In line with the psychologists' viewpoint on child development, an argument is made for reconsidering the timing and type of modern language instruction in the school. Evidence of the receptiveness of children to language learning from birth to age eleven is discussed, along with the efficacy of learning through a direct, or school, experience. (AF)
THE OPTIMUM AGE FOR BEGINNING THE STUDY 
OF MODERN LANGUAGES

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It is time to reconsider when — and how — instruction in a second language should begin in school. In Europe and in some other parts of the world such instruction customarily begins at about age eleven, in the United States of America at age fourteen or fifteen. In the United States instruction in a second language continues for an average of about two years, and little distinction is made between pupils bound for the university and others. In other countries the university-bound are identified early, and instruction in a second language continues from four to ten years or longer in the secondary school and university. Indeed, students commonly learn a third, fourth, and even a fifth language. The fact that age eleven has long been traditional for beginning instruction in foreign languages means that a proposal to reconsider this arrangement must be based on good evidence. This evidence we propose in the following pages to present, at least in a preliminary way. If it is judged to be sound, it will imply the desirability of our making an earlier start in language teaching, and also of revising our methods, in order to suit our instruction to younger learners.

Our evidence must of course respect (1) the nature of language and (2) the process of language learning. A few exceptional teachers there have always been who have understood what language is, but more recently the research of linguistic scientists and of cultural anthropologists has provided us with new insights. Basic instruction in linguistic science and its application to language teaching is coming more and more to be included in teacher-training programs and in summer language institutes. The result has been, in the secondary schools and universities, a thorough reexamination of the theory and practice of language teaching, and, in the elementary grades, extensive experimentation in teaching languages.

There is much talk of the ‘new look’, the ‘new key’, and the ‘audio-lingual method’. This new viewpoint is well stated by Nelson Brooks of Yale University. Explaining first what language is not and then what it is, Brooks writes elsewhere, “Language is not a book, nor a grammar, nor a

1) How cultural anthropologists regard language is interestingly explained in a tape recording, “A Word in Your Ear”, published by the National Association of Educational Broadcasters, Urbana, Illinois.

BEGINNING THE STUDY OF MODERN LANGUAGES

dictionary. Language is certainly not writing; indeed it is not even words, for nobody talks in single words. Nor can it be equated with communication. Language lends itself admirably to communication, yet communication can and does take place quite well without language. Above all, it cannot possibly be the matching of one linguistic code with another; translation is not language, but only the relating of two languages already well known. Language can be pictured in writing and it may be analyzed and codified in grammar. It may be divided up into words, and these words may be arranged in a lexicon. It serves the literary artist for his art; yet it is what he starts with and not the finished product, so language is not literature. Now if language is none of these things, what is it? We may say that it is learned, systematic, symbolic vocal behavior; a culturally acquired, universal, and exclusive mark of man, grafted upon the human infant’s delight in babble"). 1) Summarizing and simplifying, we may conclude that language is the way a speaker feels, thinks, and acts when he talks his own language.

How language came to be learned by man is one of the unsolved mysteries, a mystery that is reenacted every time a baby is born. “Between the clearest animal call of love or warning or anger, and a man’s least trivial word, there lies a whole day of creation – or in modern phrase, a whole chapter of evolution”. 2) In the individual this chapter of evolution takes place between birth and about age five and the most miraculous part occurs earliest. It is no wonder that the subject of infant speech has attracted so many students. Despite the studies of Jakobson, Leopold, Lev.S. McCarthy, Piaget, Preyer, the Sterns, Watts, and many others, the exact nature of the miracle escapes us and the learning of speech by man remains a mystery.

