

## **Language learning strategies for the adult**

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This paper takes as its point of departure the suggestion (Corder, 1967) that the linguistic performance of the adult language learner is evidence of his possession of a strategy or built-in language learning syllabus, one which might be different from the syllabus imposed on him by the language course designer. The question then naturally arises whether this syllabus is the same for the adult as for the child. That the child has such a syllabus seems now to be beyond question (Smith and Miller, 1966). A language learning theory that ascribes the same language learning potential to the adult as to the child has been suggested before, *eg* by Sweet (1899), Jespersen (1904), and by Palmer (1922). But these typical language learning reformers felt it necessary for various reasons to superimpose on this innate language learning competence various principles of course design that determined in advance the order in which the adult learner would acquire the lexical and structural elements of the foreign language. At the same time, Palmer (1921) and Palmer and Redman (1932) recognized that while it might be correct to credit adult learners with the same innate language learning competence as the child, not all adult learners applied their competence in the same way, or even at all, and it was such differences in language learning performance that accounted for the wide variation in degree and kind of foreign language ability that is seen in adults, as opposed to children. But while the general trend in the last twenty-five or thirty years has been to deny even the possibility that the adult could in any sense learn a foreign language in the same way in which he learned his first, the question of whether or not he possesses a language learning competence like that of the child still remains to be formulated into a testable hypothesis. I should therefore like during the rest of the discussion to keep in mind not only the difficulties that stand, or can be made to stand, in the way of the adult learner, but also the fact that many adults do acquire rather remarkable skill in using foreign languages. In fact, there is a surprising number of quasi-native speakers to be found; naturally, one is not so aware of them as there are none of the usual differentia that mark them off from the population of native speakers.

One attempt to explain the differences in language learning performance between adults and children takes as its starting point the observation that many of the features of the learner's already known

language get incorporated into the foreign language system the learner constructs for himself (Fries, 1945). While the child, as a *tabula rasa*, needs to consider only the primary linguistic data of one language, the adult learner has the idiosyncratic features of his first language as part of his intellectual make-up, and cannot extricate them from the stimulus system to which they function as responses. Hence interference phenomena arise inevitably. Such an account is bound to leave a taste of dissatisfaction in the mouths of those linguists and psychologists who no longer hold strict structuralist or behaviourist views, but what such modern linguists have done is simply to revise the theory of language learning so as to make it conform to more current views, while not abandoning the initial assumption that the adult is bound to be a different kind of learner from the child, from the point of view of his innate learning capability (McNeill, 1965; Lenneberg, 1967; Lakoff, 1969).

As long as interference phenomena are treated as the mechanical result of the learner's language learning strategy, which inexorably incorporates into the grammar of L2 linguistic features of L1, there is no difficulty in collecting data to support that hypothesis. The rest of this paper is devoted to the argument that an important distinction has been missed, however, by including under one schema all that the adult learner does, and that it is essential to distinguish at least two components in the language learning strategy of the adult.

Consider the distinction made by Chomsky (1965) between 'competence' and 'performance'. He is of course referring to the linguistic knowledge, on the one hand, and the linguistic behaviour, on the other, of the 'idealized speaker hearer'. The first underlies, but does not fully account for, the second. While competence is necessary, it is not sufficient, to account for all the performance features that are the result of the interaction of very complex and overlapping systems of belief, as well as the physiological and neurological mechanisms of speech.

Let us extend this distinction into the field of learning as well. Thus it is useful to think of underlying learning principles, known in advance by the learner before he ever undertakes a learning task, and the procedures by which he implements these principles in a particular situation, or with a particular kind of primary data or input. Together, these principles and procedures constitute his learning strategy. In Aristotle's terminology, the learning principles are the formal cause, the procedures the efficient cause of learning. This is exactly analogous with Chomsky's distinction between competence – the formal cause – and performance – the efficient cause – of

language behaviour. We will thus view the language learning process as composed of two parts: a language learning competence, and the actual language learning performance.

