1970), who argues that CS are of no use for language teaching, because, in the first place, a complete analysis involving
only two languages is already an extremely difficult and painstaking task, and, in the second, all of this is not worth that much effort, as any experienced language teacher knows where errors mostly occur, anyway.

We might mention here, in passing, that the value of error analysis has always been more emphasized in the European tradition, while CS have attracted particularly much hope and attention in the United States.

It may be interesting to consider some of the possible causes of this disappointment concerning the pedagogical application of CS. There are at least two objective causes, namely,

(a) contrastive studies involving more and more languages of the world have proliferated recently, but they constitute most often only fragmentary descriptions of two language systems; there have been very few synthetic descriptions. Besides, most of these studies are of a highly theoretical nature, and, as such, not readily applicable to language teaching.

(b) experience has shown that predicting errors on the basis of CS is not so simple and easy as it seemed to be, and that actual learning errors often occur where they are not expected and do not occur in areas of extreme interference as pinpointed by CS.

This limited predictability of errors has engendered a lot of disappointment and distrust towards CS on the part of language teachers, but the fact is that CS were expected to achieve what they are impossible of achieving by their very nature. This misunderstanding was caused by a great oversimplification of psychological processes essential for language learning, and this oversimplification, in turn, was caused by the linguists who first introduced the idea of using CS for language teaching. The point is that those linguists, having only a very superficial knowledge of psychology, based their expectations on the phenomenon of transfer, which, as any psychologist realizes, is still very puzzling and very little understood. Among the psychological authorities who readily admit this are such well known scholars as the French psychologist Geneviève Olyron (1964: 115 - 178) and the American psycholinguist Leon A. Jakobovits (1970: 189 - 192), who also warns against too literal extrapolation from experimental findings concerning transfer to real-life learning situations.

According to those oversimplified notions, linguistic interference or, in other words, negative transfer occurring in second language learning and use was believed to be the function of structural differences (in the broad meaning of the term) holding between the native and the target language. But the real problem is much more complex, as is illustrated by Jakobovits (1970: 192) in the following formula:

\[ P_i = f(P_i, t_n, t_u, R_{n+u}) \]

This formula says that attained proficiency in \( i \) (i.e. the target language) will be some joint function of attained proficiency in \( n \) (i.e. the native language), training in \( n \), training in \( u \), and the structural relationship between \( i \) and \( n \).

In fact, the overall situation is even more complex owing to the fact that the operation of transfer effects is largely influenced by the so-called attitudinal factors, which are part of the individual's contribution to the process of learning and speaking a foreign language. Some of these factors are already discussed in Weinreich's (1968) classic work on linguistic interference, but particularly in fairly recent publications they have received a lot of attention. One type of attitudinal factor relates to certain social and cultural attitudes shared by the given community, such as loyalty to the mother tongue and emotional feelings towards the society and culture represented by the target language. Another type of attitudinal factor and an extremely important one relates to the individual's learning strategy. One possible kind of approach in language learning is to make the native language a matrix of reference for the acquisition of elements and relations in the target language (this is called "compound setting"). Another kind of approach is to try to keep the two languages as separate as possible in the process of learning and using the target language ("coordinate setting").

Sometimes conclusions drawn from the consideration of all these non-structural factors are quite unexpected to language teaching specialists, who often discuss their problems in a kind of psychological vacuum. For instance, Jakobovits (1970: 196) sets up an interesting hypothesis based on certain principles of transfer operation, and particularly on Osgood's three laws of interlist similarity. The hypothesis predicts that with unrelated languages a coordinate setting will yield less negative transfer than a compound setting, but that with related languages a compound setting will yield more positive transfer than a coordinate setting. If this hypothesis is borne out by the facts, it will be necessary to work out different learning strategies for related and unrelated languages.

The importance of the non-structural factors for the operation of transfer effects has led some experts in the field of language teaching to the conviction that what is needed is not so much a linguistic contrastive analysis but rather a psycholinguistic one. This opinion is held, for instance, by Tatiana Slama-Cazaun, of the University of Bucharest, who in her recent paper given at the Zagreb Conference on English Contrastive Projects (7 - 9 Dec. 1970) claims the necessity of developing what she calls "contact analysis in disci"), dealing with the prediction and description of interference as taking place in the learner, and not in abstracto. A very similar approach is also represented by William Nemser, of the Center for Applied Linguistics in Washington, D.C. (1970: 101 - 128).
What conclusions could be drawn from this somewhat confusing picture sketched above? Are we justified in the pessimistic belief that CS have nothing to offer to language teaching methodology and procedures and that they are only valuable for theoretical linguistics? My answer to this question is a very emphatic no. To present my argument, let me, first of all, point out some of the misunderstandings that seem to confuse a lot of the issues raised in connection with the pedagogical application of CS.

