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LANGUAGE AND PSYCHOLOGY : Implications for Teaching..

By

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1. *Introductory :*

Linguistics has been mainly concerned with the description of language without regard to the psychological factors that may determine its acquisition and use. These were thought to be the domain of psychologists. In recent years, however, it has been argued that since language is central to man's experience in life, linguistics should also probe into the process by which human beings acquire their mother-tongue, the internal learning capacities that a child or an adult possesses, the different age levels correlated with the varying degrees of language learning, language aptitude among individuals, and motivation to the acquisition of a second or a foreign language.(1) The quantity of observational and experimental studies made within the last two decades in the area of first and second language acquisition, especially in the United States of America, has warranted the setting up of 'psycholinguistics' as an empirical science. These studies have attempted to find answers to questions like :

1. Is interference from the mother-tongue the only cause of errors in learning a foreign language ?
2. Is there an optimal age behind which language acquisition is difficult or impossible ?

(1) A 'second language' as defined here is a non-native language to which a government gives a prominent place in her educational or official policy, and is used as a medium of instruction in her school or university system, e.g. English in the Philippines or India. A 'foreign language,' is any language, other than the mother - tongue, which is relevant to language policy of some kind in a given country and which is not generally used as a medium of instruction in the school or university system of this country, e.g. English in Egypt.

3. Is second language acquisition the same as first language acquisition ?

However, much is still to be done in the field and many other questions have yet to be answered.

2. *Theories of Language Acquisition :*

Behaviouristic psychology maintains that language is a form of behaviour and that a child learns language through a stimulus-response process. Every utterance or a piece of utterance is the product of a certain stimulus present in the environment. This stimulus may be a verbal act or a given need which the learner wants to satisfy, e.g. to seek the help of his mother or to satisfy a state of hunger or thirst. For successful language acquisition the responses made by the child have to be 'reinforced' in the sense that he gets the approval of his parents or teachers. Consequently, correct responses are acquired and incorrect responses are discouraged. A child, then, learns by imitating and repeating the speech of adults and by checking the correctness of his verbal conduct against their approval or disapproval. For the behaviourists, the learning process is a matter of practice and is measured by the number of times the response is repeated and reinforced. In other words, habit or skill formation plays an important role in language teaching.

The publication of Chomsky's 'Syntactic Structures'(1) in 1957 has revolutionized the concepts of psychologists about language and language development. Chomsky also criticized behaviouristic attitude towards language learning in his answer to Skinner's 'Verbal Behaviour'(2) He asserts that the stimulus-response theory is incapable of accounting for the innate ability of the human being for the acquisition and use of his native language. This capacity distinguishes man from the other

(1) In this book Chomsky announced the launching of a new linguistic theory called «Transformational-Generative Grammar».

(2) Chomsky, N., «Review of Verbal Behaviour by B.F. Skinner», in *Language*, 35, 1959, pp. 26-58.

animal species. It is possible, then, that human beings come into the world endowed with an internal language acquisition device or mechanism, i.e. the large fundamentals of one's mother-tongue are already inherent in one's biological nature. According to this nature, the child acquires his native language automatically when he is exposed to it. He has his own 'creative construction process.'

3. *Language Development in Children :*

One of the wonders of man is that a child, limited in mental abilities as he is, can master the complicated structure of his native language in the first three or four years.

Child language is different from adult language, especially in syntax and phonology. The child starts in his first year by producing certain meaningful vocalizers, then he is capable of producing one-word sentences which have the implication of whole utterances. The meaning of these utterances differs according to the situational variables correlated with them.

