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Interlanguage Theory: Implications for the Classroom

The Interlanguage theory, that assumes that an active and independent learning mind makes its own generalizations upon grappling with a new language, argues that the errors that a learner makes in the rules of the target language are often in fact "correct" by the rules of an "interlanguage" invented by the learner as a provisional and sufficiently workable substitute. To insist on penalising all such "errors" has the effect of breaking down the learner's capacity to organize his or her progress in this way. Frith reviews the research supporting this hypothesis and outlines some practical steps to be taken by the teacher of second languages who would conform with its implications.

In this paper I shall trace briefly the historical development of the interlanguage hypothesis as proposed and developed by different theorists; I shall then refer to research conducted within this framework, and finally I shall discuss findings from these empirical studies as well as some materials development which this hypothesis has inspired.

The paper which started the ball rolling, so to speak, was Corder's "The significance of learners' errors" (1967). He pointed out that the development of generative linguistics and interest in psycholinguistic research had initiated a shift of emphasis in language teaching from its preoccupation with teaching towards the study of learning. The new interest led naturally to comparison between first language (L1) and second language (L2) learning, and to the question of whether the apparent differences between the two represent two different processes of learning. Corder then went on to hypothesize that some of the strategies employed by second language learners are essentially the same as those used by children learning their first language. Looked at in this way the L2 learners' errors had new significance: the occurrence of systematic errors could be taken as an indication of active participation by the learners in the learning process, during which their ability to form hypotheses about the rule system of the target language (TL)

might be observed. Corder maintained that at any point in their learning of a TL, learners use a system that can be described in linguistic terms and from which the researcher can discover the learners' *transitional competence*. This system can be illustrated by the systematic errors of the learners (as opposed to random mistakes). From this point of view errors are not seen as indications of failure to learn the TL, but are regarded positively, as evidence that learners are actually involved in testing hypotheses about the linguistic system of the language being acquired.

The term *interlanguage* was first introduced into the literature by Selinker, in an influential paper published in the *International Review of Applied Linguistics* in 1972, although it was actually written in 1969 while he was on sabbatic leave at Edinburgh University, working closely with Corder. Since then, various terms have been used synonymously with *interlanguage*, although there are some subtle differences between them: *approximative systems*, Nemser (1969); *idiosyncratic dialects*, Corder (1971); *learner language systems*, Richards and Sampson (1973). All these descriptions have one thing in common: the fact that second language learning is seen to be moving in the direction of the target language, with the learner constructing successive systems of phonological, grammatical, and semantic usage rules. However, these theories have so far received only limited support from empirical studies.

The Interlanguage hypothesis

I shall now examine some of these theoretical positions in somewhat greater detail. Selinker's main aim is the precise identification of the phenomena to be studied when dealing with what he refers to as "the linguistic aspects of the psychology of second language learning". Following Lenneberg he hypothesizes a "latent psychological structure" in the brain which is activated when one tries to learn a second language after having acquired "meanings" in a first language. The utterances which will be produced will not be identical to those produced by native speakers of the TL, nor will they be exact "translations" from the native language of the learners. Rather, a new, separate system will develop. This system is what Selinker calls *interlanguage*.

Selinker believes that the evidence for interlanguage can be found in what he calls "fossilizations", that is, phonological, morphological and syntactic features in the speech of L2 speakers that are different from the TL rules even after years of instruction in, and exposure to, the TL. Fossilizations are also described as those features which, "though absent from the speech of learners under normal conditions, tend to reappear in their performances when they are forced to deal with difficult material, when either anxious or in an extremely relaxed state" (Selinker 1972: 215). This kind of regression is seen as system-

atic, and Selinker uses it as evidence for the psychological reality of fossilizations and interlanguages. It seems reasonable to suggest, however, that the persistence of fossilized forms could well indicate that the interlanguage of a speaker who displays this kind of regression is still limited to relatively simple acts of communication. Development of the interlanguage to facilitate the use of more complex syntactic structures until its function is extended to such integrative and expressive uses as affirmation of social identity and expression of psychological need.

Nemser (1969) introduced the term *approximative system* to describe the language systems used by learners. He sees the language of the L2 learner as a self-contained language with a systematic grammar. Like Corder (1967) he sees the learner's interlanguage developing through successive stages of acquisition during the learning process. This hypothesis can only be adequately tested by longitudinal L2 cross-linguistic studies.

