CONTRASTIVE ANALYSIS IN THE CLASSROOM

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The paper which I presented at the conference in Karpacz last year dealt with various pedagogical implications and applications of contrastive studies in connection with the designing of syllabuses for language courses and the preparation of teaching materials. Lately a number of articles and papers have appeared which envisage the pedagogical application of CS in essentially the same way, i.e., for designing syllabuses and preparing teaching materials, usually emphasizing at the same time that it is impossible and contrary to sound pedagogical knowledge to think of a deliberate and systematic use of contrative analysis in the classroom. Now my contention is that CA has great pedagogical value precisely in day-to-day teaching in the classroom, as a useful technique for presenting language materials to the learner and as one of the characteristic aspects of a method of teaching. This paper is a justification of my point of view. Certainly the pedagogical usefulness of this particular application of CA which I have in mind is only a hypothesis, but to justify it I shall adopt a procedure characteristic of pedagogical methodology, i.e., first I shall show that my proposal does not contradict the findings of source such as the psychology of learing and psycho-linguistics and that, on the contrary, it is supported by many facts discovered by these disciplines. Then, I shall show that some of the statements which run counter to my claim have no validity from the point of view of contemporary knowledge. Finally, I shall say a few more words about how I imagine the use of CS in the classroom. Let me make one more point at the beginning concerning the present confusion in the field of language teaching methodology. I am of the opinion that a lot of this confusion is unnecessary, because, although second language learning has its specific aspects, it has many features in common with other kinds of learning, especially in what concerns concept formation, acquisition of habits and skills, and the working of memory. Any psychologist will tell us that quite a lot is known today about these and other aspects of learning and, actually, many ideas have been lying around for quite some time without language teachers making any use of them. I am, therefore, totally in opposition to the "new orthodoxy" in language

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learning and teaching, represented by such scholars as Leon Jakobovits, Leonard Newmark, David Reibel, and others, who claim that both first and second language learning is some mysterious process following its course independently of the intentions of the teacher and learner, and that all we can do is not to interfere with it.

One of the main assumptions of my approach is that the native language of the learner is a very powerful factor in second language acquisition and one which cannot be eliminated from the process of learning. I am referring here to the situation of language teaching in our schools and various language courses, which, from a psychological point of view, is completely different from the situation of learning a language in the country where it is spoken, or learning it in a very intensive course of total immersion. In the two cases of learning a language in the country where it is spoken or in an intensive course, there are plenty of opportunities for observation and testing one's detailed hypotheses concerning various aspects of the language. But even in these conditions it is very dubious that language habits are formed automatically and by mere exposure to language data, especially in an adult learner.

In our schools, one of the most important language learning problems is remembering the various features of foreign language learnt in class or during home study. In this respect the crucial problem is that of retroactive inhibition. Certainly the use of the native language between the foreign language classes, or between a foreign language class and an occasional use of the foreign language in some other situation, is an interpolated activity strengthening retroactive inhibition. Reasoning in terms of stimuli and responses, we can assume that meanings which an individual wants to express are stimuli, and their encodings into signs of a particular language are responses.

It is probably safe to say that no one would deny the existence of the powerful influence of retroactive inhibition, regarded by linguists as "linguistic interference", on second language learning. It is also becoming clearer and clearer how strong and persistent the habits of expressing meanings in the native language are, so that they even manifest themselves in individuals who have spent long years in a foreign country functioning primarily in the language spoken in that country. A. A. Leontiew, one of the top contemporary Soviet psycholinguists and methodologists, writes about this problem (1970:19):

"The phenomenon of transferring skills and habits of the mother-tongue onto a second language takes place independently of our efforts to limit it by a special method, e.g., by a direct method. This kind of transfer is deeply rooted in some general principles of the transfer of knowledge, or, rather,

the transfer of corrective measures, as it is more economical to be aware of and to automatize some corrections concerning the already existing knowledge than to start building a system of knowledge from scratch".

The question then suggests itself whether it isn't better to use this habitual transfer in some way rather than desperately trying to fight it and eradicate it, or even to deny its existence. I think that using CA in the classroom would go a long way towards controlling this powerful tendency and making an ally of what has long been considered our greatest enemy. The persistence and strength of language interference is readily explained by the well-established fact that retroactive inhibition is greatest where the stimuli for the learned task and the stimuli for the interpolated activity are the same, but the required responses are different. This is exactly the case with second language learning in school situations, where the meanings we want to express in the native and second language are usually the same, but call for different encodings. As Borger and Seaborne (1966:156) put it, "Confusion is greatest when on separate occasions people are called upon to behave in different ways under similar circumstances". What is known about the working of memory also suggests that the process of remembering things and storing them in long-term memory cannot be likened to faithful recording on tape. There seem to be receptive processes involved here which take in and store new information in terms of previously organized material and which result in progressive distortion of the learned material over a period of time (Borger and Seaborne 1966:165). The same idea has been stressed by the Gestalt school in their concept of cognitive structure, into which all new bits and pieces of knowledge are fitted in. This particular aspect of memory change has been emphasized by Bartlett (1932). Actually, the results of his experimental studies imply more than simply that learned material is distorted during learning; the distortion, or, in other words, assimilation to pre-existing structures, continues after removal of the original material. This points to a more dynamic aspect of language interference, which is often neglected by linguists dealing with the problem. Taking a psychological point of view, we can say that there is never peaceful coexistence between the two language systems in the learner, but rather constant warfare, and that this warfare is not limited to the moment of cognition, but continues during the period of storing newly learnt items in memory. Accordingly, every Polish sentence I hear, speak, read, or write impairs my English. The reverse is also true, but the so-called "backlash interference" is not really dangerous in the learning conditions which I have in mind, so I shall not deal with it in the present paper. Taking all of this into

