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THE LANGUAGE LEARNING PROCESS: WHAT CAN WE LEARN FROM THE LEARNER?*

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ABSTRACT

This paper attempts to answer the following questions:

- a. How do people learn languages?
- b. What are the implications of the language learning process from second language teaching?

To answer the first question, the paper discusses the main theories of language learning, the learning variables that come into play and the strategies the learner adopts in his effort to learn the language.

To answer the second question, discussion is focused on the learning of language structures and functions; the role of errors, and the role of translation.

Knowledge of the second language learning process that a teacher gains from his learner could certainly help the teacher in the planning and the conduct of his teaching.

Introduction

Learning throughout this paper refers to second language (L2) learning. The question is: how do people learn languages? No one really knows exactly how. The theories of language learning only state how we believe people learn languages. These theories are the best source we have so far for answering the question.

Language Learning based on the Behaviouristic Theories

The behaviourist answer to the question "How do people learn languages?", proposed by Skinner (1957), is based on Pavlov's idea of conditioning which was popular from 1920s to 1960s.

The idea of conditioning is based on the theory that you can train an animal to do anything (within reason) if you follow a certain procedure which has three major stages, stimulus, response, and reinforcement. In the classic form of the theory a rat is placed in a box. A signal light is operated (the stimulus), the rat goes up to a bar in the cage and presses it (the response) and a tasty food pellet drops at its feet (the reinforcement). If the rat's behaviour is reinforced a sufficient number of times it will always press the bar when the light comes on.

Reinforcement in that example took the form of a reward and was therefore positive. But you could also train the same rat not to do something by giving him negative reinforcement, maybe in the form of a small electric shock.

(Harmer, 1983: 29-30)

In his application of this conditioning theory, Skinner described language learning as a form of behaviour similar to the rat pressing the bar as a form of behaviour, in that:

- a. Language learning consists of acquiring habits, initially by imitation (like the parrot).
- b. The "good" response elicits a reward of some kind.
- c. The habit is reinforced by having the stimulus recur so often that the response becomes automatic.

Thus "... we learn by imitation, mimicry, constant practice and, finally, the new language habits become as fixed as those of our mother tongue" (Bell, 1981: 24).

Language Learning based on the Cognitive Theories

The cognitive answer to the question is based on Chomsky's theory of competence and performance (see Chomsky 1959), in reaction against behaviourism. The rationale of Chomsky's theory is as follows:

- a. Children can say things they have never said before;
- b. Adults throughout life say things they have never said before;
- c. A new sentence that a young child produces is certainly not a result of conditioning.

Language, Chomsky maintained, cannot be a form of behaviour but an intricate rule-based system resulting from the child's innate capability to acquire language, referred to as language acquisition device (or LAD). From the knowledge of these finite number of rules, an infinite number of sentences can be produced. So what the child acquires is competence (knowledge of the grammar of the language) which enables him to be a creative user of language (Harmer, 1983).

Therefore, based on cognitivism:

- a. Language learning is a matter of "making sense" of the data which the brain receives through the senses.
- b. What is important is the ability of the individual to respond to new situations for which stimulus-response habits alone could not possibly have prepared him.
- c. Language learning, therefore, is a mental process, and not a physical one. It cannot be explained solely as the acquisition of a set of habits by the process of conditioning. (See also Bell, 1981, and Titone & Danesi, 1985 for further discussion).

Language Learning based on the Humanistic Theories

From the humanist's point of view, language learning should: (a) be interpersonal and student-centered; (b) refer to the integrated, or eclectic, methodologies.

The interpersonal and student-centred approach has been influenced by Rogers (1951, 1961) who maintains that the learner's personality is very important in the learning-teaching process. All human motives derive from the drive towards self-actualisation. Learners have the natural urge to realise their potential and to function autonomously. This tendency will flourish under condition of warmth and acceptance by others and by oneself. The best way to facilitate learning is to establish an interpersonal relationship with the learner who should be respected and appreciated as a human being. The teacher should be perceived merely as a facilitator who should create a less formal learning context in the classroom by placing himself among the learners, not to detach himself from them by being in front of the class.

Eclecticism, a recent trend in language teaching, has brought some degree of flexibility in language teaching methodology. It is an integration of approaches -behaviouristic, cognitive, and interpersonal. "Some language learning tasks may require a behaviouristic approach (e.g., articulation); others, a more cognitive one, (e.g., word order); still others may require an interpersonal approach (e.g., free speech exercises)" (Titone & Danesi, 1985: 60).