As infants we observe the behavior of those around us as they make noises with their mouths. Little by little their behavior suggests meaning for these noises. In time the noises come to have significance even without the accompanying behavior, that is, they acquire their full symbolic meaning. Gradually we partly imitate these sounds and partly invent other similar sounds, for the sheer pleasure of using this newly experienced ability. It does not take us long to discover that we can use our voices to control the behavior of those around us. How successful we are in this, as

well as in adjusting our behavior to that of others, depends in part on our skill in using this instrument called language. 1)

There are two facets to this language-learning process, the imitative and the inventive. "The mother helps, but the initiative comes from the growing child", says Dr. Wilder Penfield, Director of the Montreal Neurological Institute. 2) Of the two, authorities have come to consider the inventive aspect as the more important. In fact, Leopold goes so far as to assert that "pronunciation is the only part of language that is chiefly imitative". 3) He is even more explicit in his Speech Development of a Bilingual Child (I, 22) when he writes: "The diary at this point reveals my astonishment at the course which the development took. From the literature on child-language I had expected a stage of mechanical sound-imitation, with later induction of meanings for words thus acquired . . . . In Hildegard's case, the phase of mechanical imitation was completely lacking; meanings were always developed before sound-forms. The impulse for any kind of imitation was strikingly weak in this child."

Brooks reflects a similar point of view: "In the case of the infant, there is a fascinating contest between his inborn potential for the use of parole and the community's highly systematized practice of langue. Of course, the latter always wins, and imposes its will upon the loser almost completely". 4)

Dorothy McCarthy summarizes the best thinking on the subject when she writes: "Most present-day psychologists seem to agree with the opinion of Taine (1876) that new sounds are not learned by imitation of the speech of others, but rather that they emerge in the child's spontaneous vocal play more or less as a result of maturation, and that the child imitates only those sounds which have already occurred in its spontaneous babblings". 5)

Language learning in the early stages consists, according to Penfield, of the "acquisition of speech units", by which he means the conditioned learning of the sound system and forms of a language by the assimilation of a set of utterances or structures. This is what Aage Salling calls det lille Sprog (the little language) in a book of the same title. According to Salling's


3) "Childhood and Second Language Learning", a conference report issued by the Modern Language Association of America as FL Bulletin No. 49, August 1956, p. 3.


theory, "However small the vocabulary of a pupil may be, you will find that he will be able to express something personal in it". 1)

Once the child has learned the basic speech units, he is ready for the stage of vocabulary expansion. "At three years the child begins to use prepositions and plurals with some facility. Sheer rate of learning new words is at a peak. The three-year-old may be acquiring language at the rate of about 400 new words in six months; and from two and a half to three and a half years his total vocabulary nearly doubles". 2)

What applies to the learning of the mother tongue seems under similar conditions to apply equally to the learning of other languages. According to Penfield, "A child who is exposed to two or three languages during the ideal period for language beginning, pronounces each with the accent of his teacher. If he hears one language at home, another at school, and a third, perhaps, with a governess in the nursery, he is not aware that he is learning three languages at all. He is aware of the fact that to get what he wants with the governess he must speak one way and with his teacher he must speak in another way. He has not reasoned it out at all". 3)

One of the best known examples of children's multilingual ability is that cited by the British psychologist J. W. Tomb: 4) "It is a common experience in the district in Bengal in which the writer resides to hear English children three or four years old who have been born in the country conversing freely at different times with their parents in English, with their ayaks (nurses) in Bengali, with the garden-coolies in Santali, and with the house-servants in Hindustani, while their parents have learnt with the aid of a munshi (teacher) and much laborious effort just sufficient Hindustani to comprehend what the house-servants are saying (provided they do not speak too quickly) and to issue simple orders to them connected with domestic affairs. It is even not unusual to see English parents unable to understand what their servants are saying to them in Hindustani, and being driven in consequence to bring along an English child of four or five years old, if available, to act as interpreter". 5)

We should of course remember that very young children are apt to forget

1) Quoted from a summary in English at the end of Det Lille Sprog, Grafisk Forlag, København 1952, p. 133.
5) This example is cited in the Unesco tape recording entitled "Another Man's Language", prepared after the Unesco Conference in Ceylon, August 1953, but even more striking is the demonstrated bilingualism of an English girl of eleven who had spent much time in France.
other languages almost as quickly as they learn them unless they have continuous practice up to the age of ten or eleven.