Of course, it is an open question what the nature of the principles of language learning are that constitute this language learning competence. Trying to specify them amounts to trying to say just what formal features or criteria of analysis would have to be built into a language learning device that replicated the language learning competence of the human being. First of all, the device would have to have some notion of phonetic representation. This feature is the analogue of the perceptual characteristic of the human learner that enables him to identify speech sounds as such, to the exclusion of other auditory inputs. Secondly, we assume a segmentation criterion, which cuts up the linear array of speech into the phonetic, lexical, and phrasal elements that constitute the surface structure of the language act. This criterion is what allows the device to arrive at segments that match those of the grammar of the input language. In the meantime, a global semantic representation is assigned to the whole segmented phonetic representation; portions of the total semantic representation are then assigned to segments or segment-sequences of the phonetic representation. These phonetic-semantic units are then stored in such a way that access to them is possible given either the phonetic or semantic portion. At this point, we do not assume that the device has any information about the actual syntactic operations that can assemble the lexical entries into the original correct surface structure sequences. This is consonant with the claim of McNeill (1965; 1966) that in his first utterances, the child produces strings that honour the basic syntactic relations such as subject-predicate, but lack the correct surface structure form of adult utterances. In other words, the device, while segmenting the phonetic input into elemental parts and storing them, will not reassemble them correctly to match the original inputs until the intermediate (transformational) rules that distort the underlying basic structures have been learned. This is just what we find when we trace the gradual introduction into the child's speech of the features of adult speech that are the result of transformations that insert surface morphemic material, such as infinitival 'to', inflections, etc., which delete superfluous elements, and which rearrange, permute, and restructure the elements of the basic structure of the sentence.

At this point we must assume that the device is provided with a linguistic theory. By this is meant simply that the device is capable of accepting only those analyses of the data that are formulated in terms of

certain constraints on the form of grammars (Chomsky, 1957). Of course, we do not know what the exact form of this theory is, but it seems inescapable that one must be present. The behaviourist-structuralist hypothesis about the nature of linguistic behaviour can be interpreted to mean that, first of all, whatever the general principles of learning, they must be applicable to language, and secondly, that whatever regularities the linguist detects in the data the procedures that he uses to arrive at his analysis are just those one would want the learning device to possess, so that it too could arrive at productive hypotheses about the linguistic form that lies behind the linguistic input. What modern linguistics has done is simply to assert that the content of this linguistic theory is much richer and more complex, hence more restrictive, than was imagined by the structuralist. What the nativist does is simply to ascribe knowledge of this theory to the learner – surely not an unreasonable thing to do if the investigation of this theory is to have any ontological, empirical, or methodological justification. The theory is indirectly confirmed by the possibility of finding that the grammars of diverse natural languages conform to the general principles of language design embodied in it. The theory is also confirmed if we find that in the course of language learning the child appears to use a succession of grammars that approximate more and more that used by the adult model, and if in doing so he seems to be adding the transformational rules that describe the relationship between the basic structures that he first produces, and the correct adult surface structures that he eventually ends up knowing.

Furthermore, Lenneberg (1967) has shown that linguistic maturation parallels physical maturation; the maturing child has a maturing linguistic theory which becomes more complex and rich with time, enabling the child to learn more and more complex structure only with the onset of certain ‘maturation milestones’. The abstract device that reflects the learning capability of the child thus contains an evolving linguistic theory as well.

The claim that the child first produces sentences that honour only the basic grammatical relations while ignoring the structure superimposed on them by the transformational rules that are to be learned later, has an essential importance that should not be overlooked. Pragmatically, this knowledge provides the first provisional grammar. Such an initial step is necessary if cognition is ever to be translated into language acts. The output of the provisional grammar is available at all times for comparison with sentences of the model language. Discrepancies between the output of the provisional or interim grammar and the sentences of the model language

provide the information on the basis of which the device proceeds to revise the interim grammar. This of course has consequences for certain experimental designs. If the child could detect only those features of input sentences that he himself can produce, that is, if the only structure he imposes on input sentences in perceiving them is the structure that his provisional grammar can handle at the moment, it would be impossible for him to add anything to the provisional grammar, since all phonetic and structural features of the adult sentences that impinge on him that were not allowed for in the provisional grammar would be treated as so much noise (Shipley, Gleitman, and Smith, 1969).<sup>1</sup>

Translated into flesh and blood, or hardware (Aristotle's material cause), we must consider the formal properties of such an abstract device as just those that we would want to be present – in some isomorphic way – in the actual device. Viewed in another way, we could imagine the actual device as a machine which is literally capable of carrying out the operations implied by the abstract device; the latter provides the criteria on the basis of which the actual device decides whether it has carried out the procedures implied by these criteria correctly or not.

