A SYNTHESIS OF AUDIOLINGUAL AND COGNITIVE APPROACHES TO LABORATORY SOFTWARE

by

HIROKO WAGNER

B. A., University of Nebraska at Omaha, 1972

A MASTER'S THESIS

Submitted in partial fulfillment of the

requirements for the degree

MASTER OF SCIENCE

COLLEGE OF EDUCATION
Department of Curriculum and Instruction

KANSAS STATE UNIVERSITY
Manhattan, Kansas

1982

Approved by:

[Signature]
Major Professor
Acknowledgements

I wish to express my gratitude to my major professor, Dr. Loren Alexander, for his scholastic assistance and understanding throughout my project. As an experienced teacher and scholar in the field of teaching foreign languages, he provided me with keen criticism on some sections and constant encouragement which enabled me to complete this thesis.

I am also very grateful to my other committee members, Professor Charles Heerman and Professor Heinz Bulmahn, for the valuable opinions and advice that they gave to strengthen my thesis.

In addition, I would like to express my thanks to Mrs. Ann Torczon, the director of the Learning Laboratory at the University of New Orleans, who allowed me to conduct experiments in the laboratory. I also wish to thank ESL students at UNO for their involvement and interests in these experiments.

To my husband, sons, and parents, my appreciation is extended for their love and patience.
## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>I. Pronunciation</td>
<td>14</td>
</tr>
<tr>
<td>II. Grammar</td>
<td>24</td>
</tr>
<tr>
<td>III. Vocabulary Expansion</td>
<td>38</td>
</tr>
<tr>
<td>IV. Listening Comprehension</td>
<td>50</td>
</tr>
<tr>
<td>V. Speaking</td>
<td>61</td>
</tr>
<tr>
<td>VI. Reading</td>
<td>70</td>
</tr>
<tr>
<td>VII. Writing</td>
<td>81</td>
</tr>
<tr>
<td>VIII. Experiments</td>
<td>92</td>
</tr>
<tr>
<td>Conclusion</td>
<td>100</td>
</tr>
<tr>
<td>Bibliography</td>
<td>102</td>
</tr>
</tbody>
</table>
Introduction

When we look at the current situation in language laboratories in the universities, we come to notice that
they are obviously underused, and gradually some are even left out of the university curriculum. To find out a cause
for this problem and ultimately to look for a possible solution to revitalize the language laboratory, I started
my research in this area.

According to Raymond Keating (1963), the use of the language laboratory basically goes back to the World War II
Army Specialized Training Program, in which the audiolingual method was implemented with the support of the language
laboratory. Yale University began its experimental intensive German program emphasizing the acquisition of listening
and speaking skills in the laboratory. Other schools and colleges followed this example and supplemented their lan-
guage programs with language laboratories (p.6).

Some language specialists found several definite advantages in this booming development of language labora-
tories in the 1950's and 1960's. Edward Stack pointed out that while "a classroom recitation of twenty five students
would afford each student only two minutes of active participatpation during a 50-minute period, 30 minutes in the
language laboratory afford at least 20 minutes of intensive, incessant, active, individual practice" (1966, p.84).
Alfred Hayes stressed that the language laboratory with its
good acoustic conditions provides a place to make an "intimate contact with the language" (1963, p.29). Altman noted that a library type of language laboratory allows students to have individually paced learning (Altman, 1977, p.77). Stack further added that the laboratory booth creates a sense of psychological isolation from any embarrassment of pressure which students normally feel in language learning in the classroom (1966, p.145). Such positive comments by well-known language scholars contributed to the acceleration of the development of language laboratories. As a result of the language boom of the 1950's and 1960's, most universities and colleges are today equipped with a language laboratory of one type or another.

But then, upon looking at the declining usage of the language laboratory in the last ten years as indicated in Wardhaugh (1968), So (1974), Forest (1976), Dobbyn (1977), Taylor (1979), and Epting and Bowen (1979), we question what went wrong. Epting and Bowen explain that the problem of the underused laboratory is mainly due to a shift in the philosophy of foreign language teaching away from the audiolingual method (1979, p.74). Teachers were not satisfied with the results of the audiolingual method and found several disadvantages in the use of the language laboratory. Wilga Rivers, Professor of Romance Language
and Coordinator of Language Instruction at Harvard University, thought that the phonetic and structural drills were too repetitious and mechanical, thus creating boredom especially among the advanced students (1981, p.421). Epting and Bowen questioned the value of existing commercial laboratory materials which were not fulfilling the needs of ESL students attending American universities. E.J. John observed the students working with a tape recorder and a headphone in the laboratory and recognized that the audio-lingual method contains the danger of students mimicking without understanding the content of the materials (1980, p.295). John Joseph Higgins also argued that the students are not willing to continue performing pattern drills and pronunciation drills especially when "the material cannot be interpreted. Learners do try constantly to understand what they hear" (1975, p.153). Muriel Saville-Troike noticed that some students cannot learn the language just by listening and speaking it. He resented the overemphasis of listening and speaking skill acquisition and the exclusion of development in reading and writing skills in the audiolingual method (1973, p.405). Wu Yi So, the Director of the Language Lab, English Language Center at Michigan State University, reported that the advanced students complained about the available laboratory materials
being not really helpful to them in developing academic skills such as understanding lectures, taking notes, and expressing themselves in discussions (1974, p.293). These examples obviously indicate that the problems to be solved exist in the language software and also ultimately in the audiolingual method itself, because this method has been implemented in the production of such materials.

Recent trends in methodology indicate that the pendulum has shifted from the audiolingual method toward approaches in which students learn by "understanding and ultimately internalizing the 'rules' of that language and using them to communicate in an original and creative manner," (Davidson, 1980, p.317). It is a move away from the machine-oriented toward more human-oriented learning, and ESL teachers as well as other foreign language teachers cherish and welcome the new orientation of these approaches.

In this process of changing, however, Clifford H. Prator warns teachers not to get caught in what he calls the "pendulum syndrome" (1980, p.19). He claims that teachers tend to rush to a new approach negating all the principles of an old approach. He finds a danger in such an attitude of shifting from one extreme to another, because in this process some valid elements in an old approach tend to get lost or wasted.
In agreement with Prator's opinion, when we observe the present condition of the language laboratory, we come to suspect that the language laboratory may be a casualty suffering from the result of this "pendulum syndrome." This makes us question whether or not it is possible to bring a change into the present stagnant condition of the language laboratory. Is there any way to apply the cognitive code theory to the audiolingual laboratory framework? Is it possible to carry on some, if not exact, then modified audiolingual elements and at the same time implement the cognitive code theory in the laboratory materials?

In order to examine what could be done about the problematic areas of the software and consequently improve the laboratory condition again, I chose among several new approaches the cognitive approach which emphasizes the "internal" process of learning as directly opposed to the "external" habit formation stressed in the audiolingual approach (Chastain, 1979, p.1). Let us now compare and contrast the principles of the audiolingual and cognitive approaches.

Audiolingual theory was greatly influenced by structural linguistics and behavioristic psychology of the 1920's and 1930's. Such structural linguists as Leonard Bloomfield and Charles C. Fries described language as
physical "form" and rejected anything related to meaning. They viewed language acquisition scientifically and physically as if "a collection of discrete items" were "put together like building blocks" (Newton, 1980, p.18).

Behaviorist psychology represented by B.F. Skinner also gave a scientific treatment to language learning. It claimed that all learning including language learning requires conditioning, a habit formation through the repetitions of stimuli and responses (Newton, 1980, p.18).

In 1961, William Moulton formulated the basic tenets of the audiolingual approach:

1. Language is speech, not writing.
2. A language is a set of habits.
3. Teach the language, not about the language.
4. A language is what native speakers say, not what someone thinks they ought to say.
5. Languages are different.

(Prator, 1980, p.13)

The basic tenets mentioned in 1 and 4 of Moulton's list indicate that the audiolingual approach put a primary emphasis on listening and speaking; hence, the name of the method became audio-lingual. The written form of language for reading and writing were used only to supplement listening and speaking activities.
The tenets stated in 2 and 3, expressing the importance of mechanical habit formation and the deemphasis on the mental aspect of the language were realized in the phonetic and pattern drills. Through the practice of new sounds and patterns of the language, a person learned another set of speech habits different from his native tongue, the idea of which is indicated in tenet 5. Hayes' article on the function of the language laboratory published in 1963 supported these factors. "The main purpose of the language laboratory is to provide . . . efficient practice" (p.70).
Comparing language learning with mastering a piano, he continued as follows:

Learning a foreign language is much like learning a musical instrument . . . (in the sense that) the one (is related) to sounds, words, forms, and constructions, the other to notes, scales, and chords, to which the listener reacts . . . The mechanics of piano playing must be automatic, or the student will never be able to concentrate on reproducing the 'meaning' the composer intended" (p.70).

In 1965 the view of structural linguists was strongly challenged by Chomsky whose linguistic theory is now commonly known as transformational generative grammar. He and his followers believed that language is a mental phenomenon, that speech and writing are two different manifestations of language. They also asserted that learning language is not habit formation, but "a creative process -- a
rationalistic, cognitive activity" (Newton, 1979, p.19).

Cognitive psychologists shared the same kind of view and expressed the idea that the learner's mind absorbs new knowledge through its conscious control over selection, acquisition, organization, and utilization of in-coming information. In this process, the learner has to relate the new knowledge to the knowledge that he had already obtained (Croft, 1980, p.5).

In agreement with the theories of transformational generative grammar and cognitive psychology, Chastain (1979) summed up the characteristics of the cognitive code theory that are in sharp disagreement with the audiolingual theory which I mentioned on page six.

1. The use of language is governed by the rules of the language.

2. Native speakers can activate this finite set of rules to create an infinite variety of communiques.

3. The native speaker's knowledge of the language system (competence) gives him the capacity of saying much more than he actually says (performance).

4. The native speaker has the ability to comprehend the meaning of a sentence, contained in the deep structure, by seeing or hearing the surface structure of the sentence.

5. There are two types of language rules: (a) generative rules, which account for the formation of basic sentences, and (b) transformation rules, which
account for all of the changes that can be made in the basic sentences of the language.

6. Meaning resides either in the semantics or the syntax of the language.

7. Children are born with an innate capacity to learn language.

8. GT linguists postulate the existence of universal elements of grammar.

(1979, pp.14-15)

As shown in the list above, the cognitive code theory, contrary to the audiolingual theory, considers language as a mental phenomenon, not physical, and stresses the importance of learning language as knowledge. The mental acquisition of the language requires a learner to obtain conscious control over the rules of grammar and to be concerned with the semantics and structures of the language.

The ideological arguments were manifested in the practical criticism against the audiolingual method made by the ESL teachers and other language specialists. They rejected the mere mechanicalness of audiolingual exercises and the lack of coherence from one sentence to another, the overemphasis of listening and speaking skills and the lack of emphasis on reading and writing skills, the inductive approach to the teaching of grammar, the content having little concern with the learners' needs and interest, etc. Instead, in practice they valued topics
with meaningful content realistic enough to the learner's life situation, contextualization, an inclusion of reading and writing skill acquisition, a deductive approach to grammar, etc.