Traditional methods of investigating child language used to describe this language in terms of its role in the adult language. But the important question now is : What role does it play in the child's language system ?(1)

Investigation of child's grammatical system has so far concentrated its attention on the early stage of the child before he starts his primary school, i.e. the period between a year-and-a-half and four years of age. The researches conducted in this area proved that once the child begins his two-word sentences, he proceeds to larger structural units. These units are rather regular, and do not necessarily conform to the grammar of adults. Besides, this progressive change is proportionate with his age. These researches have also revealed a striking similarity of child language consisting of two-word sentences across various languages in both form and function. In other words, there is

(1) Slobin, D.I., *Psycholinguistics*, Scott, Foresman and Company, Glenview, Illinois, 1971, p. 41.

a degree of universality among children at this early stage. According to Slobin, the following universal categories have been observed :

a) subject-predicate b) quantitative and qualitative modification
c) some form of negation.(1)

These constructions often express universal and basic notions such as those of agent, action, object and locative. Examples from English child language are :

there book, that car, see doggie, more milk, give candy, want gum, no wash, not hungry, all gone milk,, mama dress, big boat, where ball.(2)

In addition, other two-word sentence types of structures are developed at that stage. These structures usually imply 'underlying semantic relationships' such as : conjunction, attribution, possession, location and subject-object, 'e.g. cup glass, party hat, Kathryn sock, sweater chair, and Kathryn ball.(3)

These relationships will be naturally more explicit in their contexts of situation, but the important thing is that such structures are a psychological evidence that the child is intuitively aware of these semantic relationships although he cannot express them in longer sentences.

The next stage is that of producing utterances of more than two words. The striking feature of this stage is that the child starts to use 'hierarchical' structures in the sense that his sentences may be analysed into their immediate constituents. He may start with the use of a predicate and then complements it with its subject, or he may expand the predicate phrase , e.g. " Build house...Cathy build house", "Stand up...Cat stand up...Cat stand up table" with a pause between "stand up" , and "table" which shows the child's awareness of such sentence units as verb "stand up" and locative "table". Similarly, his awareness of grammatical

(1) Slobin, op. cit., p. 46.

(2) Ibid., pp. 44 - 45.

(3) Ibid., pp. 46 - 47.

units as noun phrase is proved by keeping such units uninterrupted, e.g. "Put... the red hat...on". Child's sentences, then, "are not mere strings of words but hierarchies of units organized according to grammatical principles". (1)

In deviating from adult speech, children have their own systematic and regular rules. This is based on their "partial analysis of language" and on their inborn "cognitive tendencies". They often deal with the irregularities of language as if they were regular, e.g. they often use forms like comed, breaked, foots and mouses. This is accounted for as a natural tendency in the child to look for order and regularity in his language. Another observable tendency is that he may replace an earlier form with a new form through the process of analogy, e.g. after hearing the plural of box- boxes the child may replace the earlier plural "foots" with a new analogic form: "footses".(2)

After this stage a child is faced with certain grammatical operations which are known in modern linguistics as transformations. The child, by a gradual process, learns to do one operation at a time. For example, he is capable of preposing the question word in "wh-question" such as: What he wants? What the boy hit? Where I should put it? and so on. He is incapable at this stage to perform two grammatical operations simultaneously, i.e. of preposing the question word and transposing the subject and auxiliary in, for example, Where should I put it? Although he may well produce sentences that require one operation of transposition as in the yes / no question: Can he ride in a truck? This is due to a certain "performance limitation"- on the part of the child - which may

(1) Ibid., pp. 47 - 48.

(2) Ibid., pp. 49 - 50.

“block the application of both operations together, at this stage of development”.(1)

With the growth of the child, this performance restriction gives way to capability of performing more than one operation at a time.e.g. Where can he stop? But this takes place in accordance with a gradual process involving first two and then three or more operations at the same time , such as:“Why can't he stop”, where preposing, transposing and negating are involved. This all proves that in the acquisition of his mother-tongue, the child encounters linguistic complexities that he solves by imposing his own structure and applying his own “rule system”.

To sum up, the majority of studies made in the area of children's language acquisition of their mother-tongue have advocated, first, that there are universal basic stages and processes of acquisition, second, that “individual children go through strikingly similar stages of development”(2), and, third, that there are inherent biological determinant factors for such resemblance and universality.

