Audio-visual Techniques of Language Teaching: The Theoretical Basis

MICHAEL SARGENT

Many teachers of Classics will have heard of the interesting experiments now being made in teaching French and other modern languages by audio-visual methods[1]. Such methods would not, of course, be applicable to the teaching of Latin and Greek without much adaptation and many experiments; but it seems reasonable to believe that methods of a similar sort could help the teaching of Classical languages. The following notes are offered as a possible starting point for formulating a theory which such experiments might be designed to test: it is hoped that later it will be possible to publish reports of such experiments and notes on the actual use of different teaching media. The assumptions underlying the use of audio-visual methods in the teaching of a modern language are briefly these:

1 Language is essentially speech, and speech is basically communication by sounds.

2 Sounds made by the voice are extremely complex, and can never be completely represented by graphic symbols; the sounds of human speech must therefore be learnt by imitation, by speaking the language.

3 Speaking a language is a skill; a skill is acquired by much repetition. It is primarily a neuromuscular and not an intellec-

[1] For detailed information, see articles in *Modern Languages*, December 1959 and December 1960, and the booklet *Audio-Visual Aids and Modern Language Teaching* (published by the National Committee for Audio-Visual Aids in Education, 33 Queen Anne Street, London W.1. 3/6).

tual process. In other words, learning a language is more like natural context for the language to be learnt, and adequate stimulus for its repeated practice.

4 The aim of audio-visual devices should be to provide the

The basic belief is that the process of learning a foreign language is the same, in kind, as the child's process in learning its mother tongue. Or to put it another way, that in learning a foreign language the student should first learn to speak, by imitation, and analyze afterwards.

It seems therefore sensible to review briefly the first language learning of the child as a means of understanding the psychological and linguistic basis of foreign language learning.

Of the four basic language skills (hearing and speaking, reading and writing), two are audial and two are visual. Of these the audial skills are clearly more fundamental; the ability to read and write are dependent on hearing (or, to be exact, on aural comprehension) and on speaking. The child listens and then learns, by imitation, to speak its native language; only later will it be able to read (a similar process to aural comprehension) and write (which depends on ability to speak and to read).

We have spoken of language learning as *imitation*, but this is, of course, only a small part of the process; the parrot which learns the rote-repetition of words by imitation is not learning a language. A fundamental part of language learning is *association*, the way in which a word becomes a 'symbol' for a thing. Imitation helps the child to produce actual speech-sounds, and to acquire forms, intonations, sentence-patterns; but association forms the basis of the symbolic process by which these noises acquire meaning, that is, by which they become connected with certain states, things, or situations. Language learning also has elements of trial-and-error, and this is perhaps most evident in its use of *analogy*: to expand its verbal resources, and in the later stages of language learning and language using, analogy is much more important

than imitation. We tend, of course, to be aware of the functioning of analogy only when it has proved unsuccessful, and to overlook the countless times when it has been applied successfully.

Let us now turn to the learning of a foreign language and consider, firstly, the part played by aural comprehension. The heart of both aural comprehension and reading is, of course, *interpretation*, but not enough seems to be known about how this process of interpretation works in the aural comprehension of a foreign language. A comparison with the learning of telegraphic code is interesting[2]. At first the trainee operator struggles to grasp single letters, then whole words, and still later sentences; his progress in speed and accuracy depends on his ability to handle larger and larger units. It is similar with the newcomer to a foreign language; from recognising only a word here and there, he gradually comes to the stage of being able to grasp whole sentences. In the same way the young child's increased ability to use a more complex sentence structure must reflect a greater antecedent capacity to hear intelligently.

Thus we have a paradox of language learning: the ability to hear more depends on the need to hear less. That is, aural comprehension depends in large part on unconscious supplementation. The most important aid to our interpretation of what we hear is the *context* in which the words are set. Thus we do not start immediately to interpret what we hear; sound by sound, but lag behind the speaker to get more context. This was shown by the experiments with telegraphy: while the beginner keeps only a letter or two behind the sender; the experienced operator lags as much as six to twelve words in receiving connected material. In code, this means a mental retention of two or three hundred characters which are kept in mind before any attempt is made to interpret them: thus the receiver of code interprets by these larger units in order to work in total context.