There exists, however, a questionable part in the presupposition made by such cognitive code theorists as John B. Carroll (1966). He stated: "Provided the student has a proper degree of cognitive control over the structures of the language, facility will develop automatically with use of the language in meaningful situations" (p.102). Does the physical production of the language happen "automatically" if the student learns the language as knowledge? Later Carroll himself recognized a deficiency in such a presupposition and added that learning a language involves not only cognitive understanding of the language but also practice in the production of language. At the TESOL convention in March 1971, he noted that "stimulus, response, and conditioning are indispensable concepts in the psychology of learning (p.7)."

This idea is certainly a rediscovery of some validity in the heavily criticized old method. Consequently it justifies the utilization of the language laboratory again for practice in the production of the language, though this time through cognitive activities.
With the recent interest in the production of language, Krashen points out another weakness in cognitive learning. He believes that because of its demand on students’ conscious control over grammatical rules, there is a problem of some students getting strangled with the monitoring effect and not being able to express themselves (Krashen, 1980, p.215). In the discussion of language acquisition, Wilga Rivers stressed the need for providing "skill-using" exercises beyond "skill-getting" exercises. She asserts that besides the manipulative production practice, students should have "skill-using" practice in interaction (Rivers, 1973, p.25). Thinking of the laboratory environment, however, it is difficult to provide exercises which require the students to express themselves in spontaneous interaction. In other words, "the meaningful situations" that John Carroll talks about are rarely presentable in the laboratory. Applying a synthesis of the cognitive approach and audiolingual approach to laboratory exercises thus requires a very careful analysis.

Finding some solutions to those problems pointed out by Krashen and Rivers, I notice that both scholars agree on the application of contextualization to the exercises. Krashen believes that contextualization will reduce the rigid monitoring effect and stimulate the creative con-
struction process especially in speech (Krashen, 1980, p.219). Rivers thinks that contextualization will help students develop logical and creative thought (Rivers, 1978, p.296).

For the production of language, in order to prepare the students for self-expression and stimulate their motivations, contexts and language activities should be chosen according to the needs and interests of the students. Wardhaugh's statement reflects this concern:

We must respond to the different needs of students, the different language patterns they exhibit, and the different inclinations and motives that they have in learning... I see a need for lots of examples, lots of variety, and lots of context-oriented work.

(Wardhaugh, 1969, p.111)

Because of the emphasis on knowing about the language, the cognitive approach considers that learning the spoken and written forms of language has equal value. In agreement with this idea, Taylor asserts that both forms of language should be presented and taught to the students simultaneously (Taylor, 1980, pp.368,9).

Therefore, through contextualization, the integration of spoken and written modes of language, and the activities and programs developed according to the students' needs and interests, I attempt to synthesize two approaches, the audiolingual and the cognitive. At the same time I argue
that the application of such synthesis to the laboratory software will improve the students' achievements and attitudes in laboratory work.
I. Pronunciation Drills

During the period when the audiolingual method was dominating the teaching field of foreign languages, pronunciation played a very important role because of its emphasis on the spoken form of language. The extract from p.89 of *Conversational English* (1965) is a typical example of audiolingual pronunciation exercises.

Pl: Vowel Review
(W+T) Repeat and contrast the following pairs of words.

-/E/ and /æ/  /i/ and /I/  /ɔ/ and /ə/
bed  bad  lean  Lynn  bad  bud
fed  fad  bean  bin  dad  dud
led  lad  keen  kin  mad  mud
said  sad  beet  bit  hang  hung
men  man  seat  sit  rang  rung

In the pronunciation drill above, as well as throughout my paper, I use the following abbreviations and numbering system. W stands for "on worksheet"; T, "on tape"; and W+T, "both on worksheet and tape." Drills and exercises are numbered in each section, and the letter before the number is the abbreviation for the name of the section. For example, Pl means the first drill in the pronunciation section.

In the article, "Contextualizing Pronunciation Practice in the ESL Classroom" (1972), Donald Bowen
observes that a problem with this kind of pronunciation drill is that the students usually do them quite satisfactorily, but as soon as the students' attention goes to the content, the controlled pronunciation is replaced with the heavy accents of their native languages.

In finding a solution to this problem of internalizing the pronunciation of minimal pairs, that is, "pairs of words which differ in one sound only" (Trager and Henderson, 1976, p.3), he questions the way these drills are presented, namely being so unrelated to 'a meaningful context,' and argues that "pronunciation can be presented in meaningful contrasts and in situations that are both relevant and interesting to the students" (Bowen, 1972, p.83). Charles Parish, in his essay, "A Practical Philosophy of Pronunciation," supports Bowen's view of presenting minimal pairs in real-life situations, thus "demonstrating to students the consequences of interchanging sounds and how they cause misunderstanding or noncommunication" (1980, p.261).

Bowen considers effective contextualization as follows:

Situations should be meaningfully related to students' interest/or experience; the repetition of specific drills and situations should be minimized; the language and style of pronunciation exercise material should be convincingly natural and realistic; at least some exercises should be designed to give
practice when the student's attention is on the content rather than the form of the message.

(1972, p.82)

In practice, the use of visual aids and reading passages are recommended by Bowen. Following his technique, I contextualized some minimal pair drills and supplied some drawings. This exercise is for beginners.

P2: (W+T) Listen and repeat.

Vowels/æ a/
What's this map for? For reading.
What's this mop for? For cleaning.

Consonants/f V/
What's this fan for? For cooling off.
What's this van for? For driving.

Vowels/i i/ 
Why did he slip? He stepped on a banana peel.
Why did he sleep so long? He was tired.

The contextualization of contrasted minimal pairs of words is made more realistic with the use of visual aids such as stick drawings and pictures in the workbook plus a minimal segment of discourse. In the first group with a minimal pair map and mop, the differentiators read and clean are distinct in meaning and function to identify
those two nouns. The map and mop are "picturable," and the concept of reading and cleaning are realistic to the students (Bowen, 1972, p.92). Contrasted to the audiolingual pronunciation drills shown on Pl above, this way of presenting the drills leads students to thinking of what they are saying rather than to the mere repetition of sounds.

Some texts like Pronunciation Drills (1976) by Trager show some effort in contextualization by providing sentences which contain the cue words. But sentences like, "Is it his?" for the practice of short /i/ sound or "It's not a lot." for the practice of /ɔ/ are certainly not acceptable examples of contextualization because these sentences alone are not giving sufficient information; we cannot tell what it is, or who he is, in the first sentence; neither in the second sentence is the subject clear. A sentence like "I leave the house where I live at five o'clock" (p.21) for the practice of /i,iy/ also fails as a well contextualized sentence. It is an example of forced contextualization due to the lack of naturalness and authenticity of the language; "I leave my house(home) at five o'clock" is the most common expression.

At the intermediate or advanced levels, students may read well and have a pretty good control over grammar, but
still need to correct some of the elements of pronunciation already imperfectly learned. Learning pronunciation is a "continual, ongoing process" (Parish, 1980, p.261) and requires continuous practice throughout the intensive ESL program. For the purpose of preparing the remedial pronunciation program at the upper levels, Bowen suggests that contextualized reading passages should be provided to help students internalize similar phonemes in the forms of minimal pairs while their attention is on the expanded context rather than just on the limited words in contrast.

I made up the following exercise drawing on Bowen's ideas. It provides intensive practice in the articulation of /iy/ and /i/ with special attention to the contrasted words, leave and live.

P3:  (W+T)

Mr. and Mrs. Smith now live in this country, but three years ago they used to live in the Philippines. In order to teach English in a small city, east of Quezon City, they had to leave their children in America; their sons were already in college. Mrs. Smith now says that living and teaching in the Philippines were very interesting to her and her husband, but leaving the children was still very difficult for her. Even if she knew that her children would eventually leave her and become independent, she couldn't help worrying about them.

In this passage the words in contrast, leave and live, are repeated three times each. The passage speaks of a
couple who are ESL teachers, who taught in the Philippines, and of Mrs. Smith's feeling for their children, whom they left in America. The content is realistic and interesting enough to command students' attention. And while their attention is on the content, they can develop the skill of pronouncing the words in contrast as accurately as possible using a tape recording. Other words with the sound /iy/ or /i/ are also incorporated into this passage to give concentrated practice on these sounds. These other words with /iy/ or /i/ are indicated in capital letters in the continuation of P3 below.

P3:

MR. and MRS. SMITH now live IN THIS COUNTRY, but THREE years ago they used to live IN the PHILIPPINES. IN order to TEACH ENGLISH IN a small CITY, EAST of QUEZON CITY, they had to leave their CHILDREN IN AMERICA; their sons were ALREADY IN college. MRS. SMITH now says that living and TEACHING IN PHILIPPINES were VERY INTERESTING to her and her husband, but leaving the CHILDREN was STILL very DIFFICULT for her. EVEN IF SHE knew that her CHILDREN would EVENTUALLY leave her and BECOME INDEPENDENT, SHE couldn't help WORRYING about them.

Bowen's format of minimal setting can be further implemented in a stress contrast as I will demonstrate on P5. The most common way of presenting stress contrast in audiolingual drills is illustrated in Stress and Intonation
(1967, rpt. 1980) prepared by English Language Services, Inc. as follows:

P4:

Exercise: In this exercise decide whether your teacher or the voice on the tape is saying A or B in each group:

3. A. *yellowjacket* (a wasp, or bee-like insect) / B. *yellowjacket* (a yellow coat)

8. A. He's in the green house. / B. He's in the green house.

( pp. 39-40 )

This is a common pattern used for presenting noun compounds and adjective-noun forms in contrast throughout the book. Even though the lexical explanation of each word is supplied in the book, this way of presentation really does not force students to think about the contrasted usage in real life situations. But if I apply Bowen's idea of contextualization to the above examples, the following presentation becomes possible. In each pair of sentences A or B, not only the stress in contrast but also the difference in meanings and uses of the cue words is clearly made distinct through contextualization. And because of this improvement, the contextualized exercise shown below is more meaningful and interesting to the students to perform than the exercise with individual words or isolated
sentences as presented in P4.

P5:  (W+T) Listen and repeat.

A. Why are you afraid of yellowjackets?
   They sting.

3  B. I want to buy a yellow jacket
    at the clothing store.
    Yellow is my favorite color.
    A. What is a greenhouse for?
       For raising plants and flowers.

8  B. Bob lives in the green house on
    the third floor.
    The owner just painted the house green.

And a cognitive exercise for the stress in contrast can be developed in the same manner. Borrowing the modified structure of the "Sound Discrimination" lab exercise suggested by Wu Yi So (1974, p.298), I developed the following exercise for beginners.

P6:
Exercise: Mark the stressed syllable in each of the pairs of words as you read the following sentences.

A. (yellowjacket)--Why are you afraid
   of yellowjackets?
   They sting.

B. (yellow jacket)--I want to buy a
    yellow jacket at the clothing store.
    Yellow is my favorite color.

Then listen to the recording for the answers. The speaker will read each sentence twice. Be sure that you put the stress on the correct syllable.
and repeat after the speaker as he reads a whole sentence.

I applied So's format to my exercise because it basically contains a synthesized form of the cognitive exercise and the audiolingual type of exercise. In the first part of the exercise, the students have to think, choose, and mark the stressed syllables according to their understanding of the meanings found in the contexts. This cognitive exercise is followed by a "repeat-after-me" type of audiolingual exercise. Since the meanings of the sentences are already clear to the students, this part of the exercise plays the role of reinforcement in oral production.