Richards' "Non-contrastive approach to error analysis" (1970) is another article which has become a classic in the field. As we have seen, within the interlanguage framework errors represent the L2 learner's "transitional competence" and are themselves systematic. Richards does not deny the role of the mother tongue as a source of difficulty in language learning, but points out, quite rightly, that there are other types of errors involved. He uses the terms *intralingual errors* and *developmental errors*. Intralingual errors reflect general characteristics of rule learning such as overgeneralization and incomplete application of the TL rules. According to this view learners who over-generalize create deviant structures on the basis of their limited exposure to the TL rules. Errors such as

- * *She must goes to school every day.*
- * *She did not found it.*
- * *The student does not walks to school.*

show that the learners are making false analogies with previously learned structures such as

- She goes to school every day.*
- She found it.*
- The student walks to school.*

Errors which omit the third person singular morpheme (-s) remove the necessity for concord, thus reducing the learner's linguistic burden.

On the other hand developmental errors illustrate the attempt of learners to build up hypotheses about the TL from their limited exposure to it:

- * *I am not liking it.*
- * *In French we are not having a present continuous tense and we are not knowing how to use it.*

These deviant structures show that the learners have not yet learnt the constraints on the use of the present progressive form in English, so

they are operating on the false assumption that the morpheme/ing/can be added to any verb in any context.

However, it is very difficult to assign errors to specific sources since they often have multiple sources. As Hatch (1976) pointed out, only a better understanding of learners and the many variables involved in the process of learning a second language will help us to identify more accurately all the possible sources of variation in L2 data.

In "Social Factors, Interlanguage, and Language Learning", Richards (1972) extended the interlanguage concept to immigrant speech, indigenous minority dialects, and local dialects, as well as pidgin and creole languages. He stresses the importance of the social and communicative functions of language in these different language learning settings. With this in mind, one wonders if the term *interlanguage* is at all appropriate in the kind of learning context where the TL is never really used for genuine inter-personal communication, that is, contexts in which the quaint kind of "ESLese" found in certain texts is manipulated by the learners in purely formal exercises. The majority of French elementary and high schools in Quebec, where English is taught as a "foreign" rather than as a second language, offer, unfortunately, innumerable examples of such learning contexts.

Before moving on to a discussion of research conducted in the Interlanguage framework, I think it will be useful to summarize the main points of the theory so far outlined:

1. The Interlanguage hypothesis sees errors as evidence of L2 learners' strategies of learning, rather than as signs of interference or as the persistence of "bad habits" which should be eradicated as quickly as possible through practice, drill and overlearning of the correct forms.
2. The making of errors helps the learner to test hypotheses about the TL system.
3. A study of errors should help to uncover the learner's built-in syllabus and his learning strategies.

Structural linguistics, transformational grammar and the Interlanguage hypothesis

A brief digression is perhaps necessary at this point. The audio-lingual method became the dominant method of language teaching in the United States and Canada during the 1950's and probably continues to occupy an important if not a dominant position today, although in a somewhat modified form. While details of this method go back to the Middle Ages at least, its resurgence and formalization was almost entirely due to the structural linguist. The audio-lingual method embodies a number of structuralist principles, the most general of which is reflected in the name of the method: that is, language is primarily speech, with writing as a secondary system of speech representation.

Thus, hearing (audio) and speaking (lingual) are the main linguistic skills to be learned in a language class, reading and writing to come later. This ordering of language skills was a cardinal principle of the applied structuralist, and proved to be one of the earliest points of conflict between language teaching theoreticians of the structural and transformational camps.

The structuralists appeared to have a missionary zeal to influence language teaching. Bloomfield, Frieze, and Lado all produced materials for teaching reading as well as for English as a second or foreign language. The form of the most common phonological drill, the "minimal pair drill", can be said to have come straight from the structural linguist's desk. Transformational linguists, on the other hand, showed no such zeal for the practical application of their theories. Chomsky made this abundantly clear at the 1965 North East Conference on the Teaching of Foreign Languages:

I should like to make it clear from the outset that I am participating in this conference not as an expert on any aspect of the teaching of languages, but rather as someone whose primary concern is with the structure of language and, more generally, the nature of cognitive processes. Furthermore, I am, frankly, rather skeptical about the significance, for the teaching of languages, of such insights and understanding as have been attained in linguistics and psychology.

He went on to say that suggestions from these two "fundamental disciplines" should be viewed with caution and scepticism. In spite of this warning, language theorists and textbook writers have persisted in their effort to find insight and understanding from transformational grammar which could have practical implications for language teachers. Indeed, the Interlanguage theory developed out of the transformational grammarian's way of looking at language as creative and rule-governed, and the learning of language as rule acquisition rather than habit formation.

Research conducted in the Interlanguage framework

I shall now briefly examine five L2 empirical studies which were motivated by the Interlanguage hypothesis. I must point out, however, that although work in this area has increased in recent years, the scope of the research is still very limited and it behooves us to heed the timely warning of Tarone, Swain and Fathman (1976) that hasty pedagogical applications should not be made on the basis of its findings.