These findings about the complexity of grammar developed by the child have reacted against the earlier traditional notions based on behaviouristic psychology that a child acquires language through imitation , frequency, recency, continuity and reinforcement. Dulay and Marina Burt state in their article on “Should We Teach Children Syntax?” that “In the last fifteen years of LI research, the emphasis has shifted from a search for environmental factors such as reinforcement and frequency of stimulus-response associations, to a search for the innate ability of the human child to organize speech data”.(3)

4. *Second Language Acquisition:*

Studies on LI acquisition have led to the investigation of the process of learning a second or a foreign language. The question

(1) Ibid., p. 51.

(2) Ibid., p. 55.

(3) Dulay, Heidi C., and Burt, Marina K., « Should We Teach Children Syntax ? » in *Language Learning*, Vol. 23, No. 2, December 1973, p. 245.

raised by psychologists in this respect was: "Is L2 acquisition by children characterized by the child's gradual construction of his own linguistic rules, and if so, what consequences would this have for L2 instruction?" (1) This again casts doubt on the widely held view that the errors committed by the learner of a second language are the result of interference on the part of the linguistic habits he acquires from his mother-tongue. This theory seems to be giving way to a new theory which postulates the construction by the learner of a second or a foreign language "independently of his knowledge of the structures of his first language." (2) The original hypothesis is that the types of errors committed by the learner would be similar to the types of errors he commits while acquiring his native language. These "developmental" errors must be due to certain innate processing capabilities the child makes use of in the organization and production of the new language. This hypothesis was validated by a number of experiments. For example, Dulay and Burt collected data on 145 Spanish-speaking children aged five to eight-years-old. These Spanish children were learning English as a second language. Questions were given to the children to elicit from them six different types of syntactic structures. Surprisingly enough, the experiment revealed that 85 per cent of the structural errors were similar to those made by children learning English as their mother-tongue. Only 3 per cent of the errors were of the "interference" type. (3) But it was also noted that "there does seem to be a common order of acquisition for certain structures in L2 acquisition... and the order is different from that found in L1 acquisition." (4)

It was left to J. de Villiers and P. de Villiers to investigate this order. They conducted a research on the order of acquisition

(1) Dulay and Burt, *op. cit.*, p. 246. Cf. also Ervin-Tripp, S.M., «Is Second Language Learning Like the First», in *TESOL QUARTERLY*, Vol. 8, No. 2, June 1974, pp. 111-127.

(2) Dulay and Burt, *op. cit.*, p. 247.

(3) See Dulay and Burt, *op. cit.*, pp. 248-251.

(4) *Ibid.*, p. 256.

of 14 morphemes among 21 English-speaking children aged between 16 and 40 months. (1) The results of their research yielded the following order:

present progressive — on — in — plural — past irregular — possessive - uncontractible copula — articles — past regular — 3rd person regular — 3rd person irregular — uncontractible auxiliary — contractible copula — contractible auxiliary. (2)

Of course there are many other grammatical morphemes in child speech which need to be investigated. These morphemes, however, were ordered according to their grammatical complexity measured by the number of transformations in the derivation of each morpheme. For example, the simple progressive should be acquired before the full progressive (aux. to progressive). Likewise, the irregular past is acquired before the regular past and third person forms (3) and so on. Another determinant factor in the ordering of these morphemes seems to be semantic complexity, but the writers admit that this is even more difficult than it was for grammatical complexity since there exists no systematic semantic analysis of all the morphemes. (4)

5. *Language Development in Adults:*

Researches conducted on adult language learning have also tried to prove that the syntactic errors committed by adults are not the direct result of interference from their first language. For example, the difficulties encountered by adults in learning English as a second language are found to be of a relatively

(1) De Villiers, J.G., and De Villiers, P.A., « A Cross-Sectional Study of the Acquisition of Grammatical Morphemes in Child Speech», in *Journal of Psycholinguistic Research*, Vol. 2, No. 3, Plenum Press, New York, July 1973, pp. 267-278.

(2) *Ibid.*, p. 271.

(3) *Ibid.*, p. 274.

(4) *Ibid.*, p. 275.

consistent order, whatever differences there are among the learners as to their standard of competence, amount of exposure to English, and their native languages.