As we can see, in the cognitive exercises specially prepared to improve certain features of pronunciation, the use of spoken and written forms of language is integrated through contextualization. The activities are also developed on the basis of students' needs and interests as I mentioned on pp.15 and 19 so that those who have to improve some features of pronunciation can go to the language laboratory and practice them with the use of tapes and workbooks. At the same time they employ the audiolingual method of listening and repeating for speaking practice.

Thus, the synthesis of the cognitive approach and
the audiolingual approach should, as Bowen's experiments show (Bowen, 1972, p.108), contribute to more effective and productive laboratory usage.
II. Grammar

In this section of my paper, I attempt to show that the language laboratory can also be revitalized if the modified audiolingual and the cognitive approaches are applied to the development of laboratory grammar drills and exercises.

Audiolingual theorists strongly believed that the acquisition of a second language required a habit formation of responses to stimuli, and their idea was implemented in the repetitious practice of pattern drills or structural exercises. A few examples below are the typical exercises illustrating the main idea of audiolingual method.

Gl: four-phase drill:

Repeat the model sentence you hear. In successive sentences replace the last word by the cue words given, making any necessary changes. You then hear the correct sentence. Repeat it if you have made a mistake.

a. model sentence: Do you see my father? He's over there.
cue: Brother
response by student: Do you see my brother? He's over there.
correct response confirmed: Do you see my brother? He's over there.
repetition by student of correct response (if desired): Do you see my brother? He's over there.
further cues (uncle, son, George, Mrs. Smith)

(Rivers, 1978, p.121)

G2: repetition drill:

model Where is the station? Oh, I see it.
student Where is the station? Oh, I see it.

model Where is the cab driver? Oh, I see him.
student Where is the cab driver? Oh, I see him.

model Where are the shops? Oh, I see them.
student Where are the shops? Oh, I see them.

(Rivers, 1978, p.126)

G3: substitution drill:

Rep: Chen needs a lot of help

Sub: eggs S: He needs a lot of eggs.
change He needs a lot of change.
ideas He needs a lot of ideas.
advice He needs a lot of advice.
milk He needs a lot of milk.
pictures He needs a lot of pictures.
candy bars He needs a lot of candy bars.
beer He needs a lot of beer.
cigars He needs a lot of cigars.

(Bruder, 1974, p.113)

These pattern drills are commonly found in laboratory materials. Their importance for ESL students is to familiarize them with the surface structure of the second language. But as Wilga Rivers points out, we should remember that such drills should be used "only as a preliminary practice" because "from mere repetition, no matter how prolonged, the (students) will learn little" (Rivers, 1978,
To make the exercises shown in example G1 and G2 more meaningful, avoiding monotony and promoting cognition, Rivers suggests making them more realistic by constructing a response and answer form, and by using real objects or pictures. In agreement with her ideas, I have developed the following drill for beginners from example G1. This drill is made more natural and realistic with the application of a short dialogue form and visualization.

G4: (W+T) model: Do you see my father over there?
(W+T) Yes, he's in the house.
(W+T) cue: Do you see my father over there?
student: (Yes, he's in the house.)
(W+T) cue: Do you see my mother over there?
st: (Yes, she's in the house.)

Paulston (quoted in Davidson, 1980) applied a question form to these repetition drills. The following exercise for beginners (G5) is an example using Paulston's format. This type of drill is different from the drills shown in examples G1, G2, G3, in the sense that the following example is more meaningful while the others are mechanical. As the reader can see in G5, the response in a meaningful drill is not mere repetition of cue sentences, but it involves some creativity and cognition on the part of the student within the fixed frame. In other words, in
meaningful drills, even though the response is still controlled, the student has to understand cue sentences, and in response he has to know what he is saying (Davidson, 1980, p.318). To be able to use Paulston's format in the laboratory environment, I underlined certain words to specify that the students should form questions focusing on those cue words. Otherwise, there are two or three ways to form a question; for example, to the answer, "Mary is inside.", question like "Who is inside? or "Where is Mary?" are possible.

G5: (W+T) Form wh-questions according to the prefixed answers given as cues, concentrating on the underlined words.

(W+T) cue: Mary is inside. (Voice 1)
       st: (Where is Mary?)
(T)(voice 2) Where is Mary?
(T)(voice 1) Mary is inside.

(W+T) cue: She is dressing up.
       st: (What is she doing?)
(T)(voice 2) What is she doing?
(T)(voice 1) She is dressing up.

(W+T) cue: She is going to the movies.
       st: (Where is she going?)
(T)(voice 2) Where is she going?
(T)(voice 1) She is going to the movies.

In agreement with Carroll's idea of synthesizing elements of the audiolingual and the cognitive approaches James Ney also says that "pattern practice (ought to) be retained . . . for the conditioning of surface forms of a
language," but he strongly asserts the necessity of contextualization of the audiolingual exercises (Ney, 1973, p.6). William Slager supports his view, saying that "to avoid a list of random and disconnected sentences is to create a realistic context to which all the sentences in a single drill are related" (Slager, 1973, p.35). If I apply the idea of contextualization suggested by these scholars to the substitution drill shown in example G3, it becomes more meaningful, realistic, and situation as in exercise G6, which is intended for beginners.

G6: (W+T) Rep: Mr. Johns is opening up a
new restaurant.
He needs a lot of things.

(W+T)
Sub:   tables     S: He needs a lot of tables.
chairs  He needs a lot of chairs.
plates   He needs a lot of plates.
dishes   He needs a lot of dishes.
cups     He needs a lot of cups.
forks    He needs a lot of forks.
knives   He needs a lot of knives.
spoons   He needs a lot of spoons.
coffee   He needs a lot of coffee.
food     He needs a lot of food.

etc.

In her discussion of "cognitive exercises," Wilga Rivers explains that (cognitive exercises) "require of the student an abstract comprehension of the workings of the grammatical system" (1978, p.279). Through cognitive exercises the students explore the possibilities of the grammatical system and become more conscious of the restrictions it
establishes. However, this is still within the stage of "skill-getting." In order to leap from this level to the "skill-using" stage, we need exercises which gradually prepare the students to express their own thought in the target language. In that sense, "the activity must demand of the student understanding of the complete sentence and careful thought" (Rivers, 1978, p.284). Using the criteria suggested above and the formats given in her book, Practical Guides to Teaching of English as a Second or Foreign Language (1978) and in Davidson's article, "Current Approaches to the Teaching of Grammar in ESL" (1980), I developed exercises of different types such as fill-in-the-blank, conversion, restatement, and combination. Wu Yi So's article, "A New Language Laboratory Program for Advanced Students" also gave me some suggestions for making an exercise for the advanced students.


(W) Read the following passage carefully and fill in the blanks with the most appropriate forms of verbs and helping verbs. The verbs are supplied, but not the helping verbs. For checking your answers, turn on your tape recorder. When the speaker reads a whole sentence, be sure to repeat after him.

1. Yesterday, I ( ) to the supermarket.
2. Since my friends ( ) ( ) in the afternoon, I ( ) a bag of
Dorito chips and some beer.

- **take**: 3. But when I ( ) them back home, I realized that the bag of Dorito chips ( )( ) already.
- **open**: 4. I called the store manager and ( ) about it.
- **sell**: 5. He apologized and said that he ( )( ) out all of that brand already.
- **get**: 6. He suggested that I should ( ) a different brand because another stock of supply ( ) not come in until tomorrow.

The reason why the answers to the written exercises are provided on tape rather than at the end of a workbook is to improve students' listening comprehension and also to encourage them to practice the oral production of a certain word in context. As Leslie Dickinson observes, due to the emphasis on reading and writing in the current college curriculum, "many advanced language students are still considerably more capable of reading and writing in the foreign language than they are of speaking and understanding the spoken language" (1970, p.32). To balance the learning of spoken and written modes of the language to some extent, I believe that the students should be directed to practice using the target language in listening and speaking as well as in reading and writing in the language laboratory. Even though the laboratory drills are mostly limited to mechanical and meaning-ful types, and not communicative, such an effort
to balance the use of two forms of the language should not be ignored to build up a good foundation for second language acquisition.

In the essay, "A New Language Laboratory Program for advanced Students" (1974), Wu Yi So suggests another fill-in-the-blank type of drill to develop students' "conscious awareness of the use of the articles." Wu So says that "those whose native languages do not have the articles do not always hear the articles used by native speakers of English" (p.299). In this exercise the students listen to the tape and insert all the articles, definite or indefinite, into the blanks on the worksheet. Wu So observes that some students have to replay the tape two or three times before they can distinguish the correct articles on the tape.

Following Wu So's technique, which was very effective for language laboratory use (So, 1974, p.302), I made up exercise G8 for advanced students:

G8: (W+T) Fill in the blanks with a/an or the as you listen to the tape. Do not put anything where it is not necessary.

A Simple Experiment (an excerpt from Stress and Intonation Part 2, p.100)

(W) ( ) simple experiment will distinguish ( ) two types of human nature. Gather ( ) thron of
(  ) people and pour them into (  )
ferryboat. By (  ) time (  ) boat
has swung into (  ) river you will
find that (  ) certain proportion
have taken (  ) trouble to climb up-
stairs, in order to be out on (  )
deck and see what is to be seen as
they cross over. (  ) rest have
settled indoors, to think what they
will do upon reaching (  ) other
side, or perhaps lose themselves in
(  ) apathy and (  ) tobacco smoke.
But leaving out these apathetic, or
addicted to (  ) single enjoyment,
we may divide all (  ) alert
passengers on (  ) boat into (  )
two classes --those who are interested
in crossing (  ) river, and those
who are merely interested in getting
across.

Transformational- generative grammar explains that all
our sentences are generated from "kernal sentence(s)
--basic subject- verb constructions" (Davidson, 1980, p.332).
Through "interrogative transformation", "passivization,
"negativization," "combination," etc., more complicated
sentences can be produced and used for speaking and writing
in communication (Rivers, 1978, p.130). The following are
eamples of cognitive exercises which demand the students'
understanding and thinking of the whole sentences in the
rocess of conversion, restatement, and combination. In
order to distinguish the old from the new, I have juxtaposed
the audiolingual exercises and the cognitive exercises for
intermediate students.
G9: Change the teacher's statement into a question.

5. John has a coke in the afternoon.
6. He studies at night.
7. The students study here.
8. They understand the lessons.
10. John and Mary speak English.

(excerpt from Krohn, 1971, p.13)

G10: conversion exercise (Format follows that of an exercise in Rivers, 1978, p.131)

(W+T) cue: Bob has an apartment.
(W+T) st: Does Bob have an apartment? Has Bob (got) an apartment?
(W+T)cues: 1 Tomoko has an apartment.
2 The apartment has a big living room.
3 She likes to give a party at her place.
4 Some of her friends live in the same building.
5 They get together on Saturday night at Tomoko's place.

Both G9 and G10 are conversion exercises in which students are supposed to change statements to questions. But the difference is found in the contexts which the two exercises present. In the audiolingual exercise G9, there is no coherent context throughout the exercise. The subject matter jumps from what John drinks in the afternoon to where the students study. In contrast to G9, however, the exercise presented in G10 provides a logical context.
It is about Tomoko who likes to give a party for her friends at her apartment. With the realistic situation which this context presents, it is easier for the students to think about the grammatical rules and further understand the language patterns.

G11: (W+T+) Listen to the question and the partial response. Complete the response shown in the examples.

(W+T) (example) Who is that man? I don't know who that man is.

(W+T) 1. What is the date of the party? I don't know ________.