The point of all this is that the kind of learning here referred to bears little resemblance to language learning in school. Penfield calls the former "learning by the direct method or the mother's method" and the latter "learning by the indirect or scholastic method". The former may also be called conditioned learning or acculturation. Called by whatever name, language learning by young children in a natural setting is widely recognized as something quite different from the kind of learning that takes place in school by older children or adolescents, usually called conceptual learning.

This difference, most writers on the subject agree, is primarily a function of age. Penfield states positively, "There is an age when the child has a remarkable capacity to utilize these areas (of the brain) for the learning of a language, a time when several languages can be learned simultaneously as easily as one language. Later, with the appearance of capacity for reason and abstract thinking, this early ability is largely lost". 1) Langer characterizes this favorable language-learning age by saying that "there is an optimum period of learning and this is a stage of mental development in which several impulses and interests happen to coincide: the falling instinct, the imitative impulse, a natural interest in distinctive sounds, and a great sensitivity to 'expressiveness' of any sort. Where any of these characteristics is absent or is not synchronized with the others, the 'linguistic intuition' miscarries". 2) Langer points out the educational consequences of not taking advantage of this stage of mental development: "The tendency to constant vocalization seems to be a passing phase of our instinctive life. If language is not developed during this period, the individual is handicapped .... by a lack of spontaneous phonetic material to facilitate his speech experiments. The production of sounds is conscious then, and is used economically instead of prodigally". 3)

Conditioned learning seems to be at its peak at birth and to decline with age, conceptual learning at its low point at birth and to increase with age.4)

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4) See figure on page 303.
At what point does conceptual learning outweigh conditioned learning? Tentatively we believe that age ten approximately is the dividing line, that before this age speech habits in the first language are not so fixed as to interfere seriously with the learning of new speech habits. It has been noted, for example, that foreigners who come to the United States before age ten, approximately, learn to speak English without an accent. Those who come later usually speak with an accent, which is the more marked the older they were on arrival.

We are now ready to propose tentatively the optimum age for beginning the study of modern languages. All the evidence that we have examined leads us to concur with the conclusions expressed in the Modern Language Association FL Bulletin No. 49, to which we have already referred. At the meeting held in May 1956 the conferees were asked: Is it possible to determine an optimum age, from the standpoint of the child's physiology and psychology, for beginning the learning of a second language? We quote from the report: "Several conferees (Penfield, Ilg, Leopold) were inclined to think that ideally the best starting age is at birth. However, since the group was considering language learning in relation to schooling and since the first language is normally 'set' by the age of 4 or 5, it was decided to select four as the earliest age to be recommended. As is stated below, the years from four to eight are regarded as very favorable. The imitative capacity of the child in this early period is considered by Dr. Ilg as the best for language learning. She added that at eight the child is group-minded, expansive, and receptive. At this age, when expansion and imitation are at their height, the child can under favorable conditions be expected to learn a second language with a rush. At eight also the child begins to hold on to patterns and at nine he fixes them". 1) The conference

therefore drafted the following consensus: "The optimum age for be-
ginning the continuous learning of a second language seems to fall within
the span of ages four through eight, with superior performance to be
anticipated at ages eight, nine, ten. In this early period the brain seems to
have the greatest plasticity and specialized capacity needed for acquiring
speech.