(a) The first misunderstanding concerns the fear that basing teaching materials on contrastive analysis may result in the learner's being presented not with the whole system of the target language but only with its parts and fragments, which, as many authorities point out (Rivers 1970: 7 - 10), may be harmful to the process of learning. Yet it is clear that this incomplete presentation is not a necessary consequence of CS and is connected more with a certain possible misuse or abuse of these studies than with their reasonable application. Using contrastive analysis as a basis for the construction of a pedagogical grammar, we are by no means limited by this fact to the presentation of not the whole system but only those items which constitute learning problems, although it is reasonable to expect that the latter will receive more emphasis, especially in terms of more intensive drilling.

(b) The second misunderstanding concerns the significance of non-structural factors, brought recently to general attention by psychologists and psycholinguists. The fact that those factors are important or even very important cannot be interpreted as denying the significance of purely structural factors. In fact, the latter are certainly more important, because it is common knowledge that for people of certain language background some foreign languages are more difficult to learn than others, as is generally observed in schools and universities all over the world. There is even some more compelling evidence for this; Cleveland, Mangone, and Adams (1960: 250 - 1) present a table which specifies the time requirements for attaining specified levels of proficiency for individuals enrolled in intensive language courses. Their table shows that Americans with average language aptitude can attain proficiency in speaking Italian, French, Spanish, Rumanian, or German (among others) in two-thirds of the time it takes them to achieve the same proficiency in Russian, Greek, or Finnish (among others), and in only half the time it takes them to learn Chinese, Japanese, or Vietnamese (among others). So it seems that the description of structural differences holding between languages is a worthwhile task for the linguist and one whose results may have great significance for language teaching.

(c) The third misunderstanding concerns the complaint that currently produced contrastive analyses are often so complex and full of technical detail that they cannot be of any use to anyone but a trained linguist. But, again, we have to distinguish between scientific and pedagogical contrastive grammars.

The latter must be presented in such a way that they could be used and understood by the foreign language teacher and even by the interested student. This requirement also determines to a certain degree the length of such analysis; it cannot be a very thick volume describing every item as fully as possible, as, of first, we would probably have to wait for years for the appearance of such a grammar, and, on the other hand, it might by its very size discourage its potential user. These pragmatic reasons opt for a grammar as complete as possible as far as the presentation of the whole language system is concerned, but treating only the most essential similarities and differences in detail, and others rather cursorily. Ideally, the pedagogical contrastive grammar should be based on scientific study, but, again, as such theoretical treatises are long in the making, it is both advisable and possible to produce a pedagogical grammar without waiting for a complete theoretical analysis.

(d) The fourth misunderstanding consists in presenting error analysis and CS as two propositions of an alternative choice, while, in fact, they complement each other. Error analysis shows what the most frequent mistakes really are and where they occur. These mistakes should be analysed and those probably caused by structural differences should be separated from the others. Getting data of this kind will be a natural testing procedure verifying hypothetical predictions of CS. This approach has already been used with good results for phonological interference by Brière (1968). When we know what types of error result from structural differences and when we know exactly why they are made, it is fairly easy to work out a set of pedagogical procedures offsetting the operation of linguistic interference.

These are, then, the basic misunderstandings which so much confuse the whole issue of the applicability of CS. But besides them there are some controversial points concerning pedagogical uses of CS, which are solved differently by different authors. Let me discuss briefly these three problems.

(1) The first is a methodological one, namely, which of the available linguistic models should be used as the theoretical framework for CS. It is obvious that the best model, offering the most adequate linguistic description should be chosen, but it is not always clear which one is really the best. In my opinion, it is transformational generative grammar that is the best model for any linguistic description, in spite of the current lack of uniformity among its followers. But as soon as we decide in favour of TG, we face another problem, that is, whether CS should be concerned, first of all, with differences and similarities in deep structures of the two languages analysed or in their surface structures. If we assume, as most transformationalists do, that base components of most natural languages are very similar to one another, and that most structural differences reside in surface structures, the conclusion that the latter ought to be the primary concern of CS is inevitable. This attitude is also strengthened by the fact that in the newest versions of TG deep struc-
ture has either a semantic character or is so abstract that only surface differences and similarities are of any pedagogical consequence.