Neuro-Psychological Aspects of L2 Learning

Neurological Aspects

It has been noted that children could come close to native competence in L2 acquisition, whereas adults do not. Is this related to cerebral lateralization and brain plasticity? Is there a critical period for learning languages?

According to Lenneberg (1967), the lateralization process starts around the age of two until the age of puberty. This is the critical period for language learning when the brain is still plastic, enabling the child to acquire the L2 with ease. The language function generally is lateralized to the left hemisphere. However, in children, the right hemisphere will take over the language function if the left hemisphere is damaged. But, as some studies have indicated (see Denis & Whitaker, 1976 and Levy, 1979), the right hemisphere could not do the job as well as the left one. Beyond the age of puberty, when the brain is already stiff, it is generally quite difficult for people to retrain their speech muscles and to master the target language (TL) sound system. They might be able to improve in most areas of competence, but might still lag behind in pronunciation in the TL (Slobin, 1979; Steinberg, 1982; Titone and Danesi, 1985).

Thus, neurological evidence shows that childhood is the optimal period for L2 learning. Adult learners might not be able to perform as well especially in pronunciation since their speech muscle, already attuned to the L1 sound system, could not easily be adjusted to the L2 sound system in the TL production. Therefore, when teaching adult learners, the emphasis should be more on communicative competence rather than on native-like pronunciation.

Psychological Aspects

Skills in the mother tongue that adult L2 learners have developed can be of help to them in learning the L2. Such skills enable them to construct hypotheses of the L2 in terms of the L1 especially where the two languages correspond. At the same time the L1 can be a source of interference especially where the two languages contrast.

Knowledge about the perceptual, cognitive and affective aspects of L2 learning might shed some light relating to the processes of L2 learning. The perceptual and cognitive mechanisms tell us about the how of L2 learning. From the perceptual viewpoint, "...L2 learning is marked by the learner's effort to decipher messages..." (Titone & Danesi 1985: 86), a process which "...takes place in terms of the L1" (*ibid.*).

From the cognitive point of view, it is clear that adult L2 learners have greater capability than children in making sense of grammatical rules. Titone & Danesi (*ibid.*) point this out:

By the age of puberty formal thinking transcends concrete experience as a learning strategy. L2 learners will probably profit somewhat by well-designed grammatical explanations and deductive pedagogical approaches. Such explanations would however take into account the psychological fact that the L2 learner is making comparisons to the L1. The teacher should realize that comparisons with the native language are unavoidable, particularly in those areas where the target language and native language do not coincide.

(*ibid.*: 87)

The affective variables, on the other hand, tell us about the why of L2 learning. Variables such as attitude and motivation, cognitive learning style, and aptitude that come into play are crucial in determining the success, or otherwise the failure of, language learning.

Attitude is "... an evaluative reaction to some referent, or attitude object, inferred on the basis of the individual's beliefs or opinions about the referent" (Gardner, 1985: 9). Two attitude variables that have received considerable attention are attitude towards the TL and attitude towards the TL community.

Motivation is "... some kind of internal drive that encourages somebody to pursue a course of action" (Harmer, 1983: 3), classified by Gardner and Lambert (1972) into:

- a. Integrative motivation, i.e., the motivation to be a member of the TL group or to become familiar with the target culture; and
- b. Instrumental motivation, i.e., the motivation to learn a language for utilitarian purposes. e.g., to pursue higher studies, or to get a good and highly paid job.

Another important variable involved in L2 learning is cognitive learning style. Titone and Danesi (1985) distinguish four general traits of good learning style:

1. Perceptual motor ability - the ability to perceive and produce sounds with a high degree of accuracy;
2. Grammatical-cognitive ability - the ability to recognise the grammatical function and form of linguistic items;

3. Mnemonic~cognitive ability - the ability to memorize a great number of associations in a relatively short period of time; and
4. Generalization ability - the ability to extrapolate structural patterns from language data.

These traits lead us to aptitude for language learning which includes:

1. The ability to learn the sound system of the TL;
2. The ability to learn the vocabulary;
3. The ability to learn its grammar, etc.