"The specialized capacity includes the ability to mimic accurately the
stream of speech (sounds, rhythm, intonation, stress, etc.) and to learn
and manipulate language patterns easily. Support for the conviction that
the brain has greater plasticity for speech learning during the first decade
of life comes from the fact that, in cases of gross destruction of the cerebral
speech areas, return of normal speech occurs much more rapidly and more
completely than at a later age". 1)

There must be many examples of bilingual or multilingual learning by
children, such as the case cited by J. W. Tomb, but they have not been
recorded. And the only well known example of a school which has taken
advantage of the multilingual potential of children is that of Castillejo in
Spain, concerning which we have the following report: "His school
received boys and girls between the ages of three and five and instructed
them in Spanish, English, French and German. All the children received
instruction daily in the mother tongue and in at least two foreign lan-
guages. A few were taught four languages. The children came from
superior homes, the size of the classes was limited to a maximum of fifteen,
and the general curriculum was restricted. No teacher was permitted to
use any language but his own in the classroom, the playground or the
dining rooms. Consequently the pupils identified the language with the
person who taught it and it was found that they did not mix the various
languages. Castillejo concludes: 'The accumulation of several languages
neither disturbs nor overloads the mind of the child, because to him they
are not multiple. He does not distinguish them ... he does not even
notice differences between them. A child of five years could not tell his
mother whether the songs were in French or English. His only explanation
was 'This is the fair-haired teacher's, and this is the brown-haired
teacher's' ". 2)

It is only proper to state that there is a considerable body of opinion
against bilingualism. Many believe, for example, that the learning of a
second language is likely to reduce one's skill and artistry in using one's

2) Ministry of Education, Central Advisory Council for Education (Wales), The
Place of Welsh and English in the Schools of Wales. Her Majesty's Stationery Office,
mother tongue. The Council mentioned above reviews objectively all available evidence and concludes that "It appears wisest at the present juncture to accept that body of opinion that bilingualism in itself is neither an advantage nor a disadvantage to the mental development of a normal child". 1)

Brooks reaches the following conclusion: "Even if it were proved (as it has not been) that ... children are below standard in English vocabulary because of bilingualism, the knowing of a few less lexical items in the mother tongue at a given age may be a modest price to pay when, in exchange, one is in possession of all the structure and a sizeable vocabulary of a second language". 2)

Even though the evidence suggests the educational feasibility of bilingualism – or even multilingualism – in properly staffed schools, there are sometimes local reasons for reservations concerning bilingualism, as for example when bilingualism is identified with bicultural tensions. Léopold Taillon has such reservations concerning too early bilingualism in certain parts of Canada, where such a program would tend to favor an already dominant English language and would perhaps not help – as it should – to preserve the less favored French language.3)

Though age is perhaps the most important factor in successful language learning, it is not the only factor. As Penfield points out: "Second languages are frequently taught by the indirect method even to children ..." 4) We must therefore, before we conclude, consider briefly how languages should be taught, as well as when. All that we have said points clearly to the conclusion that languages should as much as possible be taught in a way to take advantage of the child's capacity for conditioned learning, using what Penfield calls the direct method and avoiding if possible the indirect method. "The teacher whose mother tongue was English, and who must explain French to little children using English to do so, is using the indirect method of teaching. She instructs them, not only because of her method but also by her pronunciation, to speak French with units that belong to the English tongue. She teaches them to learn by the indirect method and to speak by it.

"The teacher whose mother tongue was French and who enters the classroom and talks only in French, even though she makes no effort to do anything but play with them, allows the children to learn by the direct method and to acquire French speech units that can be used later, should

they have the opportunity of expanding French vocabulary. They think in the new language from the beginning". 1)

This method need by no means be confined to the teaching of children. At all levels, wherever the objective is to learn to understand or speak a second language, the teacher who speaks natively the language being taught can in the words of Brooks create a "cultural island" in order to facilitate the kind of language learning which resembles as closely as possible the conditioned learning of children. Even the teacher who does not speak a second language natively can in this day of technological advance provide the voices of native speakers on tape.