[2] The classical experiments were those of W. L. Bryan and N. Harter: Studies in the Telegraphic Language (*Psych. Rev.* 1899).

But context does not mean merely the verbal context of the utterance: there is also the larger context of situation. In most situations the hearer has a fair idea of what the speaker is, and is not, likely to talk about; this interpretation is helped further by the facial and other gestures of the speaker[3]. The context of an utterance is an important aid in normal adult comprehension, not only for the child or the foreign language student.

It is clear then that the teacher of foreign languages who wishes his students to develop aural comprehension must work always in context, both the verbal context and the situation. In the latter especially visual devices help to provide the natural setting for the language patterns which are being learnt.

To sum up: the student who is to become proficient in understanding a foreign language must, firstly, get an accurate impression of the sound-patterns he hears; but this perception is only the first step towards aural comprehension, and it is easy to overestimate what it can achieve on its own. More important, the student must be able to remember these sound patterns long enough to be able to interpret them in larger groups, and thus to see them in context. How then can students' auditory memory be improved? Clearly, 1 by greater familiarity with the sounds of the language and their combinations; but also 2 by *frequently repeated experience of larger units, of phrases and whole sentences in context – for only the larger combination gives the 'sense'*.

Next let us consider the speaking of a foreign language. The ability to speak in any language is closely linked to the ability to 'think' in that language[4], and this raises at once the question of the general relation between language and thought. Does one 'have ideas' or 'think' and then put these thoughts into words to express or communicate them? or does one 'have ideas' primarily in verbal forms and 'think' by manipulating verbal

[3] see J. C. Cotton: Normal 'Visual Hearing' (*Science*, 1935). He found that mechanically distorted speech was still intelligible when the speaker was visible, but with an equal amount of distortion was incomprehensible when the speaker was invisible to the hearers.
[4] Making use of the ability to think in Latin is, of course, often considered to be a particularly valuable intellectual discipline.

symbols? Many psychologists believe that the processes of the brain are closely related to speech, that 'ideas' are in fact sub-vocal or internal speech or the mental images of verbal symbols. When a person has a thought, minute movements are observable in his vocal apparatus similar to those which would occur if he were speaking this thought aloud. Although it is possible to overemphasize the linguistic aspects of thought and thinking, we can still accept that most of the thinking of most people is in linguistic form, much of it in the shape of internal or sub-vocal speech[5].

The linguistic nature of thought obviously affects the idea of 'thinking in the foreign language': by this we mean that the stream of internal speech (which is of course often telegraphic and extremely fast, like silent reading) should go on in the foreign language rather than in the native tongue. We should note that (i) this internal speech is highly automatic and unconscious; therefore similar activity in the foreign language must also be highly automatic before thinking can take place in it. (ii) As with the listener in aural comprehension, the speaker's speech may lag behind his thought. Utterance is conceived, at least in part, before it is spoken; and by 'conceived' we mean some kind of verbal activity, perhaps sub-vocal speech, or visual or auditory image.

The automatic nature of speech (whether audible or sub-vocal) is clearly basic to 'thinking in the foreign language', but how is it to be acquired? In its simplest form this automatism is familiar to us in the formulae of greeting, politeness, and the like; we use them in our own language almost as conditioned reflexes, and they are readily handled in a foreign language without much, if any, conscious effort. But such fossilized expressions are only a small fraction of the language. Language teachers have sometimes pinned their hopes to the 'theory of direct associations'; by this, presumably, a Latin student should think immediately in Latin

[5] L. W. Max (in *J. Compar. Psych.* 1935) found that deaf mutes, when they dream, allow minute activity in their finger muscles of the same patterns as those used in their sign language. Even for them thought was being expressed in the form of language.

mediately of *creta*, *baculum*, *arbor*, when seeing these objects, rather than thinking of the English word and translating it. The teacher sought to form a 'direct association', to 'fuse the symbol with the thing'; and skilful use of visual aids could extend widely the variety of 'things' put before the student. But this is of little help when he has to form an abstract mental concept. Such concepts will be in verbal form, whether native or foreign: either the student will form his mental concepts in English, which will then be translated – an indirect and inefficient method, or he will form his concepts originally in the foreign language. And although this is clearly the more desirable alternative, it is considerably more difficult than some proponents of the Direct Method have wished to believe.