Strategies of L2 Learning

Learning strategy refers to "... a choice that the learner makes while learning or using the L2 that affects learning" (Cook, 1991: 78). What strategies then are adopted by learners in the course of learning the L2?

Good language learners might tackle L2 learning in different ways from those who are less good or they might behave in the same way but more efficiently. Naiman et al. (1978) group the strategies learners adopt as follows:

- a. Strategy 1: Find a learning style that suits you;
- b. Strategy 2: Involve yourself in the language learning process;
- c. Strategy 3: Develop an awareness of language both as system and as communication;
- d. Strategy 4: Pay constant attention to expanding your language knowledge;
- e. Strategy 5: Develop the L2 as a separate system; and
- f. Strategy 6: Take into account the demands that L2 learning imposes.

O'Malley and Chamot (1990) outline three main types of strategy used by L2 learners, i.e.:

- a. Metacognitive strategies involve planning and thinking about learning, such as planning one's learning, monitoring one's own speech and writing, and evaluating how well one has done.
- b. Cognitive strategies involve conscious ways of tackling learning, such as note-taking, resourcing (using dictionaries and other resources), and elaboration (relating new information to old).
- c. Social strategies mean learning by interacting with others, such as working with fellow students, or asking the teacher's help.

Strategies of Communication

Communication strategies is defined as "...a systematic technique employed by a speaker to express his meaning when faced with some difficulty (Corder 1981: 103) due to his "...inadequate command of the language used in the interaction" (ibid.).

How does an L2 learner communicate in the TL? Corder (*ibid.*) says there are two options open to the learner, i.e.:

- a. To adjust his ends (i.e., the meanings to be expressed) to his means (i.e., linguistic resources available), referred to as message adjustment or risk-avoidance strategies;
- b. To increase his means in order to achieve his ends, referred to as resource expansion strategies (which are all risk-taking strategies in that they run the danger of failure, i.e. misunderstanding or communication breakdown).

Forms of message adjustment/risk-avoidance strategies:

- a. Topic avoidance - a refusal to enter into or to continue a discourse within some field or topic requiring the use of the TL rule or form which the learner does not know well. In this situation he may change the topic of discourse or remain passive.
- b. Message abandonment - to cut short the discourse or stop in mid-sentence because the learner runs into difficulty with the TL rule.
- c. Semantic avoidance - an attempt to say something different from what is intended because the appropriate TL rule is not available. What is communicated may presuppose the desired meaning.
- d. Message reduction - to say less or less precisely from what is intended. The learner deliberately sacrifices part of the intended meaning and this may appear as vague general talk.

Forms of resource expansion strategies are:

- a. **Borrowing**, for immediate purpose, forms or features of the learner's mother-tongue (or any other language he knows) due to the non-availability of the TL form or feature.
- b. **Switching** from the TL to the mother tongue (or any other language he knows) is an extreme form of borrowing. In this case the learner's L2 utterance will form a mixture of the TL and the mother-tongue.
- c. **Paraphrase** (the expression of the same meaning in other words because the required rule of form is not available), circumlocution (the expression of an idea in more words than necessary or a definition of it in other words), and word-coinage (the invention of a lexical item which does not exist in the TL).
- d. Resort to **paralinguistic devices**, such as gestures, signs and other features to convey meaning as an addition to the learner's inadequate linguistic means.
- e. **Appeal to authority** - the learner's attempt to ask his interlocutor for the TL rule or form or refer to a dictionary.

The Monitor Theory

Normally, when learners speak, they aim for fluency and do not really bother about grammar unless it causes communication breakdown. But some would be conscious of grammar and, therefore, monitor their speech to avoid mistakes. This is the essence of Krashen's monitor theory (see Krashen 1977, 1981) which claims that conscious learning is available as a monitor. Krashen states:

In general, utterances are initiated by the acquired system - our fluency in production is based on what we have "picked up" through active communication. Our "formal" knowledge of the second language, our conscious learning, may be used to alter the output of the acquired system, sometimes before and sometimes after the utterances are produced. We make these changes to improve accuracy, and the use of the monitor has this effect.

(Krashen, 1981: 2)

The Language Learning Process and its Implication to L2 Teaching

The foregoing discussion provides us insight relating to the processes people go through when learning languages as well as the strategies they adopt when learning and when communicating in the language. Our next question is: What are the implications of the language learning process to L2 teaching? To answer this question we need to look into the following aspects of L2 learning:

- a. The learning of language structures and functions;
- b. The role of errors; and
- c. The role of translation.