First, the error analyses conducted by Dulay and Burt in the early part of this decade have shown that only an insignificant number of the errors made by L2 learners are due to interference from their native language. This is contrary to the Contrastive Analysis hypothesis which was put forward by structural linguists in the fifties. This stated

that negative transfer, or interference from the native language, is the cause of the majority of the errors made by L2 learners. Dulay and Burt, working within the framework of interlanguage theory, have a great deal of evidence to show that most errors have their source in the learner's dynamic process of dealing creatively with the TL system.

Buteau (1970) and Brudhiprabha (1972), using written compositions of French and Thai students respectively, investigated the significance and sources of the errors made by these students. Both found that errors due to negative transfer were not statistically significant. Taylor (1974) found that adult elementary level EFL students at the University of Michigan's English Language Institute used transfer learning strategy more often than those at the intermediate level. He suggests (as did Brudhiprabha) that as L2 learners move closer to TL performance, their problems will indicate hypothesis-testing type errors such as overgeneralization and violation of rule restrictions rather than native language transfer.

Scott and Tucker (1974) describe an interesting error analysis of oral and written samples of 22 Arabic-speaking EFL students at the American University of Beirut. They offer the following conclusions:

1. For these students native language interference was a persistent problem in the use of prepositions and articles. (Here one must question the validity of even a tentative conclusion of this type, since no attempt was made to determine what percentage of this problem was due to native language interference and what was due to the semantic complexities of these elements in the TL — a formidable task indeed.)
2. English word order was an early acquisition whereas object deletion was late. This transformation was actually learned during the term in which the experiment was carried out.
3. Relative clauses in which the relative pronoun was the object of a preposition were attempted infrequently and only in writing — apparently the students had not yet acquired this structure.
4. The nature of the corpus led the researchers to posit a rule-governed Interlanguage system which was changed and reorganized during the term. They state: "We may say that we were dealing with two approximate systems, the second at Time 2 being a closer approximation than the first to adult native English".

It is not so easy, however, to establish unequivocally different stages or approximate systems in a learner's L2 grammar, so this finding has to be interpreted with a great deal of caution.

Researchers working in the error analysis framework typically examine the errors of L2 learners and attempt to account for them according to the learning strategies used. However, as Corder (1971) pointed out, the learner's interlanguage is not just a collection of errors. If the interlanguage is to be described in its entirety, then

target as well as nontarget structures must be analyzed. The next study, (Frith 1976), instead of concentrating only on errors, attempted to evaluate and explain the interlanguages of high school ESL students from different language backgrounds as variable systems, moving in a dynamic way between target and nontarget structures.

This study was designed to test the approximative system hypothesis of Nemser (1969) mentioned earlier. Frith hypothesized that the ESL learner acquires a series of transitional grammars, each of which more closely approximates the grammar of standard English. The investigation was governed by two implications which are subsumed under the hypothesis. These are

1. The ESL learner is seen as an hypothesis-tester working creatively with the TL system rather than as one who merely imitates the structures of the input data.
2. Since it is hypothesized that learners are progressing by forming hypotheses that come closer and closer to the rules of the TL (that is, they move through a series of approximate levels of mastery) they should be given the opportunity to produce natural speech rather than elicited speech if the system they control at any one period of time is to be effectively evaluated.

Spontaneous oral production Time 1 and Time 2 data were collected three months apart and analyzed. The aim of the analysis was to describe and explain the changes in the subjects' interlanguages between the two stages with particular reference to five grammatical categories: the progressive, the third person singular, the simple past tense, articles and prepositions. A detailed analysis of the forms and functions of the grammatical categories in all declarative sentences in the data was undertaken in order to describe and explain the nature of the move towards the TL. The term 'error' was avoided in this study because of the negative connotations traditionally associated with it. Instead, the interlanguage of each subject was divided into target structures and non-target structures (that is, what are usually called errors) containing each grammatical category. Non-target structures were given positive significance as indications of transitional competence as suggested by Corder (1967 and 1971) and as potential sources of information on analogical patterns and other factors that influence learners.

The results of the analysis lend support to the existence of a rule-generated interlanguage for each subject, which showed some advances toward the TL at Time 2. This move toward TL grammar, however, was not the same for each subject nor did it include all grammatical categories. Thus, while the results offer insufficient evidences to support the hypothesis of a different stage in the grammar of each subject in all the selected grammatical categories, they show very clearly that each learner, in simplifying the TL system by the omission of functionally redundant morphemes, such as the /s/ in *walks* and the

/d/ in *filled*, and function words such as *the* and *of*, was working creatively with the TL system.