In addition, studies made on different age levels with respect to ability to acquire language argue that the most convenient age level for language acquisition is between the ages of about two and puberty. This is accounted for on a neurophysiological basis. The study of speech mechanisms favours language instruction as early as the primary school: 'The brain's control of motor activities is located in the left hemisphere of the brain. If the brain should be damaged in this area and the control of motor activities lost, it is only children below the age of puberty who can transfer control of motor skills to the right hemisphere.'⁽¹⁾ It is also argued that 'before puberty the brain has a plasticity which is subsequently lost and that with it the capacity for learning is lost too.'⁽²⁾

As a result of these studies it is held that since learning ability decreases with the onset of puberty, 'formal' instruction in isolated rules and feedback constitute a more convenient teaching system for adults, whereas exposure to language in natural situations is more beneficial for the children than instruction in rules and error correction.

The order of acquisition of morphemes among adults was also investigated by Diane Larsen-Freeman. She tried to find out whether this order is similar to or different from that acquired by children. ⁽³⁾ The experiment was conducted on 24 adult students doing an intensive English programme at the English Language Institute of the University of Michigan. These have four different languages as their mother-tongue, i.e. Arabic, Japanese, Persian and Spanish. The students were all of more or

(1) Wilkins, D.A., *Linguistics in Language Teaching*, The MIT PRESS, Cambridge, Massachusetts, 1972, p. 186.

(2) *Ibid.*, p. 186.

(3) Larsen - Freeman, Diane, «The Acquisition of Grammatical Morphemes by Adult ESL Students», in *TESOL QUARTERLY*, Vol. 9, No. 4, December 1975, pp. 409 - 419.

less equal level of ability in English. The writer applied the same measure used by Dulay and Burt in their experiment mentioned above (called the Bilingual Syntax Measure) as well as other measures. The procedure involved five different language skills, i.e. reading, writing, listening, imitating and speaking. She also included in the tests given to the students ten of the eleven structures studied by Dulay and Burt such as 'progressive — ing', plural, third person regular present tense in the singular, regular and irregular past. The result was that in four of the five skills (the reading skill was an exception) there was a high concordance among language groups with regard to morpheme ordering...language background did not seem to radically affect performance in morpheme ordering.'(1) In other words, the native language does not greatly influence the way in which L2 learners acquire the order of English morphemes, even though these learners are of different ages and different degrees of exposure to ESL instruction. (2)

6. *Language Aptitude:*

Whatever may be said about the most convenient age for language acquisition, or the creative construction capacity of the learner, or the order of acquiring grammatical structures, one has to admit that the aptitude for learning a foreign language differs from one individual to another. Language aptitude is assumed to be a kind of stable personal characteristic or ability for learning foreign languages. This aptitude may account for 'the rapidity of progress or advancement made in language learning when the language is well taught, particularly when the teaching is geared to the basic intelligence of the learner.'⁽³⁾ Although the nature of this human ability and its psychological components are not yet fully investigated, some tests for measuring individual differences in language aptitude have been devised. One of these tests known to psycholinguists is called 'Sapon's

(1) *Ibid.*, p. 415.

(2) *Ibid.*, p. 418.

(3) Lambert, Wallace, E., «Psychological Approaches to the Study of Language», in Allen, H.B. (ed.), *Teaching English as a Second Language*, McGraw-Hill, Inc., New York, 1965, p. 36.

Modern Language Aptitude Test'.(1) It comprises five parts that test:

1. The learning of an artificial system of numbering (Number Learning Test).
2. The ability to handle a phonetic script (Phonetic Script Test).
3. The ability to identify vocabulary (Spelling Clues Test).
4. The ability to identify the grammatical function (position) of word classes in sentences (Words In Sentences Test).
5. The capacity to memorize by recalling a paired list of words in English and Kurdish (Paired Associates Test).