In the first place it is hard to keep the student mentally in the foreign language. Even the modern language student who travels abroad is inhibited by his linguistic habits: he may promise to speak only the foreign language, but this does not affect his thoughts. There is a danger of self-deception, with the student believing that he is actually thinking in the foreign language and labelling as mere 'perceptions' all the concepts which he continues to form unconsciously in his native language.

Secondly it is difficult to find means to aid the student to form his concepts directly. Too often the student is not given the language for his own concept but for that of the teacher; the situation is described from the teacher's point of view. Even a deliberately third-person statement does not avoid this: the teacher may say 'The master strikes the boy' but the student's thought is probably 'The master strikes the boy' or 'The master is pretending to strike the boy'. In short, some Direct Method enthusiasts (in both modern and classical languages) tended to overestimate the help which their conversational procedures gave to the student in 'thinking' in the foreign language. Materials in the form of dialogues and plays are, indeed, more likely than conversational activities to give the student the linguistic moulds in which to form *his* concepts: it

is easier for him to put himself in the position of a fictitious but clearly-defined character than to simulate a different attitude towards an actual situation. This is a sound theoretical basis for the use of films and other aids.

It has, in fact, been too readily assumed that giving the student the necessary material to speak and understand the foreign language is the same as helping him to think in it: this is especially untrue in the early stages of language study. Direct Method instruction has often emphasized the classroom situation, enabling the student to understand when to open the window or close his book, or how to frame his responses and to ask necessary questions; but much other thought is going on in his mind – perhaps 'I wonder whether I'll be called on next' or 'I wish the bell would ring'. In conversation, he may have learned phrases to say to the teacher or the other speaker, but he has not necessarily been helped to think, in the language, about him and the conversation in general: that is, language teaching has helped him to live his outer life linguistically, not so much his inner life.

Thirdly, the desire that the student should form his concepts in the foreign language leads at the start to a rather vicious circle. The student will form concepts, and these will be in some language; but they cannot be in the foreign language until he has enough of it to cast his concepts in it. The teacher's problem is to avoid self-deception, and gradually to expand the area in which the student can and does think in the foreign language. The foreign language channels into which we must seek to turn the flow of thought and speech are, largely, model sentences or basic language-patterns which the student has overlearned and overpractised until they have become automatic. These sentences may be useful in themselves, but their chief function is to serve as basic linguistic equations in which numerous substitutions can be made. The principle is the same as in aural comprehension — to increase the size of the unit of language with which the student works.

Two points of warning are, however, necessary. (i) It is easy for teachers to underestimate the total number of patterns needed:

a native speaker of a language is able to substitute so much and to draw analogies simply because he has long practised this activity and knows which substitutions are permissible. (ii) Even after the student has learned the basic patterns, an enormous amount of practice is necessary in substituting, that is in manipulating the possible changes. For until the foreign language can become as available a medium of thought as the native language, most of the student's thinking will continue to be in his own language.

Is language learning made easier for different types of student by different methods of presentation? Psychologists distinguish the learning-types of students as visual (what we call 'eye-minded'), audial ('ear-minded'), and 'kinesthetic' or 'motor'. A parallel is seen in the playing of a musical instrument: in playing a piece from memory some pianists will 'read' from a clear mental image of the score; others will follow the sounds (the original meaning of 'playing by ear'); others will 'feel' their way by remembering the succession of muscular movements which they have practised. Similarly in language work some students will learn and remember by seeing the printed word or sentence and by retaining a mental image of it; for others the aural perception and memory will be more vivid; for a third group the muscular movements involved in speaking and writing the word will be the most effective aid to learning.

There are two closely-linked implications of this: (i) It seems likely that different students will tend to become most proficient at different types of language skill; the visually inclined student might excel in reading but be less successful in the aural-oral skills, while the audial type would be the reverse. (ii) The methods by which we present language materials should be varied enough to appeal to all types of student. For example, although we may approve of the recent emphasis on the aural-oral skills and methods of presentation, can we expect a visually minded student to learn efficiently materials which he primarily

hears? One investigation[6] into language teaching with visual and auditory materials showed that varying the mode of presentation had little effect on the learning of vocabulary, but that visual presentation was much more effective than audial in making possible grammatical inference and the recognition of grammatical forms.