(2) Another problem concerns the establishing of a hierarchy of difficulty as a result of contrastive analysis. This hierarchy will show which of the target language structures present the most and which the least difficulty to the learner. Several such hierarchies have already been suggested, the best known of them being those worked out by Brière (1966: 763-769) for phonology and by Stockwell (1965: 282-291) for syntactic structures, the latter being in fact the adaptation of the former. These hierarchies are of a very general character, and they do not take particular structures in particular languages into consideration, but rather classes of interference depending on relations of correspondence between structures in two languages under analysis. In this way they are a sort of blueprint upon which different structures in particular languages may be mapped. Such hierarchies are useful to a certain extent and may give us some insights into the nature of linguistic interference and language learning, but the discussion whether those suggested by Brière or Stockwell or others are correct or not, is largely academic. They should be confirmed not so much by one test or experiment but by teaching and learning experience, and it will be that they will be different for related and unrelated languages, and that they will also depend upon teaching methods or learning strategies. From my own experience as a teacher, I am convinced that as far as syntax is concerned, the number one difficulty and major source of interference is what Stockwell calls “split type” negative correspondence in the native language, which means that there is an obligatory choice between two categories in the target language and no choice, i.e., only one possible category, in the native language.

(3) Still another problem concerns the use of the results of CS for the optimal gradation of the target language structures in a pedagogical grammar or textbook. It has often been expected that the discussed hierarchy of difficulty will automatically provide the best solution concerning the arrangement of teaching materials. The controversy has centered around the question whether it is more advisable to start from the structures similar to certain structures in the native language, or whether to start from those that are different. Again, the whole problem is not properly approached. As far as the starting point is concerned, both solutions may be harmful from a psychological point of view. If we start from what is similar to the native language, the learner may be established in the belief that everything else in the target language is also similar. If we start from what is different from the native language, the learner may develop an attitude precluding any possibilities of positive transfer. The point is, however, that a lot of other factors have to be taken into consideration for the proper arrangement of the target language items, and not only their degree of similarity to the corre-

sponding native language structures. These other factors include communicative usefulness, ease of presentation in accordance with the principles of the given method, their relation to other structures with which they can be most economically presented, their frequency of occurrence within the given style or register taught in the course, etc. Here also the relatedness or unrelatedness of the languages involved may be another very important consideration. It seems, then, that neither an adequate description of the target language nor the results of a contrastive analysis can determine the selection and arrangement of the structures to be taught. They can only provide some raw materials and some basis for a decision for the materials writer, but neither of them can become an overriding determinant. So, as we see, while we cannot expect CS and the hierarchy of difficulty to select and arrange teaching materials for us, they will nevertheless be helpful in this task and will certainly pinpoint certain areas of difficulty which we must know in order to locate them in the proper place in the pedagogical grammar and in order to provide enough exercises for teaching them.

After this critical discussion of some misunderstandings and problems, let us now try to arrive at the conclusions which could be drawn from the above remarks and which will be a kind of synthesis concerning the role and function of CS in language teaching. As we have established above, the pedagogical use of CS does not primarily lie in their predicting errors and pinpointing the learning problems. Many other factors influence the operation of transfer effects in language learning and the structural differences between the target and the native language are only one of them, although, possibly, the most important one. Likewise, CS do not determine the selection and gradation of the target language structures in any absolute and unique way, because here we also have to take a lot of other things into consideration. What is their use, then?

Their pedagogical use is still very essential, because, complemented by error analysis, they explain and systematize our teaching experience. Error analysis itself does not explain anything explicitly, it only shows what types of error occur but not why they occur, so that when we have data provided by error analysis, we are still in need of their linguistic interpretation, which is not the complete explanation, but, at least, its very essential part. CS also provide necessary data, although not the only data, for the authors of textbooks and pedagogical grammars with respect to the selection and arrangement of the target language items, as well as the emphasis and special attention that should be given to particular structures. The future of CS is also closely linked with the newest trends in language pedagogy, which emphasize the importance of the analysis of the learning processes that take place in the student. The emphasis is now more on the learner and how to learn than on the teacher and how to teach. In order to know what is going on in the learner's
mind, we need a psychological and psycholinguistic analysis and not a linguistic one. That is why a psycholinguistic analysis of the operation of transfer effects seems to be a very promising line of development in CS. In this domain, William Nemser's (1969: 3-12) and T. Slama-Czaczew's (1970) suggestions are certainly very interesting and worth being put to test in our contrastive projects. These suggestions postulate analysing the so-called "approximative systems" which are developed in the learner in his successive approximations to the complete system of the target language as represented by the linguistic performance of the native speaker. There is already some evidence to the effect that these approximations form a series of steps and stages, and each of them is characterized by certain typical errors and deviations. These errors and deviations differ from stage to stage not only quantitatively, but, first of all, qualitatively, so that the learner's progress is not only marked by fewer mistakes but also by mistakes of a successively different sort. It is clear that the analysis and the description of these stages will have a great importance for our understanding of the learning processes and strategies employed by the student, which, in turn, will enable us to control these processes, or, at least, to conform to them for the student's benefit.

Our first aim should be the construction of pedagogical contrastive grammars which could be used by the largest possible number of people interested in language teaching and learning. Accordingly, such grammars must be simple and easily readable and should not contain too many technicalities or irrelevant detail. While being fairly comprehensive, they should, nevertheless, be focused on the greatest difficulties in the target language which should be established partly empirically on the basis of our teaching experience and error analysis.