2. Where are they? They didn't say ________.

G12: restatement exercise (Format follows that of an exercise in Rivers, 1978, p.137)

Make a statement or question as the hidden voice on the tape directs you. Cues are provided both on tape and worksheet. Make up the student's part on your own both in writing and speaking.

Cue: Tell Su what your name is.
    st: Su, my name is ________.

Cue: Ask her which country she's from.
    st: ________.

Cue: Tell her where you are from.
    st: ________.

Cue: Ask her what she is studying.
    st: ________.
Cue: Tell her what you are studying.

Similar characteristics are found in the contrast between Gl1 and Gl2. Besides the expected answers being very unnatural, there are no logical connections between the sentences presented in the audiolingual restatement exercise Gl1, while the sentences in Gl2 are unified by the everyday situational context. The latter is more meaningful than the former because the sentence arrangement in a logical context helps students understand the meaning and the use of language patterns.

Gl3: Combine the following sentences.

1. The shoe store is very good. It's large.
2. The shoe store is very good. It's on State Street.
3. The man is intelligent. He's from Brazil.
4. That man is Mr. Allen. He's beside Mr. Miller.
5. The doctor is learning English. He's with Mr. Miller.

(excerpt from Krohn, 1971, p.92)

Gl4: combination exercises (Format follows that of an exercise in Davidson, 1980, pp.332, 3)

Combine the two sentences together to make conjoined or coordinated sentences on your worksheet. Then try to do the same exercises orally using the tape. The speaker will read the answers so that you can make a
correction if necessary.

1. Beth was drinking coffee. Susan was
drinking coffee.
(combining the subjects)
Beth and Susan were ____________.

2. Beth didn't want to study. Susan
didn't want to study.
(Using neither . . . nor)
Neither ________________.

3. They decided to watch TV. A drama
was on the TV.
(Using they as a subject)
They ____________________.

Exercises G13 and G14 can be analyzed in a similar
type. Typically the audiolingual exercise as in G13 is
composed of the sentences which are isolated in meaning.
The repetition of the same language pattern in these
isolated sentences only requires the students to insert
and between two sentences, and does not really force the
students to think about the rules and their applications
as being useful in possible situations. The contextualized
presentation indicated in G14, on the other hand, forces
the students to think about the grammatical rules and to
understand how they are used in the situational contexts.

In this manner, some of the audiolingual drills are
modified in such a way that they become less mechanical
and monotonous, and the cognitive exercises are also
developed to be used in the laboratory environment as well
as in the classrooms, encouraging individual students to think about what they are saying rather than just parroting without understanding. In the process of synthesizing the audiolingual approach with the cognitive approach, I have tried to apply the ideas of contextualization, integration of the spoken and written forms of language, and a student-centered program to the grammar exercises in the language laboratory. Providing the new grammatical exercises as indicated in this section of my paper should improve the students' achievements in laboratory work. And consequently it encourages the students to study more in the language laboratory.
III. Vocabulary Expansion

During the audiolingual era the study of vocabulary was one of the areas which was deemphasized and neglected by the audiolingual theorists and practitioners. Especially at the initial stages of language acquisition, they thought that it was more important for the students to obtain phonological and structural patterns than to spend time in learning vocabulary. The following excerpt from an essay (1945) by the audiolingual theorist, Charles Fries, is a good example of the audiolingual strategy in teaching vocabulary:

In the early stages of language learning, there are many phrases and sentences to be practiced as complete wholes in the situations in which they are useful. These contain but few new content items at any one time. Thorough control and a feeling of confidence in the use of a limited number of items makes for more progress than an uncertain acquaintance with a large number of words.

(quoted in Celce-Murcia and Rosensweig, 1979, p.241)

The result from the practice of such a strategy, however, was not so positive as Fries had expected. Celce-Murcia observed that the ESL students' vocabulary was not sufficient to understand natural speech and unedited materials written by native speakers even after they had gone through a year of more of an intensive program (1979, p.215). Also, Paulston and Bruder reported that the
students constantly complained about having poor vocabulary and not being taught enough words (1976, p.168). These findings prove that the students feel a need to study more vocabulary.

Only recently with the development of cognitive code theory, has the language specialist's attention gone back to vocabulary teaching. A slogan such as "Meaning resides either in the semantics or the syntax of the language," described in Chastain's list (1979) explains the natural growth of interest and research in this area (Chastain, 1979, pp.14-5).

Twaddell, though agreeing with Fries' teaching strategy of minimal vocabulary at the beginning level, claims that a massive expansion of vocabulary is needed starting at the intermediate level. He reasons as follows:

Initial focus on habit formation of the fundamentals of pronunciation and basic grammatical structures, with vocabulary expansion coming after those habits, are well enough established so that new vocabulary can be assimilated into the FL patterns. But just as important, the expansion of vocabulary is the indispensable intermediate stage of FL acquisition.

(Twaddell, 1980, p.441)

Here, I am agreeing with his point in the sense that vocabulary learning should not prevent the students from building up the phonetic and structural basis for language
acquisition at the beginning level. But at the same time I believe certain vocabulary expansion should be considered even at this earliest level. The students will understand such contextualized sentences as they are presented in the manner suggested in the sections of my paper on Pronunciation and Grammar.

Due to the commonly limited classroom time, Twaddell admits that it is almost impossible to teach the students all the vocabulary they will need in the future or even for tomorrow. A partial solution to this problem, I believe, can be found in the use of the laboratory for vocabulary teaching. Along with the vocabulary presented and learned in the classroom, the students should be encouraged to go to the laboratory and be exposed to as many words as possible through laboratory vocabulary exercises.

This section of my paper will show that the laboratory materials for vocabulary expansion can be formulated and become available to the ESL students through the application of cognitive code theory. And at the same time I shall demonstrate that some elements of the audiolingual theory can yet be effectively generated in the oral production exercise. Such a synthesis may draw more students to the laboratory and should facilitate better language acquisition.
In selecting which words should be taught, there are mainly two criteria suggested by Paulston and Bruder that must be considered. One is "the frequency of occurrence" (1976, p.168). For reference, such books as Thorndike and Lorge's *The Teacher's Word Book of 30,000 Words* (1944) or West's *A General Service List of English Words* (1953) are recommended. The other criterion is "semantic saliency," that is the selection of words according to the needs and interests of the students. Paulston and Bruder believe that the greater the needs and interests of the students in certain words, the easier the students learn them.

With these criteria in mind, we can now discuss how to teach or present words to the students. One way to expose students to many new words is to present them in context. Twaddell strongly believes that students build up vocabulary through the skill of "sensible guessing, the skill of inference from context" (1980, p.449). Distinguished from just a wild guess, this "sensible guessing" then leads students to think about syntactic and semantic meanings of the marked words according to the contextual situations. It is through this cognitive process that the students are able to discriminate the meanings of words.
Following Twaddell and Wu So's leads, I developed a vocabulary exercise for intermediate students. (Wu So, 1974, p.295). This exercise is designed in such a way that the students are required to do some "sensible guessing" to figure out the meaning of cue words that are taken from a long context, such as a reading passage or part of a lecture. In this case, the excerpt is taken from the autobiography of Helen Keller, an internationally known blind and deaf American author and lecturer. And I believe that reading something written by her will be interesting to the students. Following the reading passage, a smaller and more concentrated context is prepared to explain the use of the words. An effort to balance the use of oral and graphic presentations of the language is also made by providing activities for listening, speaking, reading, and writing.

VI: Vocabulary Exercise

(W+T) Directions: As you listen to the tape, read the following passage.

On the afternoon of that eventful day, I stood on the porch, dumb, expectant. I guessed vaguely from my mother's signs and from the hurrying to and fro in the house that something unusual was about to happen, so I went to the door and waited on the step. The afternoon sun penetrated the mass of honeysuckle that covered the porch, and fell on my upturned face.

.........
(an excerpt from The Story of My Life by Helen Keller taken from Refining Composition Skills by Smalley and Hank, 1982, p.45)

(W+T) Following are several words chosen from the above passage. First you will hear a word, and then a new sentence containing the word. On your worksheet, circle the letter of the word(s) with the same meaning as the cue word. After you finish each exercise, listen to the tape for the correct answer. This time repeat as the voice pronounces the word and the sentence. To assure yourself that you have mastered the word, compose a sentence using the word in the space given on the worksheet.

(W) (eventful) Last week was very eventful: my mother-in-law stayed with us for a few days; our son had his third birthday party; and my husband flew to New York to attend a convention.

a. difficult  b. filled with problems

c. full of incidents

(T) The answer is (c). Now repeat:

eventful
Last week was very eventful: my mother-in-law stayed with us for a few days; our son had his third birthday party; and my husband flew to New York to attend a convention.

Turn off the tape and compose a sentence or sentences using the word "eventful."

.....

Proceed through the following exercises in the same manner:

1 expectant
2 vaguely
3 to and fro
4 penetrated
5 upturned
After you have worked through all the exercises, listen to the tape and read the same passage again. The meaning of this passage should be more clear to you.

On the afternoon of that eventful day, ....

The audiolingual elements indicated in such directions as "listen and repeat" are interwoven with the cognitive exercise. Since the cognitive exercise is reinforced by the oral production exercise, this type of synthesized exercise requires the students to listen, read, think, and repeat rather than just to parrot what they hear.

Jack C. Richards in his article, "The Role of Vocabulary Teaching" (1980), provides us with some ideas to establish cognitive exercises. From these, I chose three ways to present new vocabulary and developed cognitive exercises using his formats.

The first means to encode new vocabulary is to introduce it according to "the probability of words being associated together with other words" (1980, p.425). In the contextualized exercise for intermediate students below, I introduce the word drive in a meaningful associational bond with other words like car, transportation, traffic rules and signs, driver's license etc.

V2: Directions: Fill in the blanks with the words provided below
the text to complete the sentences. To find out the correct answer, turn on the tape and repeat after the speaker as he reads the sentences.

Due to the poor public (   ) system, if you don't know how to drive a (   ) in America, you have to put up with a great inconvenience. For this reason, a lot of foreign students who come to the US strive very desperately to learn how to (   ) and try to obtain a (   ) as quickly as they can by studying (   ).

(drive, transportation, traffic rules and signs, car, driver's license)

Another way to recognize words suggested by Richards is through their relationship with other words by contrast or similarity.

V3: Directions: Circle the word(s) with the same or opposite meanings according to the designation.

1 I tried to convince Professor Hill that I was right. But he still disagreed with me. (Find a synonym.)
   (relation, persuade, refuse )

2 I love to eat; ironically I (   ) to cook. (fill in the blank with an antonym of love.)
   (try, used, hate )

Another way suggested by Richards to introduce new vocabulary is by learning "the underlying form of a word
and the derivations that can be made from it" (1980, p.428). In books used in some laboratories, such as Checklists for Vocabulary Study (1981) by Richard Yorkey or American Topics by Robert Lugton, I recognize that this technique has been implemented, yet in a problematic way.

The normal procedure of these books starts with the description of verb, noun, adjective, and adverb forms as shown in the following example:

V4: (Step 1)

   verb noun adjective adverb
   exclude exclusion exclusive exclusively

   (p.1 of Checklists for Vocabulary Study)

In the exercises following the lists of words, the students are asked to insert the correct form of the word on the line after they choose one word from the four choices.

(Step 2) .

18 The Chicago Chinese Checkers Club is so ___ that it has only forty ___.

   reject, exclude, conclude, contract (p.4)

   .