In conclusion, then, we believe that the preponderance of evidence deriving from the nature of language – as a way of talking, acting, and feeling – and from the natural process of language learning or acculturation suggests that it is time to reconsider seriously when and how to begin modern language instruction in the school. Ideally the best language learning takes place out of school, for the child who is exposed to several languages from birth – and we have no way of knowing how many a child in these circumstances could learn without difficulty – and who can continue in contact long enough to retain the languages once they are learned – perhaps until age nine or ten – would come closest to utilizing his as yet unfathomed language learning capacity. As for school learning, Castillejo's venture suggests the theoretically best arrangement. It would consist of a nursery school for children of three or four, the staff of which would consist of several well trained and gifted nursery-school teachers. Each would speak her mother tongue and would go about her work using her own language exclusively – except in the case of a crisis. The children should of course not be pressed to respond verbally until they are ready and should be free to select any form of response they wish. Such an experiment – perhaps under the sponsorship of Unesco – should of course be observed carefully by a variety of experts in child development. If the outcome of the experiment should measure up to its promise, one could then consider ways of adapting these techniques to classes of older learners.

Too fanciful? Not at all. We believe that a sober reading of the evidence leads one inevitably to just such a conclusion.


Il est temps de reconsidérer la question de savoir quand et comment il faudrait commencer l'enseignement d'une langue étrangère à l'école. La coutume veut que cet enseignement commence en Europe et ailleurs aux environs de l'âge de 11 ans, aux États-Unis à 14 ou 15 ans; cependant, des études récentes montrent qu'il serait souhaitable de commencer bien plus tôt en adaptant les méthodes d'enseignement actuellement en vigueur à des élèves plus jeunes.

Les conclusions apportées par ces études concernent à la fois la nature du langage et le processus spontané d'apprentissage d'une langue. Nelson Brooks, de Yale, définit le langage comme suit: "Un comportement vocal, acquis, systématique et symbolique; un produit de la culture, la marque exclusive et universelle de l'homme, et qui se greffe sur la balbutiement spontané des petits de l'homme". La façon dont s'acquiert la langue maternelle est pleine d'enseignement pour la psychologie de l'apprentissage d'une seconde langue. Des autorités de grande réputation comme Wilder Penfield, le neurologue renommé, Frances Ilg, psychologue d'enfants, Werner Leopold, spécialiste du bi-lingualisme, et Susanne Langer, philosophe, ont apporté une importante contribution à une meilleure connaissance du processus de l'apprentissage d'une langue. Ils admettent qu'il y a une part de miracle dans la manière dont les enfants apprennent une ou plusieurs langues. Et ce miracle est plus évident encore chez le très petit enfant.

Ce mode d'apprentissage a été appelé imitatif et intuitif; pour dire mieux, c'est un conditionnement. Il faut en tout cas le distinguer de l'apprentissage intellectuel. L'apprentissage spontané, par voie de conditionnement, à l'inverse de l'apprentissage systématique, semble culminer dans la petite enfance et décroître par la suite. Vers l'âge de 10 ans, nous enseigne la psychologie, les processus intellectuels d'apprentissage prennent le pas sur les formes spontanées. En conséquence, il devient plus difficile après cet âge de commencer l'apprentissage d'une autre langue et spécialement d'en assimiler la prononciation.

Nous pouvons en conclure que le meilleur moyen pour apprendre une ou plusieurs langues étrangères, est de vivre dans un milieu où ces langues sont parlées. Ainsi des enfants britanniques vivant en Inde ont appris jusqu'à quatre langues en même temps sans difficulté apparente. Faute de cette possibilité, il reste la ressource d'introduire l'apprentissage d'une langue étrangère dès les premières années de l'école primaire. Mais il convient alors d'user d'une méthode directe, celle que Penfield appelle la méthode même de la mère. Peut-être d'ailleurs, cette méthode trouverait-elle aussi bien son application dans les classes supérieures.

Nos méthodes actuelles paraissent ignorer les possibilités réelles des jeunes enfants dans l'apprentissage des langues. Pour en avoir tenu compte, l'école internationale de Castillejo à Madrid semble avoir obtenu des résultats. Nous voudrions proposer que, de préférence sous le patronage de l'Unesco, une expérience soit tentée: enseigner dans une école maternelle plusieurs langues à des enfants de 3 et 4 ans, évaluer soigneusement les résultats obtenus et en tirer les conclusions utiles pour l'enseignement des langues en général.