Further, we note that there are characteristics of the human learner that lead him to be selective about the learning of competing systems. One interpretation of the findings in the field of sociolinguistics is that the learner seems to select from the various linguistic systems to which he is exposed the one used by a person who matches his socio-economic status (Labov, 1966). In other words, the primary linguistic data capable of functioning as a real input to the language learning competence of the learner is that produced by the speaker capable of functioning as a model to

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<sup>1</sup> A corollary of this is that the adult who notices no difference between the output of his provisional (inaccurate and incomplete) grammar of L2 and what the native speaker is saying to him will not then proceed to correct his interim grammar. But it is important to avoid seeing such a state of affairs as mechanically or deterministically defining the limits of second language learning, as attempts to account for interference phenomena sometimes do. For we must ask why the adult stops perceiving these differences, and then go on to ask whether he might not be able to revise his provisional grammar in the right direction if he did or could be made to perceive them. What is it that decides, in the case of a particular second language learner, whether he will or will not notice such features? The difficulty with any theory that ascribes a deterministic influence to previously learned linguistic rules is that it will not account for how the adult achieves the success that he does.

the learner. Bandura and Walters (1963) have shown the importance of the role of the model in imitative learning in a wide variety of situations, and it takes no stretch of the imagination to extend their findings into the learning of language. In particular, the model is the source of the primary data that are the input to the learning function. A complex interaction of factors, including reward-consequences to the model, affect the salience of the primary data, partially determining the degree to which the data, presented by observation and instruction, will be acquired and used. This model-learner relationship has been demonstrated in a large number of studies by Lambert (eg Lambert, 1963; Lambert, Havelka and Crosby, 1958) to determine degrees of attainment, and the nature of the learned second language system.

We see then that there is the logical possibility, supported by experimental evidence, that there is some innate language learning competence, which, applied in the right way, leads to linguistic competence that underlies linguistic performance. Together, the innate learning principles and their application constitute the learner's language learning strategy. We thus have the possibility of explaining the adult's language learning performance in terms of a strategy which he adopts, and we seek to explain differences between adult learners, not in terms of differences in the innate learning abilities, but rather in terms of the way in which they are applied. The adult who accepts the fluent native speaker as a suitable model, and uses his gradually increasing proficiency in the foreign language within the bounds of his expressive capabilities will not import into his foreign language speech features of his native language, unless he is forced or allowed to do so by factors imposed internally or externally on his expressive needs.

It has been argued by McNeill (1965) that whereas the child starts from deep structures, and proceeds to infer the transformations that lead to the correct surface structures, the adult approaches the learning of a new language from the surface structures, and then infers the transformations that lead to new deep structures, just the reverse of the child's procedure. There seem to be a number of logical difficulties with this claim, and it is hard to know what an empirical verification of it would be. First, to the extent that deep structures represent the cognitive or semantic portion of the utterance, the adult already knows how to construct them and so has no need to infer a new system of deep structures for the new language. Secondly, whereas we have pretty good evidence for what the child does – and it seems to be what McNeill says it is – we have very little information about

what the adult actually does. To claim that the adult can infer new deep structures from new surface structures credits him with an auxiliary language learning skill that he possesses as an adult but not as a child, but does not explain why he should use the new one if the old one is available, or even why it should be there at all.

McNeill's second argument is that 'Once language is acquired, the distinction between the universal and the idiosyncratic aspects of language is inevitably lost' (1965, p 19). Again, there seems to be a logical difficulty here. If the distinction between the two is inevitably lost, how is it ever possible for the adult to sort them out? It is not at all hard to show that adults can learn new rules in a new language where there is conflict between the new and the old, even in the case of adult learners who do poorly with the new language. Even if the adult could adopt a strategy that was like that of the child's, *ie* start from deep structures and then learn the transformations, as McNeill goes on to suggest, it is hard to see on McNeill's interpretation how the adult learner could apply the general linguistic principle that enabled him to learn the first rule in the old language to the learning of the new rule in the new language without contaminating the latter with the former, given the validity of McNeill's statement.

