The Language Laboratory and
Teaching English at College Level in Japan

by

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Abstract

A recommendation made by the Central Council on Education in Japan, states that in foreign language education the main concentration should be placed on the development of practical abilities. Language laboratory facilities are becoming widespread in Japan as one of the most effective methods of meeting the needs of foreign language training.

In this paper, the first portion deals with the definition of the language laboratory from the technical and the theoretical point of view. It includes the following discussions.

1. The background to the development of the language laboratory.

2. The place of the language laboratory in foreign language education.

3. The basic functions of the language laboratory.

4. The classification of language laboratory facilities.

The second portion presents an analysis of language skills, both audio-lingual and visual. The discussion is centered on the problem of which skills are most effectively trained through use of the language laboratory. This analysis is presented in the following order.

1. Language skills.

2. Audio-lingual training of language skills.

I Note: This is the first of three parts. The second and third parts will appear in the Spring/Summer issue.

a) Development of aural-perception and aural-comprehension abilities in English.

b) Development of oral-production ability in English.

In the third chapter, teaching materials utilized in the language laboratory are discussed in detail. The main points of discussion are as follows.

¹First of a two-part series. The second will appear in the next issue.

1. The background of theory necessary for preparing teaching materials.
2. The preparation of relevent teaching materials.
a) Presentation patterns used in teaching materials.
b) Drill patterns used in teaching materials.

With this presentation of teaching materials through the utilization of the language laboratory, proficiency in audio-lingual skills can be achieved effectively.

Preface

According to the interim report presented by the Central Council on Education in June, 1970, emphasis in foreign language instruction is placed upon the training of communicative competence in order to facilitate international relations. This training may be carried out in the language laboratory; the result may be examined and graded by the testing systems. Based on the CCE report the roles of the language laboratory will be considered from the following points of view: I. the definition of the language laboratory, II. the development of language skills and the language laboratory instruction, and III. teaching materials in the language laboratory.

I. The Definition of the Language Laboratory

The language laboratory can be divided into two categories: one for research such as language analysis or description, and the other for language instruction. In this paper, the discussion will be centered on the latter.

Today, the language laboratory has become the focal point in meeting the needs of effective and efficient ways of teaching foreign languages. In addition, because it is affected by technological development and the progress of educational engineering, the language laboratory has developed in a variety of types. For example, there is the highly modified language laboratory[1] in which all teaching plans are programmed into a computer. There is also the language laboratory with video recorders or teaching analysers for individual or collective learning, or the more simplified language laboratory which makes efficient use of tape recorders. In addition to variety in type, the language laboratory has been given various names such as 'language learning room', 'language training room', 'speech clinic', 'foreign language exercise room', and the like. Now, we would like to consider the essential conditions of the language laboratory through its various functions, names, and interpretations.

1. The Background Which Has Helped the Development of the Language Laboratory

There are three factors which have helped improve methods of learning in the language laboratory.

First, the development of electronic devices, especially the dual channel tape recorder has contributed to better utilization of the language laboratory. Secondly, the development of video recorders, overhead projectors, and computers has greatly influenced the growth of the language laboratory.

The third factor is the improvement of teaching methods based on a new linguistic theory. Structural linguistics has developed modes of language instruction based on the audiolingual method, which aims at building up linguistic habits efficiently by training the four language skills; listening, speaking, reading, and writing, in that order. In other words, language instruction should be done essentially through exercises on listening comprehension and the oral production which follows.

Many of the tape-recorded lessons in the language laboratory are based on the four phases: stimulus—response—positive response-reinforcement. The establishment of the S-R model in Skinner's theory of behaviorism which contains the idea of learning by step is the aim of each stimulus and response. Therefore, the tape-recorded lessons can be regarded as programmed learning.

It should be noted here that the "small step" in programmed learning has been overly credited, and that Skinner's S-R theory has failed to take full account of language activity as meaningful behavior. The S-R theory is effective for reinforcement of automatic habit formation, or for exercises in pronunciation and sentence pattern practice in the language laboratory at the first stage of foreign language acquisition. However, it is not appropriate for advanced language learning with meaning involved.[2]

2. The Position of the Language Laboratory in Foreign Language Instruction.

There are generally thought to be three different views on the position of the language laboratory in language instruction. The first is described by what is called the integrated laboratory classroom instruction followed by language laboratory practice in order to reinforce lessons as a whole. In this view, the language laboratory is strictly placed in the lesson plan, and only the areas which cannot be handled in the classroom are taught in the language laboratory.