Even though these exercise books are in use in our laboratory, I noticed that the students often complained
about the exercises being too difficult. I believe that the problem could be solved, however, by following Wilga River's suggestion that "learning vocabulary in context is much more valuable than learning isolated words" (Rivers, 1978, p.255). Even though the students are encouraged to use a dictionary, it becomes too tedious and boring if they have to check every word. Besides, consulting a dictionary does not always give enough information on the use of each word. If contextualized examples for the use of each word were provided between Steps 1 and 2, the semantic and syntactical meanings would become more clear, and the exercises would be easier for the students. These kinds of lead-in examples are especially indispensable for the exercises on vocabulary expansion because the nature of vocabulary acquisition demands independent initiative on the part of the learners.

To improve the situation found in the commercial texts mentioned above, I added contextualized sentences between Steps 1 and 2. I also added (an audiolingual) exercise for the students to repeat after the speaker on the tape in order to learn not only the correct pronunciation of each new word but also the stress and the intonation in each sentence using the word.
V5: (W+T) Directions: Listen and repeat:

(exclude) Due to the limited time, our teacher had to exclude a closing speech from tonight's program. / If we had had five more minutes, she could have kept it in the program. /

(exclusion) The temporary exclusion of foreigners from the port was enforced after the discovery of plague on several ships coming from other countries. / All the foreigners on those ships had to stay on the ships until they were permitted to get off. /

(exclusive) CBS held exclusive rights to the football game. / That means that no other television service could broadcast it. /

(exclusively) Mrs. Darsey did it exclusively for me. / Others were told that she was too busy to help them. /

Through contextualization, each word presented in isolation on the left becomes more meaningful in the sentences on the right. The added contexts, then, function as a guide for the ESL students to do "sensible guessing" and to complete the cognitive exercises given in Step 2.

Vocabulary teaching thus should involve contextualization, the integration of listening, oral production, reading, and writing skills, and the vocabulary program
developed from the needs and interests of the students. All of these ideas on vocabulary teaching basically derive from the cognitive code theory, which seeks to direct students to think about the semantic and syntactic meanings of the words in context and to understand the basic use of vocabulary. Yet, as I indicated before, we should be aware that the audiolingual exercises still play an important role in the oral production practice such as in pronunciation, stress, and intonation of words in context.

Thus, the synthesis of the audiolingual and cognitive approaches to the laboratory materials of once-neglected vocabulary teaching will help satisfy some, if not all of the students' needs and desires to learn more vocabulary than provided in the classroom. And as such, my argument suggests a positive effect on the students' attitudes and achievements in laboratory work.
IV. Listening Comprehension

Since the audiolingual approach has its emphasis on the spoken language and insists on a natural learning sequence of listening, speaking, reading, and writing skills, it puzzles us when we find someone making such statements as, that comprehending the spoken form of the target language "is probably the most neglected skill in second language teaching" (Paulston and Bruder, 1976, p.127). The teaching of listening comprehension has a rather young history.

In the audiolingual theory, listening was considered a passive skill. Listening to outside stimuli was an arbitrary part of the speaking skill, it was expected to draw a response. Fries (1945) represents the audiolingual theorists' view on listening. He maintains that because listening and speaking "are interdependent, recognition, i.e., the listening skills will develop as a result of learning the speaking skills" (Fries, 1945, p.3).

With the development of the cognitive code theory, however, more attention has been paid to listening comprehension because of its focus on rational thinking. In contrast to the view held by the audiolingual theorists, the scholars of the cognitive code theory considered listening comprehension an active skill:
the process of speech recognition is an active interplay of guessing, approximation, expectation, and idealization that normally makes extensive use of all the redundancies found in a typical speech situation, phonological, morphological, syntactic, semantic, as well as many varieties of nonlinguistic redundancies.

(Wang quoted in Carroll, 1971, p.296)

The following observation by Belasco (1967), also represents the change in the philosophy of language teaching by looking at listening comprehension as a separate entity, independent of speaking skills.

Because a student can utter a lot of sentences in a foreign language is no guarantee that he will understand them in the mouth of a native speaker. There is a virtual chasm between the performance of native speakers engaged in a conversation and what a student expects a conversation to sound like.

(Belasco, 1967, p.86)

Thus, in this section of my paper, I attempt to develop useful cognitive exercises of listening comprehension united with an element of the audiolingual approach in order to suggest that such exercises will bring some improvement to the laboratory software and consequently stimulate the students in their laboratory activities.

Through my own experience in learning foreign languages, and through conversations with the students in our lab, I realize that listening comprehension is one of the
most difficult skills that the students have to develop. Belasco believes that this problem basically derives from the students' lack of exposure to live English (Belasco, 1969, p.196). Such scholars as Suzanne Herschenhorn (1979), Leslie Dickenson (1970), and Wilga Rivers (1981) also support his view and recommend that students should be exposed to live English as much as possible so that they can get used to the "infinite variety of combinations of live language" (Herschenhorn, 1979, p.67).

Wilga Rivers finds a solution to the problem of students' difficulty in understanding the oral language by providing proper contextualization. She asserts that every listening item should have a proper context to prevent a "cognitive block" (Rivers, 1978, p.92,94). For example, it is very common to find such an exercise as the following in commercial texts.

L1: Circle the sentence which has the same meaning as the one you hear.

Teacher: The man is going to work tomorrow for the first time in months.

Answers:
1 The man hasn't worked for a long time.
2 The man doesn't like to work.
3 The man is going to work for a few months.

(Paulston and Bruder, 1976, p.137)
The answer is supposed to be 1), but looking at the other two, 2) and 3), I believe that the teacher's statement contains some ambiguity. In other words, it could suggest that answers 2) and 3) are also meaningful. Those who choose 2) as an answer probably think that the reason why the man is going to work tomorrow for the first time in months is because he may be too lazy. If so, 2) is the appropriate answer to that question. The students who choose 3) might think that it is possible that the man is going to work tomorrow for the first time in months and is going to work for a few months.

To avoid the problem of ambiguity found in the above example, proper contextualization is needed. For instance, if I add a sentence to the teacher's statement, the meaning of the context would be more clear and help students discriminate 1) as the answer.

L2: The man is going to work tomorrow for the first time in months. He has been very sick for a long time, but now he wants to work hard to make his retirement which is coming up in two years.

With the criteria given by Rivers and Belasco in mind, I generated my own topics according to the needs and interests of students.

The first format was found in Classroom Techniques: Foreign Languages and English as a Second Language (1972)
by Edward D. Allen and Rebecca M. Valette. It is an exercise in "taking a telephone message" (p.200). Using their format, I developed the following laboratory exercises for advanced students.

L3: (Exercise a)

(W+T) Directions: Imagine that you happen to be in one of the offices in the English Department at UNO. In Step 1), listen to the speaker and say the student's part. In Step 2), write down the message in the blank provided on your worksheet.

(W+T) Step 1) speaker: Hello, this is Dr. Miller. Is Professor Johns in?

(W) student: I'm sorry, but Dr. Johns is not here. Would you like to leave a message? (or) Could I take a message?

(T) Step 2) speaker: Yes, tell him that we'll have to close section 23 of Composition in 1157. No, ah . . . on second thought, that's section 24, not 23. There're just too few students for the section to make. Have him give me a call at 6824 if he's not clear on this.
L4: (exercise b)

(W+T) Directions: Imagine that you are in the university dormitory. Follow the same procedure described above.

(W+T) Step 1) speaker: Hello, is Mark there? (The speaker sounds like a college student.)

(W) student: Hold on. I'll check to see if he's here... Sorry, he's not in right now. Can I take a message?

(T) Step 2) speaker: Yeah, ah... this is Barney. Just tell him ah... I can't come and pick him up today. My car went bad on me. Ah... we'll try to see that... that "ET" at Orpheum Theater in University Plaza this Saturday. It'll be from er 2:00 p.m. If he wants to join us there, he's gotta get there by bus.

In both exercises a and b, Step 1 is provided in a written form on the worksheet to help students visually familiarize themselves with different styles of language and practice of semi-formal and informal short conversations. At the same time, the students are supposed to learn these expressions in oral production. Since this
part of the exercise demonstrates that certain stimuli call for certain responses, I categorize it basically as audio-lingual. My exercises reveal that the audiolingual element will yet play a role in cognitive exercises for listening comprehension.

Step 2 is a listening comprehension exercise. To use Morley's description of it, this step requires students to listen, think, and remember (quoted in Paulston and Bruder, 1976, p.129). Since this step is only provided on tape and not on the worksheet, students have to listen to the speaker, think what s/he is saying, and use their memories to write down the messages.

I tried to use natural English in the utterances of the speakers and at the same time bring in the proper contexts so as to clarify the meaning of each message. The topics are chosen from university life, and the use of spoken language is balanced with written language in Step 2 for both exercises.

Harold Madson explains another format which can be implemented in the listening comprehension exercises for beginning students. It is what Winitz and Reed called "aural discrimination" (Madson, 1979, p.28). The procedure that students use is very simple; they listen to the speaker and choose one of the four pictures according to
the description of what they have just heard. Using this procedure, I made up the following exercise.

L5:

(W+T) Directions: Listen to the following passage and choose one picture which best describes the passage.

(T) Speaker: It was a Sunday afternoon in October. Even though it had rained early in the morning, it was nice and sunny by noon. Bill's father cooked hamburgers for everybody for lunch. Everybody, including Billy's parents, Billy, his sister, and even his dog Fluffy enjoyed the cookout in the yard.

(W)

With the use of visual aids depicting different contexts, these exercises allow even the beginners in English to get exposed to spoken language which is related at normal speed. At first, the students probably have to turn back the tape a few times to discriminate the correct picture from the others. It is an example of cognitive
activity in which students must think to match the context of what has been stated and the visual context as drawn in the picture. It is encouraging to see a report on the students' enthusiastic reaction to Winitz-Reed's aural discrimination exercises (Madson, 1979, p.28).

Dealing with ESL students in our laboratory, I notice that they are very interested in finding out what is going on in the world. Yet often I hear them complain that they have a hard time understanding the news on radio or television. Because of this, I selected another format from Allen and Valette's book (1972) to develop a listening comprehension exercise to help them tackle a newscast (p.205).

It is a guided listening comprehension exercise in which the students are supposed to read several questions at first before they listen to a newcast so that they know what they are looking for. Using Allen and Valette's format I recorded part of the NBC News broadcast of August 2, 1982 and developed the following exercise for advanced students.

L6:

(W) Directions: Read the following questions.

1 In which city is the fighting going on?

2 What happened to the cease-fire?
3 Who had a grim face?

4 What did the President want?

5 How did the Israeli Foreign Minister Yitzak Shamir react to the President's statement?

: Now listen and answer the above questions.

(T) Good evening. With the guns still firing in Beirut, with yet another cease-fire broken, a grim-faced President Reagan had a tough talk today with Israeli Foreign Minister Yitzak Shamir. The President reportedly told him he wants a complete end to the fighting. Shamir did not back down but blamed the Palestinians.

This is another example of a cognitive exercise in which students consciously listen to the tape to find out the appropriate answers to the given questions. The spoken language is integrated with the written language in the sense that the exercise requires students to write a sentence or sentences for answers.

While the audiolingual exercises basically demanded that the students listen and repeat, the exercises presented here are designed to force students to listen and think about the contexts in given situations. In these cognitive exercises, writing is an important part of the exercises because by writing students are able to express the degree of their comprehension. In some cases, speaking is also incorporated, thus making exercises for the four
basic skills. The use of these exercises in the laboratory allows individual students to get exposed to an infinite number of natural English sentences as early as possible.