From what has been said, however, it is clear that the chief function of visual aids is not the teaching of vocabulary, nor the explanation of grammatical and structural points, but the provision of a natural setting for the language patterns which are being learnt, that is the total context or situation which gives the language its meaning. If the use of visual aids can (i) provide a glimpse of the real-life circumstances in which the words, phrases, and other language units come to life, and (ii) enliven or even motivate the constant repetition necessary for the material to be mastered, we will avoid the tendency for a foreign language (especially Latin) to appear a mere parade of rote-learnt and disembodied forms.

Of course, no teaching aid can ever improve in all aspects on the normal classroom situation; only there are to be found the mutual audibility, visibility, and accessibility of teacher and pupil, all of which are essential elements in language teaching. Visibility is essential for showing that what is learnt is meaningful (it is easier to suggest contexts visually than aurally) and is necessary for the learning of the written language. Audibility is necessary for the learning of the spoken language. Audibility is, however, the more important in so far as language has to be learnt as the spoken expression of thought. Mutual accessibility is essential if a language is to be acquired as quickly as possible, since where this accessibility is lacking (as, for example, in tape-recordings, films, television programmes) the pupils are less active and the teacher's efforts are less sharply focussed. The classroom situation, therefore, has big advantages over other teaching media, which lack one or more of these three factors;

6 The University of Chicago Investigation of the Teaching of a Second Language, reported in H. B. Dunkel: Second-Language Learning (1948), chapter IX and Appendix A.

nevertheless, the classroom can itself be improved on by adding the advantages of other media.

A person learning a foreign language naturally, among native speakers, is like a child learning its own language in that he has many stimuli to urge him to use the language spontaneously. The teacher in the classroom has to make up for the lack of natural stimuli, and has to call on his pupils' imagination; and he must realise that in so doing he is making demands on them. It will not do to use the objects and situations shown in a picture, film, or other visual aid, as if they were the real objects and situations: even the best representation needs to be related to experienced reality by an effort, sometimes only a slight effort of the imagination.

This imaginative effort is perhaps made easier (especially for younger pupils) if the visual material is not used until the particular structural point has already been introduced and practised in the classroom situation itself. It is probably better always to introduce new work by beginning the lesson with practice of what is familiar; leading gradually to the new material being used, as far as possible, in the familiar context of the classroom; and only then showing it in its more natural, but less familiar, setting by means of visual media. A compromise is, in fact, desirable between the extreme Direct Methodist who demands that the language should be used only to describe what is familiar to the pupil and the teacher who overemphasizes the strangeness of what should, after all, be merely a natural context for the language. It is extremely difficult in the case of Latin to keep this balance; the more one stresses the unfamiliar, and extremely interesting, background for its cultural value, the less natural will seem the setting, the more 'dead' the language.

It is beyond the scope of this article to discuss the relative merits of various audio-visual aids: the range of media which can be used for language teaching – from flannelgraph to tape-recorder, from slide-projector to a complete audio-visual course such as that mentioned in the first paragraph – is very wide, and there

is scope for much experiment. But this should be based on theory, and the theory rests on a paradox: that visual aids in language teaching are a part of the *oral* method of teaching the language. They serve, that is, to provide the natural situation for the language as spoken; ideally they should at the same time enrich the cultural aspect of language study.

A possible objection to the use of an audio-visual course to teach Latin is that we are not trying, ultimately, to teach our pupils to speak the language. But if the theory of modern language teaching is correct – that in order to teach a student to read you should first teach him to speak – there is no good reason why this should not apply also to Latin. There is of course the problem of making the teacher himself a competent Latin speaker, but this is not insuperable as the Direct Methodists have shown; and the Latin teacher in planning a course would have the advantage over the Modern Language teacher (who has to work with several ends in view) in that he could predict the use to which Latin would be put, namely reading. Besides, to introduce the language at first in its more conversational form does no harm when we are concerned with teaching basic language-structures rather than vocabulary: what is essential is that the language should be seen from the start as a means of communication rather than a sort of intellectual code.

MICHAEL SARGENT
is Assistant Classics Master
at Watford Grammar School for Boys