The second viewpoint is that the language laboratory is utiilized as a supplement to or reinforcement of classroom instruction. Here, lessons in the language laboratory are not necessarily tied in with lessons in the classroom.

In the third standpoint, the language laboratory is regarded as an independent facility for language learning. F. R. Morton views the language laboratory as a teaching machine which is entirely mechanized and programmed. He claims that foreign language acquisition can be

mostly achieved through the language laboratory.[3] At this point, it can be interpreted that the language teacher is responsible for the human aspects of language.

3. The Basic Functions of the Language Laboratory.

Since the role of the language laboratory is to train the students' listening and speaking abilities, the language laboratory should provide lessons individually or collectively (according to the students' abilities) under the same acoustic conditions. And also, the language laboratory should provide exercises in mimicry or manipulation of the target language so that the students can listen to different utterances of various model speakers.

It is possible for each student to increase the amount of exercise, because through the devices he develops a one-to-one relation to recorded lessons. Moreover, the student can compare objectively his own utterance with that of a informant to some extent, and a considerable amount of feedback by both sides is achieved.

4. The Classification of Language Laboratory Facilities.

In general, there are three basic types of language laboratories. As mentioned earlier, the language laboratory has been given various names and interpretations, however its basic construction is with one of the following three types as its main format.

1) audio-passive lab (A-P)
For the training of listening ability, some kind of receiving device to listen to the recorded material is essential. Besides the receiving device, the student's desk (or booth) is equipped with a switch for program selection. In this type of lab, the student can practice both aural comprehension and dictation. Feedback by the student is impossible using this format.

2) audio-active lab (A-A)
An A-A lab equiped with microphones is needed in order to train listening and speaking abilities. In this type, each booth has a microphone and an amplifier. Since the student's oral response is conveyed to his ear through the microphone and earphone, the feedback can be properly achieved. Further, the student's oral response can be monitored from the operation console, and the student's mistake can be corrected through the earphone. In an A-A lab, it is obvious that almost all types of exercises are possible except individual learning.

3) audio-active-comparative lab (A-A-C)
In order to exercise both difficult or easy points at his own pace, the student needs a recorder in his booth. With a recorder, he can record his responses if necessary. The A-A-C lab is most characterized by the dual-channel recorder, which makes it possible to play back on two

channels simultaneously. The student can record his oral responses on channel B at the same time as he listens to recorded lessons on channel A. In playing back, the student receives feedback by listening to channel A and B simultaneously and comparing them objectively. Moreover, without erasing the model on A, the student can erase his own oral responses on B and start recording again. In terms of self-evaluation, there is an argument that the use of an A-A-C lab is not appropriate in the early stage of language learning. It is extremely effective, however, when the student commits himself to learning and identifying differences in sound. Other types of language laboratories which can be seen recently are the simultaneous use of visual aids such as slides, film-strips, 8 or 16mm films, the overhead projectors or similar devices to present teaching materials visually and vividly. Another type is that in which there is an installation of a television monitor in each booth to make individual learning possible.[4] Visual aids, as in Table I below, can be used effectively in any of the basic types A-P, A-A, and A-A-C. However, the place of (V) must move according to the order of teaching goals.

Recently, another type of language laboratory, which combines a teaching analyzer with A-P, A-A, A-A-C, is coming into use.

The Classification of Language Laboratory Facilities

AP=Audio-Passive   listen

AA=Audio-Active   listen & repeat

AAC=Audio-Active-Comparative   listen, repeat & compare

V=Visual aids

	(V) P	A (V) A	A (V) AC
booth	+	+	+
microphone	—	+	+
earphone/speaker	+	+	+
learning devices (tape recorded)	—	—	+
teaching materials (tape-recorded)	+	—	+
teaching devices (tape-recorded)	+	+	+
monitor system	—	+	+
V devices	(+)	(+)	(+)

5. The Definition of the Language Laboratory.

As mentioned earlier, the name language laboratory has been given to language exercise rooms with some kind of machine and its function, including the simplified language laboratory. We would like to consider the basic conditions of the language laboratory in terms of machine, function, and teaching material.

1) Booth

The booth functions in two ways, (1) acoustic interception and (2) psychological individualization of learning. In the early development of language laboratories, the panel between booths was higher than it is today, and the booth was regarded as a symbol of the language laboratory. However, with the development of technology and teaching materials, the panel has become lower in recent years. Further, the use of glass in front of each booth, which facilitates the teacher's supervision of the student, is becoming popular. Booths incorporating manually or electronically operated panels or folding-up desks, are also being developed, to be utilized according to the type of lessons.