Yet this is just what McNeill says later on (1965, p 20): 'In order to formulate the transformations of the second language, a foreign speaker must meet the same general condition that young children meet. They must have in mind the deep structure of a sentence as they are given the surface structure.' But if McNeill means by the term deep structure the linguistic formulation of the cognitive and semantic content of a sentence, then of course it is relatively easy to supply this in the form of explanations, translations, and all the usual tools that the language teacher uses to let his pupils know what the sentences he is teaching them mean. It is not necessary to do as McNeill argues one might do: 'provide them with sentences constructed on the same pattern as sentences produced by very young children learning that same language' (1965, p 21). That is, if it is desirable for adults to start from deep structures, then there is still the question, as there so often is when the desirability of having certain kinds of features in a language learning programme is pointed out, whether it is necessary to have a special procedure for ensuring that the programme does have that feature (Reibel, 1969).

Now what did the adult do who learned a foreign language well or nearly perfectly? I would like to suggest the nature of research that might

bear on this question, although to my knowledge none of this particular type has been done. While research into child language learning is being carried out by longitudinal studies, it seems curious that up to now research on adult language learning has typically proceeded by means of synchronic studies of interference phenomena. This has of course an explanation: the belief that the knowledge of one language will form part of the adult's learning strategy in learning a second. It only remains then to find out which features of L1 will be transferred to L2. Such research is not without interest, but it leaves unanswered a whole host of other questions, in particular what is the adult's strategy when, after a period of relative inarticulateness, he manages to acquire some performance skill in a foreign language, finally to end up with near or quasi-native competence. Quite a few methods of research suggest themselves, such as the study of spontaneous speech of adult learners over time to see the order in which certain features are acquired; acceptability experiments such as those of Quirk and Svartvik (1966); and the manipulation of various environmental conditions to determine their influence on speed and accuracy of learning. (They are listed here in ascending order of complexity of interpretation.)

The technique of analysis of errors could be adapted to study changes in underlying rule systems over time, as in some present work in child and infancy research. The acceptability tests mentioned might prove less valuable than at first hoped. If in clear cases of differences in performance skill two populations give the same or very similar results on such tests, then the validity of such tests is called into question. To the extent that foreign learners of English, for example, make the same judgements as native speakers, they will be said to exhibit the same competence, in the sense of Chomsky (1965). But such cases must be matched by equal or equivalent fluency and skill in English for such tests to be of interest in answering the question of adult language learning strategies.

What I have suggested in this paper is that the language learning strategy adopted by the adult has at least two components: underlying principles of learning and analysis, applicable to primary linguistic data, and eventually yielding competence in a foreign language equivalent to that of a native speaker, and allowing the same performance skills; and secondly, a method of applying these underlying learning principles, controlled by various situational and personal factors that set effective limits to language learning performance, and which may determine the nature of the resulting competence. We explain the differences among adult learners, and the difference between child and adult, by reference to the total strategy each

uses; logically, there is no difficulty in imputing the same innate knowledge of underlying learning principles to both.<sup>2</sup>

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<sup>2</sup> The insight to be gained from diachronic study of synchronic states has been succinctly expressed by Huxley (1953, p 33): 'When we take an instantaneous snapshot, we freeze the process into a set of unreal static pictures. What we need is the equivalent of a film. We all know how a film record can be speeded up to reveal processes that are hidden from ordinary view... The same applies to our moving picture of evolution. If this is run at what seems natural speed, we see only individual lives and deaths. But when, with the aid of our scientific knowledge and imagination, we alter the time scale of our vision, new processes become apparent... Only in the longest perspective, with a hundred-thousand-fold speed-up, do over-all processes of evolution become visible – the replacement of old types by new... the narrow and winding stairway of progress.' For 'evolution', read 'language acquisition'; for 'individual lives and deaths', read 'successive interim grammars'. (This reference is due to Wang, 1969)

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