The Learning of Language Structure and Function

The learner's knowledge of language structures and functions underlies his competence in the language. Titone and Danesi (1985: 90) divide competence into two types, viz.:

- a. Sub-conscious (practical): this refers to the ability of children to use their L1 without any direct awareness of the natural patterns involved.
- b. Conscious (noetic): this is exemplified by the explanations used by teachers to facilitate learning.

The competence of an L2 is learned by:

....assimilating the target language structures into pre-existing native language ones. In other words, the learning of L2...is shaped by the structural framework of L1....It follows that the more structurally related the L1 and the L2 are, the easier it is to assimilate the structure of L2.

(*ibid.*: 90).

Pedagogical Implications

Which teaching strategy should be adopted - inductive or deductive?

Inductive learning (the basis of behaviourism) is the natural way to learn the structure of the TL wherein rules are not presented explicitly. The structure is learned inductively, similar to the way children acquire their L1. Therefore, inductive teaching suits younger learners well. For older learners, inductive teaching is also possible; their native language competence can be exploited especially for those areas where the L1 and the L2 structures are similar.

For deductive learning (associated with cognitivism), the rules are presented explicitly. Deductive teaching is suitable for older learners especially if the L1 and the L2 structures differ or if there are no corresponding L1 structures. The learners have developed conscious (or noetic) competence; they are

therefore able to construct hypotheses and monitor their speech. For younger learners who have yet to develop their noetic competence, the deductive techniques should be avoided.

There is a possibility that both strategies are involved.

Learners will inevitably induce those patterns which are similar to the L1, but will construct hypotheses about the ones which are either different from or nonexistent in their native language.

(*ibid.*: 91).

However, the learning and teaching of structure should occur only as and when the needs arise.

Apart from learning structures, the goal of language learning is to acquire communicative competence (speech function) to enable the learners to communicate in the TL in differing context and situations. Following the suggestion by Titone and Danesi (*ibid.*), in the formal classroom setting communicative competence could be taught by:

- a. Involving the learners directly in conversational activities;
- b. Using audio-oral and audio-visual materials (e.g. records, tapes, films) in which native speakers of the language are involved in some form of discourse;
- c. Presenting the learners with humorous events (jokes, cartoons, etc.) or games and problem-solving activities;
- d. Encouraging the learners to engage in conversations with speakers of the TL. What is the role of grammar in the process of assimilating speech structures and functions? With reference to the two types of competence discussed earlier, we answer this question by looking at grammar according to its types (following Johnson, 1967), viz.:
- e. Intuitive grammar, i.e., the sub-conscious practical knowledge of the L1 in children;
- f. Analytical grammar, i.e., the noetic, or conscious, realization that language is a system of structure; it describes language formally.

Of the two types, analytical grammar is therefore very useful in the language teaching-learning process as it can be a useful source of reference for teachers and learners alike.

The Role of Errors

The L2 that the learner develops during the course of learning is referred to as interlanguage (Selinker, 1972). It approximates the TL in successive stages and is characterized by errors due to:

- a. Interference of the learner's L1, referred to as inter-lingual errors (see Richards, 1974); and
- b. Overgeneralisation, learning-teaching strategies, communication strategies, carelessness, ignorance, and emotional states such as anxiety, stress, anger, fatigue, all labelled as intralingual errors (see Hammerly, 1982).

Interlingual errors are the principal concern of contrastive analysis and intralingual errors those of error analysis.

Corder (1973; 1974a) makes a terminological distinction between errors, mistakes and lapses, which are all regarded as "faults", i.e.:

1. Errors are the grammatically incorrect forms of the TL which are characteristically systematic; they are due to errors of competence (Corder, 1974b). They are rule-governed, i.e. they follow the rules of whatever grammar the learner has (Jam, 1974). Being systematic, they are consistent and free from arbitrariness.
2. Mistakes are social gaffs of varying degrees of seriousness (Bell, 1981) which are characteristically unsystematic. They are due to errors of performance (Corder, 1974b) or due to chance circumstances (Hammerly, 1982) and are readily correctable.
3. Lapses are slips of the tongue due to psychological factors such as excitement, tiredness, etc., which change from moment to moment and from situation to situation (Jam, 1974) all of which, like mistakes, are unsystematic.