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consideration, we might conclude that as the process of comparison is going to take place anyway, it is better to make it conscious and channel it to profitable uses, at the same time preventing distortion resulting from uncontrolled assimilation.

· Another interesting psychological fact is how much the amount of retroactive inhibition depends on the method of learning used for the task material as compared to the method of learning used for the interpolated material. Experiments by Jenkins and Postman (1949) and by Budohoska (1966) clearly indicate that if the method for learning the interpolated material is essentially the same as the method for learning the task material, retroactive inhibition is markedly increased. Conversely, if the methods are essentially different, retroactive inhibition is decreased. If we assume that the use of the first language can be regarded as the practicing and learning of the interpolated activity, it becomes obvious that the claim made by numerous methodologists that second language learning should copy the processes characteristic of first language learning is not as psychologically sound as it seems to be at first sight. From this point of view, then, it is perhaps desirable that a method for second language learning should be characterized by cognitive elements which would differentiate it from first language acquisition.

Another important factor lessening the amount of retroactive inhibition is the set or readiness of a learner to prevent its interfering influence. A classical experiment carried out by Lester (1932) with four groups of subjects differently instructed and made aware of the existence of interference from interpolated activities demonstrated very clearly that the subjects who were warned and shown where the interference would appear and who were also instructed how to fight it did incomparably better on the re-testing of the learned material than the subjects who were not so instructed. It follows that warning the learner of language interference, showing him clearly and in advance where it may appear and what he should keep in mind to curb it, may greatly facilitate second language learning.

These are only a few of the psychological facts which might be cited to support the idea of using CA in the classroom, in the stage of the presentation of language material. Various objections, however, have been raised to this kind of cognitive approach.

It has been clear by now that this approach is also characterized by the use of grammatical explanations and rules and their conscious application in language teaching and learning. Most of the scholars and teachers voicing objections to this method would treat any contrastive statements presented to the learner as increasing the amount of verbalization and rules and, hence, detrimental to the acquisition of competence in the foreign language. The essence of these objections is that any conscious application of verbalized rules makes speech and aural comprehension in the foreign language reflective and slow, and thus renders the acquisition of oral-aural skills impossible. This sort of attitude is well expressed by Sol Saporta (1966:86), who writes,

"Language is rule-governed behaviour, and learning a language involves internalizing the rules. But the ability or inclination to formulate the rules apparently interferes with the performance which is supposed to lead to making the application of the rules automatic".

A very serious and persistent misunderstanding underlies all such statements and objections. The misunderstanding consists in treating all applications of rules and comparative statements as static and unchangeable in character. It seems that Saporta and other theoreticians like him think that if a learner has learnt something about the target language via rules and verbalizations, he will have forever to recall all the appropriate rules and verbalizations in exactly the same form in which he learnt them whenever he wants to say something in the language. But the psychological fact is that all these rules and verbalizations, if not studied for their own sake, help mainly to gain insight and understanding about the functioning of some element of the target language and form a helpful crutch mainly in the initial stages of language use. Then the rules are reduced through practice and probably, to a large extent, wear out completely and are not consulted at all in actual use of the language, although they may be stored, ready to be recalled, at some higher level of the conscious knowledge about the language. It seems that the more often the given rule or verbalization has been applied in real or simulated communication by the learner, the less need he has to recall it consciously. In this aspect John B. Carrol (1971) is of the opinion that the opposition between "rule-governed behavior" and "habits" is false, because language rules are descriptions of language habits and we may proceed from the conscious application of rules to habits. A. A. Leontiew expresses the same view when he writes, (1970)

"A habit may be formed in a bottom-to-top way, as a result of imitation, or in a top-to-bottom way, as a result of automatization and reduction of knowledge".

These statements can be borne out by the experience of many foreign language learners, including myself, who have learnt their language through the conscious application of rules, but whose language performance is not marked by any conscious or reflective processes. (This is just like the acquisition of any skill where, in any stage of learning, we have a number of fully automatized activities and at least one being