2) Tape recorder in the booth.

In general, with a dual channel tape recorder, each student can self-evaluate and learn at his own pace. As to the former, according to Kaneda's "On the Definition of the Language Laboratory",[5] the student needs a good amount of previous exercise in order to evaluate his own utterance by comparing it with an informant's. Since it takes time to increase the effect of selfevaluation, listening to good lessons is desirable. M. Kaneda maintains that, without dependance on the function of the tape recorder, learning in proportion to the student's progress may be accomplished through several switches for program selection, R. Lado asserts that the tape recorder in the student's booth requires a great amount of maintenance expenditure. He goes on to say that it is time-consuming for the student to get used to manipulating the tape recorder. To solve these problems, the dial system is employed in the new type of language laboratory. When dialing number 1, the student can listen to the lessons he desires through the earphone; dialing number 2 enables him to record his own responses into the tape recorder through the microphone, and when dialing number 3, he may listen to his own recorded responses.

3) Earphone.

Each basic type of language laboratory (A-P, A-A and A-A-C) has a receiving device, that is, the earphone. The earphone, intercepts the outside noise in order for the student to listen to lessons under one-to-one conditions. In combination with the microphone it enables the student to

get feedback to some extent. Recenly, however, a new type of language laboratory has appeared in which the student can learn without the earphone in an individual booth where a tape recorder is installed.

4) Tape recorder

The use of tape recorders to run the recorded lesson by the teacher is common to all the basic types of language laboratories. In using a tape recorder in the classroom, whether it is a basic common condition or not depends on the recorded lesson, the type of class, and so forth.

5) Teaching Materials in the Language Laboratory (Recorded Lessons).

What was known as tape-recorded teaching material was sold and used widely before the language laboratory method was introduced in foreign language instruction. However, those kinds of recorded tapes were not good for language laboratory instruction because they had no consideration for the context shown in the text or the pause for exercise. Teaching materials in the language laboratory have been based on the programmed learning theory and the audiolingual method. The use of recorded lessons inevitably requires the specific method found in the language laboratroy, which is completely different from the type of lesson used in the classroom instruction. This will be discussed in detail in the third portion of this paper.

Definition:

The language laboratory is a room where language skills are effectively trained through speech sounds by use of appropriate mediated teaching materials. It involves the whole system necessary for the operation.

If the language laboratory is defined from the standpoint that the essence of language is speech, it may be said that the language laboratory is a place for language learning through basic speech sounds. The reason for using the term "language" in the above definition is that the language laboratory is already used for correction of pronunciation in mother tongue or training of announcing skills, as well as foreign language acquisition. The main goal of learning in the language laboratory is to acquire language skills, and therapeutic training is also involved. "Teaching materials" refer to speech sounds recorded and compiled in some way. Therefore, they do not include the voice of a model informant uttered in the classroom. The preparation of "appropriate teaching materials" is based on the theory and method mentioned in (5), and a device to use them effectively is most essential. "Some kind of machine and its function" contains tape recorders, machines to transmit speech sounds clearly and correctly, devices for visual aids, and so forth. Finally, since the operation of the language laboratory is carried on efficiently and systematically by machines and human factors, it is stated as follows: "It involves the whole system necessary for the operation."

Notes

[1]HITACHI CLI "SYSTEM 70"

[2]Mitoji Nichimoto, ed., **50 Lectures on AV Education.** Nippon Hoso Kyoiku Kyokai, 1965, pp. 198-199.

[3]Ferdinand R. Morton, **The Language Laboratory as a Teaching Machine.** University of Michigan Press, 1961, p. 57.

[4]An Analysis of the Process of Language Sound Perception Lecture given by Professor Watanabe of Kumamoto University at the Language Laboratory Association Conference, Dec. 2, 1970.

[5]Michiko Temma, **Language Laboratory Facilities and its Utilization,** Audio Visual Room, Kenkyu-sha, 1966, pp. 47-48.

[6]Masaya Kaneda, "Definition of the Language Laboratory," **Nagoya Gakuin University Journal,** No. 6. 1966, pp. 308-309.

[7]Robert Lado, **Language Teaching—A Scientific Approach.** McGraw-Hill 1964, p. 240.