Therefore, the application of the cognitive approach united with some elements of the audiolingual approach is crucial in developing listening comprehension materials. I argue that such exercises as I have developed will bring an improvement to the laboratory software and stimulate ESL students in their laboratory activities.
V. Speaking

In order to teach speaking skills in foreign languages, the theorists and practitioners of the audiolingual method believed that habit formation through mimicry, memorization, and pattern drills would lead students to autonomy in speech. The students were told to memorize a passage and repeat mechanical pattern drills.

What Diller and other opponents of the audiolingual approach are strongly against is the audiolingualist's lack of concern for the human capability to think and create in using language. Diller observes that "students who have acquired these mechanical speech habits are still unable to think in the foreign language or to speak it in natural social contexts" (Diller, 1971, p.53).

Instead, the cognitive code theorists assert the importance of the students' involvement in thinking and creating in the target language. They claim that "to know a language is to be able to create new sentences in the language." Such a statement as Chomsky's implies that what we say in conversation is not constrained by outside stimuli, but it is rather generated from our innovative thinking (Diller, 1971, p.24). Their theoretical emphasis on the innovative aspect of learning language based on reasonable thinking was proven to be effective also in practice. Emile de Sauzé, who experimented on this, found that "the
practical results, such as reading, writing, speaking, and understanding, were achieved in greater proportion and in less time when the technique involved a maximum amount of conscious reasoning" (de Sauzé, 1959, p.5).

For this reason, in the previous sections of my paper dealing with oral production such as pronunciation and grammar, I modified the manipulative drills and exercises of the audiolingual era by the use of meaningful contexts, and designed some exercises to draw out the student's self expression. The contexts found in cognitive exercises help stimulate the students to reason and to create more sentences.

Furthermore, we have to remind ourselves that the ultimate goal in language learning is to attain communicative competence. As Paulston and Bruder maintain, the objective of language learning is "the production of speakers competent to communicate in the target language" (Paulston and Bruder, 1976, p.56). Since the nature of communication involves more than one person, to develop communicative competence students need to use the phonetic and structural skills which they have acquired at the manipulative stage, in a setting which calls for spontaneous interaction. Rivers is one of the scholars who emphasize the necessity of including "skill-using" practice
in language teaching as early as possible (Rivers, 1972, p. 76). Activities like games, role playing, debate, or discussion are very effective in that sense, allowing the students to practice spontaneous communication in the classroom.

Unfortunately, however, these kinds of communicative group activities are not well suited for laboratory use. The language laboratory is generally designed to provide students with individual practice through the use of machinery.

The ultimate goal of communicative competence does not fit easily to the limitations on laboratory activities. Applying a synthesis of the cognitive approach and some audiolingual elements to the laboratory exercises in speaking skills thus requires a very careful approach. Through the use of situational contexts selected according to the students' needs and interests, I suggest that this synthesis will lead students to think and create in a given situation and prepare themselves for more spontaneous communication in the classroom as well as outside of the classroom. At the same time, my argument implies a positive effect in students' achievements as well as their attitudes in the language laboratory.

In Practical Guides to the Teaching of English, Rivers
introduces "the verbal-active approach" or "rationalist direct method" (Rivers, 1978, p.23). This method, having its origin in the series method of Gouin and the direct method of de Sauzé, is implemented in a guided oral composition. The idea of having question-and-answer form in a step-by-step sequence forcing the students to think and create only in the target language is taken from de Sauzé's direct method, and the idea of arranging the sentences in conceptual order focusing on the verb forms is drawn from Gouin's series method. Both scholars' cognitive methods have proven to be very effective. Brekke maintains that "the series method produced excellent results with the able teachers he observed in London" (Diller, 1971, p.68).

Diller also refers to de Sauzé's observation on the results in using the direct method as follows:

The most potent result is the renewed enthusiasm of the French teachers . . . they glean their reward from the bubbling enthusiasm that they see on the faces of those youths, opening their eyes wide to the marvels of that new world— the new language.

(Diller, 1971, p.25)

Taking ideas from Rivers' book (1978), I developed the following exercise for intermediate students.
S1: Conversation Exercise for Intermediate Students

(W+T) Directions: Carry out the following conversation on tape using the same verb forms designated in the statement-and-question section on the worksheet. And for the second time through, try to use your own expressions in your answer to the questions.

(W+T) Statement & Question

1. I work in the library. Where do you work?

2. At work, I have to put books onto the shelves. What do you have to do?

3. I start around 1:00 and finish working at 4:00 p.m. When do you start and finish working?

4. After school I usually have to hurry to the library to work. Do you have to hurry to your work?

(Neither or W or T) Answer

a. I work in Schwegman's.
b. In Schwegman's.
a. I have to put groceries into bags.
b. I put groceries on shelves.
a. I start around 6:00 p.m. and finish working at 10:00 p.m.
b. I work from 6 to 10 in the evening.
a. Yes, I have to hurry to my work.
b. Yeah, I do on Monday, Wednesday, and Friday. But not so much on Tuesday or Thursday.
5. I get along fine with my boss, Mr. Brown, but some say they don't get along too well with him. How do you get along with your boss?

a. I get along fine with Mr. Baker.
b. O.K.

There are two steps involved in this contextualized exercise. In the first manipulative step (a.) the students are told to compose a sentence using the same verb form as described in the statement-and-question section. In the second step (b.), on the other hand, the questions call for answers generated entirely by the learner. A certain degree of repetitiveness found in Step(a.) as in the audiolingual drills functions as a gradual lead-in to free expression in step (b.) The topic of "work" is selected according to the students' needs and interests, considering the fact that most ESL students who study in our laboratories work in some capacity. Even though the sentences in context may not be as tightly united as in the reading materials shown in the previous sections, there is some natural flow of coherence in the context as in daily conversation. Within this set frame, students can explore their ability to think and create in the target language.

Another format, also suggested by Wilga Rivers is called "situation tapes" (1978, p.44). As its name
indicates, a certain situation is described in a conversation for two or more people. It is less controlled oral production practice than the previous example, S1. The following exercise for advanced students is an example of a situational tape.

S2:

(W+T) Directions: Imagine that you happen to meet your friends, Bill and Nancy, near the French Quarter in New Orleans. Listen to the tape once through to understand the situation. Then the second time through fill in your part orally when the bell rings.

(T) Bill: Hi!

(T) Nancy: Hi, are you going to see the Mardi Gras parade?

student: Yeah, I'm supposed to meet Kim in Jackson Square.

(Or) No, once is enough. I hate the crowds.

(Or) Yeah, there's nothing else to do. I might as well.

(T) Nancy: Betty, who's from New Orleans, once told me that you can see the best parades in the French Quarter.

(T) Bill: My friend told me it's wiser to see a parade in Metairie. Do you know anything about that?

student: Yeah, as far as I know, the French Quarter is the best place to see the parades. It has the best shows to please the tourists, you know.
(Or) Last year, I got suffocated by the crowds. A lot of people were drunk and acting crazy.
(Or) No, it doesn't make me any difference.

(T) Nancy: Well, what should we do then?

(T) Bill: I don't care, but I could go for some beniets and chickory coffee.

(T) Nancy: Let's all go to Café du Monde. It's close to Jackson Square.

student: Yeah, that's a good idea. We might be able to spot Kim from the Café.
(Or) Well, I'm not too crazy about the crowd, but I can bear it if I can eat beniets.

(Or) That sounds good!

(T) Nancy: What time does the next parade begin?

student: In about an hour, I think.
(Or) At seven, I think.
(Or) Not until 4:00.

(T) Bill: I've got to get more beads in the parades.

student: I'll help you get more, Bill.
(Or) I still have a bagful from last year. I'll give it to you if you want it.
(Or) I just don't understand people going wild for those plastic beads.

In this exercise, hearing the voices of Bill and Nancy, the students are supposed to express their part in dialogue form according to whatever the situation demands. This is an example of a cognitive exercise in which the
colloquial context forces students to reason and create in the target language "without destroying the coherence of the sequence" (Rivers, 1978, p.45). The following report indicates a positive result from using the situation tapes. Francis A. Cartier maintains that a group of programmers under his direction at the Defense Language Institute English Language Branch did an experiment with situation tapes. They found that students' reaction was very positive, and they practiced repeatedly to their satisfaction (Rivers, 1978, p.298).

In this section of my paper, I focused on laboratory cognitive exercises which are still controlled, but generate spontaneous speaking in a realistic situation. By the application of the cognitive approach mingled with some audiolingual approach, carefully selected contexts will allow the students to take the first step toward thinking consciously and creatively. Consequently, bringing in more of these synthesized exercises might improve not only students' attitudes in the laboratory in general, but also achievement in speaking the target language.
VI. Reading

When we look at the dichotomy in teaching philosophy between the audiolingual approach and the cognitive approach the main difference can be found in the treatment of the spoken and written languages.

The first principle of the audiolingual theorists and practioners was "language is speech, not writing." They observed the way children developed language skills and tried to maintain this natural sequence of listening, speaking, reading, and writing in their teaching methods. With the overemphasis on the spoken language and the de-emphasis on written language, they neglected to set up systematic programs in reading or writing for ESL or EFL students. The proponents of the audiolingual method believed that the proficiency in spoken language would prepare the students for proficiency in the written language. The written form of the language was thus considered as "decoding speech written down" (Paulston and Bruder, 1976, p.157) or as "a by-product or in support of oral-aural language study" (Croft, 1980, p.2).

The believers in the cognitive code theory think quite differently. They observed that many advanced students who went through a basic program in speaking and listening did not develop the adequate reading skills that the audiolingual theorists had expected. In addition, Lenneberg reported on
a boy who physically could not speak a word, but learned English, understood it fully, and learned to read (Diller, 1978, p.11). Because of these observations, they came to speculate that "speech and writing are two different but related performance models of a given language" (Robinett, 1980). The diagram below illustrates their view of the relationship between speech and writing.

```
Language

  Speaking ------ Writing
```

(Robinett, 1980, p.360)

In contrast to the audiolingual specialist's neglect of the written language, the cognitive code theorists consider that the spoken and written languages are two equally important modes of language used for thought communication.

Based on the cognitive code theorists' emphasis on thinking, such reading specialists as Paul and Eva King (1968) criticize the audiolingual drills for having no reasonable context to help students form any thought in the target language.

Mere practice of unrelated parts is useless; for effective storage of information, the human brain requires structural order and meaningful connections in order to function effectively later on during retrieval. In
reading, just as in oral language, letters, words, and sentences must lead to the ultimate goal of thought communication. (Kings, 1968, p.60)

James Ney supports this view by maintaining that "the context of the written word provides the most satisfactory base for the contextualization of language patterns" (Ney, 1973, p.10). Thus, with the philosophy of the cognitive code theory, once-neglected systematic teaching of reading is gaining recognition and is being implemented in school language programs.

In this section of my paper, I shall concentrate on reading exercises for laboratory use by synthesizing some aspects of the audiolingual and the cognitive approaches. By the use of contextualized materials selected to meet the needs and interests of students, and the application of the spoken as well as the written language, I suggest that there will be an improvement in the laboratory software. My argument further implied that such improvement will bring a positive effect both on students' achievements and attitudes in laboratory work.