Pedagogical Implications

Firstly, the study of learner errors could certainly help teachers in the conduct of L2 teaching. Errors just cannot be ignored or otherwise they may become fossilized, i.e. permanent. But errors are something unavoidable in learning; they are bound to occur when rules have not been perfectly learned or are temporarily forgotten (Hammerly, 1982). Errors, far from being bad, are a necessary part of learning and therefore good (Bell, 1981). After all, the primary goal of L2 learning is to enable the learner to communicate successfully in the language more than to communicate perfectly in it.

Therefore, errors should be tolerated and should not cause any concern because they tend to reduce through time. This is in accordance with the chronology of L2 learning process which every learner has to go through (see Corder, 1974a), viz.:

- a. The presystematic stage - at this stage the learner is unaware of certain rules in the TL and therefore makes many random errors (though occasionally, he might produce a correct form). When asked to correct his sentence he cannot do so and will not even be able to account for why he makes the mistake.
- b. The systematic stage - here, his errors are regular. He has discovered and are applying a particular rule but the wrong one. When asked to correct them he cannot do so but can somehow account for the rule he is following.
- c. The postsystematic stage - he still produces errors, but only inconsistently, and when asked to correct his errors, .he can do so and give an account of the appropriate rule.

During these stages, teachers undoubtedly have to deal appropriately with errors. But how and how much? Too much correction can be counterproductive since the teachers, being too critical, may discourage the learner; but too little can be equally counterproductive since the learner has no yardstick for judging his input and may be discouraged by the teachers' apparent lack of interest (Bell, 1981). Teachers therefore need a sensible compromise between accuracy and fluency in a learner.

An accurate non-fluent speaker may well bore his hearer who has to wait patiently while the learner slowly and painfully brings out his grammatically correct sentence. The fluent inaccurate speaker, conversely, may well fail to get his message across at all.

(ibid.: 176)

Again, the teacher has to decide: which errors - global or local? Global errors are those that cause the native speaker of the TL to misunderstand the learner's interlanguage; local errors are not serious and therefore do not interfere with communication (Burt & Kiparsky, 1974),

Secondly, learner errors provide feedback which can help the teacher identify specific areas of difficulty in the TL confronting the learner and, in turn, to prepare appropriate teaching materials. According to Titone and Danesi (1985):

....this feedback can provide a basis on which to elaborate a "psychological" pedagogical grammar. The grammar would focus on error-producing mechanisms such as interference, overgeneralisation, and simplification and develop appropriate explanations and exercises.

(ibid.: 97-98)

The Role of Translation

Translation also plays a role in language learning especially during the initial stages because learners tend to think in their L1 when trying to produce his L2 utterances. He ". . .is translating mentally in attempting to decipher and produce utterances in the target language" (Titone & Danesi, 1993: 98).

Translation implies the substitution or replacement of textual material in one language by equivalent textual material in another language, taking place by degrees of approximation (Catford, 1965), viz.:

- a. Free translation - this is the highest degree of approximation involving the substitution of~ a complete text in one language with an equivalent one in another language.
- b. Literal translation - the simplest one-to-one replacement of lexical items with the necessary grammatical changes.
- c. Word-for-word translation - the lowest degree of approximation involving a simple lexical substitution without any grammatical adjustment.

Pedagogical Implications

As a learning strategy, translation probably cannot be avoided especially during the initial stages. However, the desirable goal of L2 learning is to enable the learner to think in the L2 when trying to express meaning in the language. Therefore, the use of translation in teaching should be avoided. But when specific TL forms cannot be explained in the TL, translation equivalents have to be used. "Translation may also be useful at advanced levels when it can be employed to evaluate the ability to move from one language to the other" (Titone & Danesi, 1985: 100).

Conclusion

Let us go back to our question: What can we learn from the learner? It is now apparent that the learner could provide us some understanding about the process of language learning. Such knowledge is certainly useful to us in our conduct of language teaching; it tells us what, when and how to teach. With such knowledge, we are more or less able to adapt our teaching to the way the learner learns. We are able:

.... to allow the learner's innate strategies to dictate our practice and determine our syllabus; we may learn to adapt ourselves to his needs rather than impose upon him our preconceptions of how he ought to learn, what he ought to learn and when he ought to learn it.

(Corder, 1974b: 27).

From this we can then devise a syllabus for L2 teaching.

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