As to the theoretical framework for the pedagogical contrastive grammars, a non-formalized version of transformational grammar should be used. Only this framework will make it possible for us to take advantage of the most recent insights and discoveries achieved by theoretical linguistics. The transformational approach will help the learner to arrive at a conceptual, integrated knowledge of the whole system of the target language, which is a very important thing if we assume that second language learning is also an intellectual, cognitive process and not only habit formation. The learner will be better able to see relationships between sentences, and how simple sentences can be joined to form more complex ones, he will be better able to learn a number of optional choices which will give him flexibility and creativity in the use of the language. As it seems that whether we use the native or the target language, we always start from some common and general semantic plan, Fillmore's version of transformational grammar might be adopted for CS. This kind of grammar starts from certain basic semantic relationships, probably common to most natural languages, and shows us how they are realized on the surface, with the assumption that languages mostly differ in the ways of realizing those universal underlying semantic configurations. This is only a suggestion and not an assertion, as certainly only actual work on a contrastive grammar will show us whether Fillmore's model is applicable.

Our ideal pedagogical grammar should suggest a certain hierarchy of difficulty, but not so much in the sense of determining the gradation of teaching materials as rather in the sense of emphasis that particular structures should receive in teaching.

A complete grammar of this kind must comprise the phonological, syntactic, and, if possible, lexical components, although it is difficult to conceive how a lexical contrastive study may be carried out. The only practical solution seems to be to limit it to only the most typical errors as established empirically by error analysis.

As far as a direction of such a contrastive grammar is concerned, it is not really crucial whether the analysis proceeds from the target to the native language or the other way round. It is also possible to arrange the analysis along certain universal grammatical categories and to show how they are realized in each of the two languages. Anyway, it is a practical problem and in each particular case it may be solved in a different way depending on a lot of circumstantial factors. Also, depending on who we address our work to, descriptions of certain structures in at least one of the languages will have varying degrees of delicacy. For instance, in a contrastive grammar of Polish and English written for the Polish learner there will be no need to give more attention to such structures as the imperfective and perfective aspects of the verb, as they have no formal correspondents in English.

Another essential remark concerns the necessity of often going beyond the limits of the sentence in our analysis, as certain syntactic and even phonological phenomena cannot be explained without reference to some broader context. We can consider here the use of the articles in English, or the use of some and any in a certain type of questions.

Summarizing, we can say that pedagogical contrastive grammar, the construction of which is the ultimate purpose of CS, will be an important aid in the processes of learning and teaching foreign languages, although by no means can it be regarded as a sort of pedagogical panacea. Its usefulness will certainly be limited but still great enough to justify a considerable expenditure of time and effort spent on its preparation. A grammar of this kind can be expected to be widely used by the following types of individuals involved in language teaching: the teacher, the learner, the materials writer, and the translator.

a) For the foreign language teacher it will systematize and explain his pedagogical experience, and thus enable him to use it to a better advantage. It may be conceived as a kind of reference book for the teacher, of the same importance as a dictionary or a descriptive grammar of the target language.
It may prove particularly useful for the teacher who does not know the native language of his students. The contrastive grammar will also help the teacher to explain the most essential structural differences between the two languages to his students in a clear and systematic way. This, of course, will apply to those teachers who believe in pedagogical usefulness of this procedure or who can see its expediency in certain circumstances.

b) The foreign language learner will be able to use the contrastive grammar also, as one of the reference books for language learning, whenever he really needs it. I have here in mind a particular kind of learner, who bases his language learning on a cognitive approach and intellectual analysis. Also, learners following programmed materials may profit from this kind of grammar.

c) The materials writer will find in the contrastive grammar a ready-made inventory of at least some of the special tasks and problems in language teaching, and, particularly, if this grammar is based on a psycholinguistic contrastive analysis, it may prove to be an extremely useful tool in his preparation of the materials. The same applies to a person responsible for the syllabus and organization of a language course. The grammar can also provide good material for the preparation of some types of language tests.

d) The translator will also be able to use the contrastive grammar as a reference book that may often prompt the best solution of a particular problem in translation. Less experienced translators will profit from a systematic reading of the grammar as part of the theoretical preparation for their work. The same applies to translator trainers and those organizing courses in translation. We can also notice that although translation is not recommendable as a language teaching technique, it is par excellence an exercise in contrastive analysis.

We may conclude with a remark that pessimism concerning the pedagogical application of CS is certainly unwarranted. Although some premature hopes and expectations of dramatic advancements in language teaching connected with the introduction of CS must be abandoned, these studies will play an important role as a contribution to better organization and guidance in foreign language teaching and learning.

REFERENCES