Such tests are intended to predict the extent of the learner's success in acquiring a foreign language, and may be used as an index for the selection of 'those who can most certainly profit from prolonged training'(2) in educational or governmental institutions. Sapon's test may also reveal the skills on which the teachers and learners are to concentrate their attention, since the main concern of the test is to study the components of language aptitude. However, language aptitude is not the only criterion for measuring language learning. There are other factors involved: 'variables such as adequacy of presentation of the material, adequate opportunity to learn, individual differences in general intelligence, and motivation to learn'.(3) In the following section we shall consider motivation as one of the factors underlying individual variation in language acquisition.

7. *Motivation to Language Learning:*

A person's success in learning a new language depends largely on the attitude of the person towards this language and

(1) John B. Carroll and Stanely M. Sapon's **Modern Language Aptitude Test**, The Psychological Corporation, New York, 1958.

(2) Lambert, Wallace, E., *op. cit.*, p. 35.

(3) *Ibid.*, p. 36.

its users. He may like to identify himself wholly or partly with the foreign culture and values or he may have sympathies with the speakers of this language to the extent that he would like to make contact with them or to live in their country. On the other hand, the purpose of the learner of a new language may be solely to get promotion in his job or to travel abroad or to read original publications in the language or to trade with the speakers of this language. These reasons given as motives for the acquisition of language have been grouped under two categories:

1. Integrative motivation.
2. Instrumental motivation.

As Lambert puts it: "His (the learner's) motivation to learn is thought to be determined by his attitudes and by his orientation toward learning a second language. The orientation is 'instrumental' in form if the purposes of language study reflect the more utilitarian value of linguistic achievement, such as getting ahead in one's occupation, and is 'integrative' if the student is oriented to learn more about the other cultural community as if he desired to become a potential member of the other group". (1)

A number of studies made by Lambert, Gardner, Spolsky and others on several groups of students(2) showed that learners who are motivated by integration attain a higher degree of proficiency in acquiring a language than those instrumentally motivated(3).

(1) Ibid., p. 39.

(2) These were English-speaking Canadians studying French, French-speaking Canadians learning English, English-speaking Jews studying Hebrew in Montreal, English-speaking Americans learning French, and some other foreign students studying in the United States.

(3) See Lambert, *op. cit.*, pp. 40-45.

SELECTED BIBLIOGRAPHY

1. Carroll, John B., and Sapon, Stanley M., *Modern Language Aptitude Test*, The Psychological Corporation, New York, 1958.
2. Chomsky, N., 'Review of *Verbal Behaviour* by B.F. Skinner', in *Language*, Vol. 35, 1959, pp. 26-58.
3. De Villiers, J.G., and De Villiers, P.A., 'A Cross-Sectional Study of the Acquisition of Grammatical Morphemes in Child Speech', in *Journal of Psycholinguistic Research*, Vol. 2, No. 3, Plenum Press, New York, July 1973, pp. 267 - 278.
4. Dulay, Heidi C., and Burt, Marina K., 'Should We Teach Children Syntax?' in *Language Learning*, Vol. 23, No. 2, December 1973, pp. 245 - 258.
5. Ervin-Tripp, S.M., 'Is Second Language Learning Like The First', in *TESOL Quarterly*, Vol. 8, No. 2, June 1974, pp. 111 - 127.
6. Lambert, Wallace, E., 'Psychological Approaches to the Study of Language', in Allen, H.B. (ed.), *Teaching English as a Second Language*, McGraw-Hill, Inc., New York, 1965, pp. 25 - 50.
7. Larsen-Freeman, Diane E., 'The Acquisition of Grammatical Morphemes by Adult ESL Students', in *TESOL Quarterly*, Vol. 9, No. 4, December 1975, pp. 409 - 419.
8. Lukmani, Yasmeen M., 'Motivation to Learn Language Proficiency', in *Language Learning*, Vol. 22, No. 2, December 1972, pp. 261 - 273.
9. Slobin, D.I., *Psycholinguistics*, Scott, Foresman and Company, Glenview, Illinois, 1971.
10. Wilkins, D.A., *Linguistics in Language Teaching*, The MIT Press, Cambridge, Massachusetts, 1972.

THE HISTORY OF THE UNITED STATES

CHAPTER I. THE DISCOVERY OF AMERICA

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