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consciously acquired, which becomes automatic in turn). All the objections like the one given above ignore one of the fundamental psychological laws of learning, which says that the way in which we learn something does not forever determine the way in which we put this knowledge to use later on. It follows then that the gains from CA in the better understanding and retention of the target language material do not have to be offset by slowing down the processes of habit formation. Another widespread objection to the approach I am suggesting here is that it leads to compound bilingualism in which the native language of the learner is used as a matrix of reference for the use of his second language. But today the classical division of learners into compound and coordinate bilinguals is becoming more and more dubious from a psychological point of view. Among psycholinguists and sociolinguists concerned with the issue, the opinion prevails that we can talk not so much about types of bilinguals, but rather about types of bilingual functioning (Fishman: 1966). Some psycholinguists give also evidence for the fact that even the dominance of a particular type of bilingual functioning in an individual is a very unstable thing and changes according to circumstances (E. Ingram, personal communication). Be that as it may, it is difficult to conceive of a learner keeping his two languages separate in a situation comparable to the situation in which the Polish secondary school pupil finds himself. The concept of thinking in a foreign language, stressed to such a degree by Byelyayev (1964) is also quite irrelevant to our considerations, as it confuses thinking in general and particularly operational thinking — which is never completely verbal - with inner speech or inner monologue. Granted, practicing inner speech in second language may very effectively help to master it, but it is something that cannot be taught; it can be only recommended.

Another objection is that the experience with the grammar-translation method has shown that the approach based on grammatical analysis and translation is ineffective. But it is ineffective from the point of view of today's objectives set up for the language learner, i.e., the acquisition of aural-oral skills. Experimental studies by scholars such as Scherer and Wertheimer (1964) and Smith (1970) have proved that there is no marked advantage in employing strictly audio-lingual techniques even if speaking and aural comprehension are the essential objectives. If anything, these studies have shown, as Carroll (1971) puts it, that "... students learn precisely what they are taught, or at least that transfer of learning is a two-way street between aural-oral and reading-writing skills".

The reasoning I have just presented is supported by some empirical evidence. As the scope of this paper is strictly limited, let me only

mention the experimental data described by Lambert, Gardner, Barik, and Tunstall (Lambert: 1967), who found that in a very intensive language course taught by a direct method, those students who kept their two languages functionally separated throughout the course did not do as well in their work as those who permitted the semantic features of their two languages to interact.

And now, finally, a few words about how I envisage the use of CS in the classroom. First of all, I think it should be based on semantics; that is, the teacher should show how certain meanings, e.g., expressing futurity, are realized syntactically in Polish and in English, and not merely point out differences between language forms. In introducing the use of the Present Tense for expressing futurity in English, the teacher should (1) point out that in Polish the Present Tense is also used for the same purpose, then (2) show the similarities and differences in usage in the two languages, (3) set up the limits for drawing analogies and (4) warn about the areas of possible negative transfer and confusion. All of this should be done before the practising of the given structure so that the habits are formed on a conscious, cognitive basis. Frequent use of translation as a perfect contrastive technique for learning grammatical structures would be one of the characteristics of this approach, although it would not become the only or even the main technique. Such an application of CA should be carried out on all levels of grammatical description, i.e., on the phonological, lexical and syntactic levels.

The hypothesis presented here requires verification by an experiment or rather by putting it to a test by a large number of teachers in a large number of courses. This again involves the necessity of writing a good pedagogical contrastive grammar which is the first and most important task in the area of the pedagogical application of CS. Language teachers should also be prepared for the use of CA in the classroom through a systematic study of CA of the two languages involved in the process of learning. This is why a course in CA should become a part of the syllabus in all philological departments of our universities and in all in-service teacher training courses.

If the approach outlined above is confirmed by experience in learning and teaching under certain specifiable circumstances, CS will be demonstrated to have greater pedagogical value than was ever claimed before.

REFERENCES

Bartlett, F. C. 1932. Remembering: a study in experimental and social psychology. London: Cambridge University Press.

Borger, R. and A.E.M. Seaborne. 1967. The psychology of learning. Penguin.

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Budohoska, W. 1966. "Zależność retroakcji od sposobu uczenia się materiału początkowego i interpolowanego". Studia Psychologiczne 7, 137 - 145.

- Carrol, John B. 1971. "Current issues in psycholinguistics and second language teaching", TESOL Quarterly 5, 101 114.
- Fishman, J. 1966. "The implications of bilingualism for language teaching and language learning". Trends in language teaching, ed. by A. Valdman, 121 131. New York: Mc Graw Hill.
- Jenkins, W. O. and L. Postman. 1949. "An experimental analysis of set in learning: retroactive inhibition as a function of changing set". Journal of Experimental Psychology 39, 69-73.
- Lambert, W. E. 1967. "Psychological approaches to the study of language". Foreign language teaching: an anthology, ed. by P. Michel, 215 250. London: Macmillan.
- Leontiew, A. A. 1970. Nekotorye problemy obuczenija russkomu jazyku kak inostrannomu. Moskwa: Izd. Moskowskogo Uniwersiteta.
- Lester, O. P. 1932. "Mental set in relation to retroactive inhibition". Journal of Experimental Psychology 15. 681 689.
- Saporta, S. 1966. "Applied linguistics and generative grammar". Trends in language teaching, ed. by A. Valdman, 81 92. New York: Mc Graw Hill.
- Scherer, G. A. C. and M. Wertheimer. 1964. A psycholinguistic experiment in foreign-language teaching. New York: Mc Graw Hill.
- Smith, P. D., Jr. 1970. A comparison of the cognitive and audiolingual approaches to foreign language instruction. Philadelphia: Center for Curriculum Development.