There is a belief that the faster a person reads, the better he understands. And Robinett (1980), Plaister (1968), Paulston and Bruder (1976) observe that ESL students are generally very slow readers. This is basically because of
their long fixation time needed in reading "to process the semantic and syntactic information", according to the study reported in Robinett (1980, p.356).

Ted Plaister (1968) provides us with an idea to improve the reading of non-native speakers syntactically. He suggests teaching the students to read by phrases instead of word by word. Using Plaister's phrase reading format, I developed the following exercise for intermediate students (Hatch, 1979, p.138). The format required me to rewrite an excerpt from The Golden Home and High School Encyclopedia in such a way that each column contained one phrase.

(W+T) Directions: Sight read the following passage on the right as you listen to the speaker on tape. Then read along with the speaker orally on the second time.

R1: (original) (phrase reading)

(T) John Steinbeck an American writer was born in Salinas, California. He attended Stanford University, where he studied marine biology. He left without taking a degree, and, until he established himself as a writer, he roved

(W) John Steinbeck an American writer was born in Salinas, California. He attended Stanford University, where he studied marine biology. He left without taking a degree, and, until
throughout the United States. he established himself as a writer, he roved throughout the United States.

(Spore and Theocracy, 1961, p.2434)

In this exercise prepared for the intermediate level in reading, students are supposed to read the passage by structure. Since each line in this column contains not more than three or four words, it is easy to identify some words as a group. And, thus, the phrase reading exercise teaches the relation of words to each other in a meaningful context. Plaister reports that there is evidence that "reading by structures - in a sense by IC (immediate constituent) cuts - helps native speakers gain comprehension" (Plaister, 1968, p.165). Hatch also considers this phrase reading practice an effective method for ESL students (Hatch, 1979, p.138).

As the directions of the exercise indicate, the use of spoken and written languages is integrated in this exercise. The oral reading exercise, which originated from audio-lingual theory, is used here to help students recognize the phrases orally by reinforcement. The subject matter is on one of the famous American writers whom students should learn about. Since works of Steinbeck such as Of Mice and Men or The Grapes of Wrath are well known internationally,
I believe that reading something about the author interests the students.

There are a lot of commercial reading texts (some with tapes) available on the market for ESL students. These reading texts in general provide stories or reading passages and step-by-step comprehension exercises for feedback. For the intensive reading program, these comprehension questions are better discussed with other students under the guidance of the classroom teacher. The following is a common example of intensive comprehension exercises.

**R2:**

6. At the beginning of the story, what was happening in the Big Top?

7. What did the circus workers do to help the people get out of the tent?

8. What did the clown say to the little girl?

9. Why did Miss Salva keep the lion in the Big Top?

10. Who was hurt in the fire?

(excerpt from *The Angry Sea*, 1973, p.24)

There is no question about the fact that the students need this step by step intensive reading study. But reading textbooks and workbooks in the classrooms is not enough. Many students who have gone through basic ESL or foreign language courses even with some reading program
admit that they still experience a terrible shock when they have to face the non-simplified target language used in literature texts or other academic books.

To solve this problem, I believe the language laboratory should provide an extensive reading program. Paulston and Bruder support this notion and recommend that the students should start reading non-simplified books at the intermediate level. To learn reading simply by reading they suggest a reading program in which ESL students start with easy materials at first to gain confidence in reading and then extend their reading to the college level text books used in their own fields (Paulston and Bruder, 1976, p. 193,4).

For the purpose of extensive reading, instead of carefully detailed comprehensive questions as found in intensive reading exercises, we should develop more general questions. In extensive reading, contrasted to intensive reading, the students need to be "contextual guessers," grasping out the main ideas of reading material. In Testing Language Ability in the Classroom (1980), Andrew Cohen refers to Hosenfeld (1977) who through her research came to the conclusion that a successful reader is a "contextual guesser" (Cohen, 1980, p. 56). In agreement with Twaddell's "sensible guessing" which I discussed earlier,
Hosenfeld maintained that good readers "keep the content of the passage in mind as they read in broad phrases, skip words viewed as unimportant, skip unknown words and use the remaining words as clues to their meaning, and look up words only as a last resort" (Cohen, 1980, p.56).

From the formats formed on pages 194 and 201 of Paulston and Bruder's book (1976), I developed the following exercises for intermediate students. Observing the kinds of books that the students choose in our laboratory, I found the revised short stories for the ESL program most popular. Thus, I selected one of the unsimplified short stories, John Steinbeck's *The Pearl* in order to gradually lead students beyond their level.

R3:

(W+T) Directions: Before you start reading this book, answer the following questions on your worksheet.

(T) 1. What is the title of the book? (for example) *The Pearl*

2. Who is the author? John Steinbeck

3. When was it published? in 1945

4. How many chapters are there? six

5. Find the topic headings of there are any. no headings
(W+T) III

A town is a thing like a colonial animal. A town has a nervous system and a head and shoulders and feet. A town is a thing separate from all other towns, so that there are no two towns alike. And a town has a whole emotion. How news travel through a town is a mystery not easily to be solved. News seems to move faster than small boys can scramble and dart to tell it, faster than women can call it over the fences.

Before Kino and Juana and the other fishers had come to Kino's brush house, the nerves of the town were pulsing and vibrating with the news—Kino had found the Pearl of the World. Before panting little boys could strangle out the words, their mothers knew it. The news swept on past the brush houses, and it washed in a foaming wave into the town of stone and plaster. It came to the priest walking in his garden, and it put a thoughtful look in his eyes and a memory of certain repairs necessary to the church. He wondered what the Pearl would be worth. And he wondered whether he had baptized Kino's baby, or married him for that matter. The news came to the shopkeepers, and they looked at men's clothes that had not sold so well.

The news came to the doctor where he sat with a woman whose illness was age, though neither she nor the doctor would admit it. And when it was made plain who Kino was, the doctor grew stern and judicious at the same time. "He is a client of mine," the doctor said. "I am treating his child for a scorpion sting." And the doctor's eyes rolled up a little in their fat hammocks and he thought of Paris. He remembered the hard-faced woman who had lived with him as a beautiful and kind girl, although she had been none of these three. The doctor looked past his aged patient and saw himself sitting in a restaurant in
Paris and a waiter was just opening a bottle of wine.

(Steinbeck, 1945, pp.26–7)

Voice (T): What is the central idea of this section? Select an answer from the list on your worksheet.

(W): 1. The whole town was sincerely happy for Kino and Juanna because Kino had found the Pearl of the World.
2. Kino and Juanna told the town people that they would baptize their baby and pay the doctor for the treatment, now that they had found the Pearl of the World.
3. The town is full of greedy people. The news that Kino had found the Pearl of the World excited the people in town to seek more things for themselves.
4. In this town, the priest and the doctor get the best news first as the news that Kino had found the Pearl of the World reached them very quickly. This is because they are very helpful people.

Voice (T): The answer is 3. Now let’s read the next section.

In this reading exercise, students are encouraged to read closely for the meaning of the whole context rather than for the particular meaning of words or sentences. The
guaged recording according to the level of students encourages students to keep a certain reading pace and keep on moving. The simple comprehension questions on the worksheet and answers provided on tape are to help students stay on the main outline in reading. This is a cognitive exercise to make students grasp the meaning of the context through reasonable guessing. It is also an example of extensive reading practice especially prepared for laboratory use in the sense that the students sight read while they listen to the native speaker reading the passage and the exercise at normal speed. It involves listening, reading, and some writing at the beginning of the exercise. The practice is also developed according to the needs and interests of the students. Encouragingly, research indicates that people learn to read by reading extensively (Paulston and Bruder, 1976, p.199).

Consequently, I believe that a synthesis of the audio-lingual and cognitive approaches will improve laboratory software. Moreover, my argument implies that such improvement will bring a positive effect on both students' achievements and attitudes in laboratory work.
VII. Writing

During the audiolingual era, teaching writing as well as reading was neglected due to the overemphasis on phonology by the scholars who were working with the audiolingual method. When we look at the sequence of teaching various language skills, we notice that writing is placed at the end. The audiolingual slogan, "language is speaking, not writing" clearly manifests the audiolinguists' attitude toward the written language.

In contrast to the unbalanced emphasis that the audiolingual theorists and practitioners put on the two forms of language, the cognitive code theorists consider "speech and writing as parallel and coequal forms of expression" (Prator, 1980, p.14). They put the same emphasis on the two forms of language since they assert that writing reveals the writer's thinking process as much as speaking reveals the speaker's thinking process.

Like other skills, writing skills require systematic step by step training and practice. Oral proficiency will not necessarily promise proficiency in writing. Simply by observing the native speakers, we find this to be true.

Taylor, in agreement with the cognitive code theory, maintains that writing should be taught in parallel with oral language.
... in addition to linguistic ability, writing involves muscular coordination entailed in handwriting. Paragraph or essay writing requires knowledge of the rhetorical rules of the language and of paragraph and essay structure. For English, these rules involve knowledge of topic sentences, supporting sentences which elaborate on or explain the topic sentence, and concluding statements. In addition, the writer must know that the supporting statements can serve any of a number of logical rules within the paragraph or essay, such as chronological order, cause and effect, process, comparison, contrast, and description... ...

Because these abilities are intellectual and logical rather than specifically linguistic, there is no theoretically sound reason to wait until an ESL student has mastered all or even most of the complexities of the language before we teach free composition skills.

(Taylor, 1980, p.368,9)

Since writing demands logical thinking, learning to write involves practice in contextualizing language patterns. And for this reason, in agreement with Taylor, I have applied contextualization to the three levels of the laboratory drills and exercises throughout my paper, and added writing exercises to balance the oral exercises.

I argue that an emphasis on contextualization, integration of the two forms of language, and the topics selected for student's needs and interests, will allow an effective implementation of the synthesis I am developing
between the audiolingual and the cognitive approaches.

Moreover, my argument will demonstrate that such a synthesis in developing laboratory exercises will have a positive effect on the student's achievement and attitudes in laboratory work.

In the discussion of controlled composition, Taylor emphasizes the need for training students in free composition and suggests some introductory steps to expose elementary level students to contextualization (Taylor, 1980, p.370). He starts with various kinds of simple grammatical substitution drills in context. Since I have discussed this type of exercise in the section on grammar, I am going to exclude it here and, instead, begin with a discussion on how to structure writing, using chronological order. The format provided for workbook exercises by Taylor led me to the development of the following laboratory exercise for beginners (Taylor, 1980, p.372). To balance the use of the written language with the spoken language, I added dictation to the exercise.

**W1: Directions (W+T):**

1) Listening to the tape, write down the questions.

2) Then answer the questions in the space provided. When you write a paragraph, be sure that you use time expressions such as: usually, first, and next, as indicated in the questions. The first sentences of each paragraph is done for you.
This exercise involves dictation of four questions provided only on tape and then a cognitive writing activity to form two paragraphs answering the questions. The dictation which demands word for word accuracy in transcription through listening basically shares the nature of the audiolingual theory. The questions in chronological order are meant to guide the students to organization of various activities in a basic logical order. The students might answer something like the following:

I usually get up at 7. I first brush my teeth and wash my face. I get dressed and eat breakfast next.

I leave for school at 8. I go to school by bus. I usually take four books.
With the controlled framework, this cognitive exercise makes the students think logically and to form sentences and write paragraphs using adverbs which indicate a certain time sequence. The sentences to be written down in the paragraphs are basic expressions of a student's own routine and, because of this, perhaps fulfill the student's needs and interests.