Applications to teaching

One important implication of the Interlanguage hypothesis is the fact that errors are accepted as inevitable. This attitude is actually showing some results in the work of TESL theorists and researchers — results which must eventually benefit the language teaching profession. For example, *The Gooficon — A Repair Manual for English* and *Global and Local Mistakes* by Burt and Kiparsky (1972 and 1974) deal comprehensively with error analysis in the second language classroom. The authors point out that errors within a constituent or a clause affect the comprehension of a sentence far less than errors which are made in a major constituent or across clause boundaries. In other words, errors in pluralization and tense usage (that is, morphological simplifications) and the omission of function words such as articles, prepositions and auxiliaries, are less important to the comprehensibility of a sentence than errors in word order or the choice and position of appropriate connectors. For example, the major signal used in English to express relations among major constituents is word order. Without an explicit signal to the contrary we expect to see a subject followed by a verb then an object; that is, SVO word order. After that, we can have various adverbial phrases. One of the most obvious ways in which the intended relations in a sentence can be confused is to reverse the order of subject and object. For example, Burt and Kiparsky cite the following from their data:

- * *English language use much people.* Correcting each constituent locally gives:
- * *The English language uses many people.* But this improvement is negligible compared with the global correction of word order:
- * *Much people use English language.*

Since teachers do not have the time to deal adequately with *all* the errors made by their students, the hierarchy developed by Burt and Kiparsky serves as a guide to those errors on which most time should be spent, in order to give students the greatest possible mileage in their efforts to communicate in the TL. The authors' emphasis on rule acquisition rather than on habit formation is an essential part of the "Cognitive code" approach to learning — the opposite of the audio-lingual method, which is based on behaviorist learning theory.

Holley and King (1974) also suggest some productive ways to deal with errors. They present a classroom approach for the teaching of German which incorporates ideas derived from research done within the interlanguage framework. They suggest that errors should be seen

as a necessary feature of experimentation with the language. It would be well for us to remember that demands for grammatical accuracy, particularly at the early stages of second language learning, are in direct conflict with free use of the TL. This conflict can be reduced by placing stringent conditions on the kind of correction and the circumstances under which correction is done, particularly during free conversation. Some correctable errors may be those common to the group or may include material being currently taught. Errors made during free conversation, unless they completely block communication, should be noted by the teacher and dealt with in subsequent lessons: that is, activities and drills dealing with the problem areas should be presented for extensive practice.

I shall now briefly describe the kind of analysis that teachers at the high school level could do in the classroom from time to time. First I must emphasize that I do not think it is productive to spend any time analyzing forms produced in a drill activity, for the same reason that analyzing multiple-choice responses cannot give us much information about any creative use of the TL. There is a difference between choosing from alternatives which have been strictly limited and choosing from several alternatives floating around in one's head during a meaningful exchange. Therefore the language to be used in this analysis is that which is produced in a communication or communication-like situation. In real communication the participants rarely can predict the question and answers that will come up.

1. Record a conversation or use written material in which the students are concentrating more on the message than on the form.
2. This might be done in a small group conversation where the topic is very general. One possibility is to start a "Gossip session" about someone well known to the group. Give directions to participants to share all the information they have about the person.
3. Free compositions can provide a corpus for analysis of written forms.
4. A language sample should be large enough to permit the detection of mere slips of the tongue or pencil: that is to say, the sample from each each student must provide more than one instance of a particular error, or enough students must be involved to produce more than one occurrence of an error.
5. Once the data have been collected the information must be compiled. By using a frequency count try to discover
 - a) the structures that produce the greatest number of errors;
 - b) the specific errors which occur most frequently;
 - c) the structures that are used correctly most frequently.

By this means some incorrect hypotheses shared by a relatively large number of students can be detected. Subsequently, techniques should be developed or researched to help in the formation of correct hypotheses. Areas where correct hypotheses are evident should be focused on for praise and encouragement.

Teachers (especially those dealing with relatively small groups of students, particularly adults) could try experimenting with some groups working on their perceived difficulties and/or needs, that is, their "built-in syllabus", and compare their progress with other groups following the traditional teacher-directed syllabus of the course book. The results might well dictate a shift of emphasis from too great a reliance on the book, to include more of the students' perceived needs in the course.

Although the materials discussed above suggest useful techniques for dealing with errors, they do not supply us with a set of dogmatic principles that will answer all questions; they are simply welcome additions to the gradually increasing body of literature analyzing and explaining the interlanguage of second language learners. The evaluation of the relevance of a theory must certainly include a consideration of its application to the form of instructional material. The resources referred to in this paper are good examples of the kind of practical results from Interlanguage theory which are within easy reach of the second language teacher.

NOTE

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