Another format in controlled composition is Allen and Valette's letter writing practice for intermediate students (1972, p.316). In order to integrate the spoken and written languages, I put the main part of the directions on tape and provided a worksheet for the writing activity.

**W2: Directions (W+T):**
This is a letter writing exercise. First write your address and the date at the right hand top of the worksheet.

At the end of each sentence you will hear a bell ring. Stop the tape and write a sentence according to the directions you heard in the sentence. The first few words of each new paragraph are indicated on your worksheet.

**Voice (T):** First, thank Kenji for the letter and the family picture (bell). Tell him that you enjoyed them very much (bell); you especially liked the picture of his sister (bell); you think that she is very pretty. (bell)
Tell him that you are sorry to hear that his father has been in the hospital (bell); but you hope he is feeling better soon (bell). Tell him that next week you are going back to Florida to see your family (bell); you haven't seen your family for six months (bell); so you are really looking forward to seeing them (bell); you will make sure to take some family pictures and send them to him (bell).

(W)

(Your address)________

(Date)_______________

Kenji Ooshima
10 Kasugamachi
Tokyo, Japan

Dear Kenji:

Thank you for____________________

______________________________

I am sorry_____________________

______________________________

Next week_____________________

______________________________

Sincerely yours,

(Signature)_____

In writing the letter, the students are guided to produce structurally acceptable short paragraphs which are constructed in a simple chronological order progressing from the past through the present to the future. In each
sentence the students have to think logically to make a shift from indirect to direct discourse in writing according to the information which they retained after listening to the tape. Thus, this cognitive exercise involves listening comprehension, transforming indirect to direct discourse, and writing.

As soon as the elementary ESL students are able to write basic sentences, Taylor believes that by using two-sentence contextualization the students can manage simple rhetorical devices such as cause and effect, comparison and contrast, description and classification, etc. Using the format provided by Taylor, I developed the following exercise for the beginner's level, applying a multiple-choice form and adding a written practice at the end (Taylor, 1980, p.380).

W3: Directions (W+T):
Read the example first, then choose the sentence that shows an effect.

(Example): It was hot and dry yesterday. (cause)
The ground is dry. (effect)

exercise 1: I worked too late last night. (cause)

Choose one: a. I usually go to bed at 11.

(effect) b. I had a lot of homework.
c. I feel very sleepy.

Voice (T): The answer is (c). Let's read these sentences together starting with the example. Repeat after me: "It was hot and dry yesterday. The ground is dry." Notice that the first sentence tells us the cause. And the second sentence gives us its effect. Let's now check exercise 1. Repeat after me: "I worked too late last night. I feel very sleepy." Do these sentences show cause and effect? Yes, they do, don't they? Now make up two sentences. One should show the cause; the other the effect.

(on the worksheet)

(cause) - (effect)

This is an example of an exercise in which some elements of the audiolingual and the cognitive approaches are intertwined. With the use of the example, the exercise forces the students to think first about the relationship between the sentences and then to select appropriate responses from the three answers according to the understanding of cause and effect. To clarify a point as well as to provide an answer, I added an explanation with the "repeat-after-me" type of audiolingual drills. This is to reinforce the student's understanding in oral production.

Often the students complain about difficulty in under-
standing the rhetorical devices in advanced English composition. This reveals a need for earlier practice of these forms. Using a simple context with a minimum of two sentences, the students will be taught a skeletal structure of the various rhetorical devices. Once they get the basic idea of the devices, the only thing they have to do is to "flesh out" the two basic sentences and provide more information about them (Taylor, 1980, p.373).

In writing, the goal of communicative competence is free composition in which a student expresses himself without any structural guidance or lead-in examples. Getting very close to free composition, the laboratory can provide semi-controlled composition exercises by using tapes and written forms. Gorman provides a good example from which I developed the following laboratory exercise for advanced students (Gorman, 1979, p.196).

W3: Directions (on tape and worksheet):
Listen to the introductory passage of "How Do You Handle Everyday Stress?" and try to continue the essay according to the situation in this passage.

(on tape)
Psychologists are now convinced that day to day problems, which frequently seem unimportant, are what "take a lot out of you." Moreover, they can even affect the length of your life. Everybody faces day to day problems, but some can handle them better than others.

(excerpt from Reader's Choice p.58)
Take for example . . .

This is a semi-controlled composition exercise in the sense that the students are led to write a passage or passages according to the situation described in the introductory context. It is a move toward free composition because, within the limit of the situation the exercise allows students to think logically and extend the argument by bringing in their personal experiences or thoughts. The use of the oral and written modes of language is balanced since the first part is a listening comprehension exercise, and the latter is a writing activity. The topic of how to get rid of day-to-day stress is interesting to many students. In our laboratory, we deal with a lot of political refugees from Vietnam and South America. Their frustration varies from linguistic and cultural to financial and political. This kind of exercise provides the students with an opportunity to open up and express how they are trying to alleviate their stress.

Concluding this section, I assert that not only the contextualized directions, with topics which are selected according to the needs and interests of the students, but also the integration of the spoken and written forms of language provide an effective synthesis of the audiolingual and the cognitive approaches. Going beyond the imitative
habit-making of the audiolingual method, the cognitive exercise forces the students to think and write logically and innovatively within a given situation. And because of the cognitive activities, the oral production which follows becomes more meaningful. Such a synthesis in developing laboratory exercises should have a positive effect on the students' achievements and attitudes in laboratory work.
VIII. Experiments

I conducted two types of experiments to find out if synthesized exercises work better than audiolingual exercises, in regard to the students' attitudes and achievements in laboratory work. I selected two levels of ESL students studying at the University of New Orleans and gave them the following experiments in the language laboratory during the month of September, 1982.

The first type of experiment was done to find out how the students perceived the synthesized exercises. By observing their reactions, I believe that I can predict, to some extent at least, the general attitudes that larger numbers of students might have in doing such new laboratory exercises. I asked advanced ESL students of five different nationalities to go through all of my lab exercises. They were from Bangladesh, China, Vietnam, Malay, and Puerto Rico. Their overall reaction to the exercises was very positive. I was very thrilled to see their faces brighten up and at the same time to listen to their comments: "These are very good; I can use my own vocabulary and expressions in some exercises"; "I hope that you will make more of these"; "These are very interesting and easy to understand." More specifically, they liked: The visualization used in pronunciation drills and grammar exercises; the contextualized exercises that made more sense; the practicality of
some exercises such as the listening comprehension exercise in the form of taking a telephone message, or the speaking exercise using a situation tape; and the uniqueness of the laboratory programs such as vocabulary expansion and extensive reading.

The positive reaction that I observed can certainly be interpreted as the first important step toward students having a positive attitude in laboratory work, if the synthesized exercises are applied to the laboratory software. If the students like what they are doing, they tend to get motivated to do more work. The enthusiastic comments made by the five students confirm this point. The lab exercises which motivate the students, therefore, should improve their attitudes in laboratory work.

The other experiment was done with the elementary ESL students. A class of eighteen students was divided into two groups, group A and group B. To balance the English proficiency in groups A and B, I used the average Michigan Test scores to separate the class. Next, I provided group A with the following audiolingual exercises, group B with the synthesized exercises on pronunciation and grammar. Each group did the exercises in conjunction with a tape in the laboratory. The synthesized exercises and tests were taken from P3; those on grammar were from G7, but revised
for the elementary level.

Pronunciation Exercise I for Group A

Listen and repeat.

(map , mop) (fan , van)

Pronunciation Exercise II for Group B

Listen and repeat.

What's this map for? For reading.

What's this mop for? For cleaning.

What's this fan for? For cooling off.

What's this van for? For driving.

Grammar Exercise I for Group A

Repeat after me.

1) Every morning I get up at 7:00 A.M.
   Yesterday I got up at 7:00 A.M.

2) Mary eats an apple every day.
   Mary ate an apple every day.

3) In the afternoon Chen drinks a coke.
   In the afternoon Chen drank a coke.

4) Bob goes to church on Sunday.
   Bob went to church on Sunday.

5) He reads a comic book after school.
   He read a comic book after school.

* For the test you will need to remember the forms of
  the past tense of the verbs. (eats--ate) (goes--
  went) (drinks--drank) (get--got) (reads--
  read)
Grammar Exercise II for Group B

(present) (past)           (present) (past)
gets --- got             eats -- ate
goes --- went           drinks -- drank
reads -- read

Change the following sentences to the past.

Every morning Mary gets up at 7:00 A.M. Then she goes to the kitchen and eats breakfast. Until 8:30 A.M. she drinks coffee and reads the newspaper.

Yesterday Mary ___ up at 7:00 A.M. Then she ___ to the kitchen and ___ breakfast. Until 8:30 A.M. she ___ coffee and ___ the newspaper.

Listen to the tape for the answers. Then the second time through, listen and repeat after the speaker.

After the students did these exercises for ten minutes, the following tests were given. To be fair again, I asked each group to do both types of tests, the audiolingual (TestI) and the synthesized (TestII) in seven minutes. These tests are:

Pronunciation Test I

As you listen to the tape, circle the word you hear.

1) map mop 3) fan van
2) mop map 4) van fan

Pronunciation Test II

As you listen to the tape, choose the best answer and circle the letter (a or b).

1) a. For reading. b. For cleaning. 3) a. For cooling off. b. For driving.
2) a. For reading.  
b. For cleaning.   4) a. For cooling off.  
b. For driving.  

Grammar Test I  
Change the following verbs to the past tense.  

1) He eats fish every Sunday.  

(____)  

2) We go to the park every day.  

(____)  

3) I get up very early in the morning.  

(____)  

4) Tom reads two books a week.  

(____)  

5) James drinks two glasses of milk.  

(____)  

Grammar Test II  
Use the correct past forms of the verbs (drink, get, eat, read, go).  

Last Friday Kate ____ up at 8:00 A.M. First she ____ to the bathroom and brushed her teeth. Next she ____ breakfast in the kitchen. Until 9:00 A.M. she ____ tea and ____ a book.  

---  
The results of the tests are shown in the following table.
Table 1: Test Results of Audiolingual vs. Synthesized Tape Programs

<table>
<thead>
<tr>
<th></th>
<th>Group A</th>
<th>Group B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Scores of Michigan Test</td>
<td>39.11</td>
<td>38.44</td>
</tr>
<tr>
<td>Pronunciation Test I (average)</td>
<td>3.89 (97%)</td>
<td>3.78 (95%)</td>
</tr>
<tr>
<td>Pronunciation Test II</td>
<td>2.89 (72%)</td>
<td>3.78 (95%)</td>
</tr>
<tr>
<td>Grammar Test I</td>
<td>4.70 (94%)</td>
<td>5 (100%)</td>
</tr>
<tr>
<td>Grammar Test II</td>
<td>3.89 (78%)</td>
<td>4.83 (97%)</td>
</tr>
<tr>
<td>Total</td>
<td>15.37 (85%)</td>
<td>17.39 (97%)</td>
</tr>
</tbody>
</table>

The graph below presents a clearer view of these test scores in contrast.
The scores in the table as well as in the graph indicate that the students achieved more by studying the synthesized laboratory exercises than studying the audiolingual exercises. To begin with, group A had a little higher Michigan Test scores of 39.11 compared with 38.44 on group B. But the results of my experiment reveal that group B scored much higher than group A in almost all the tests. The total average scores in contrast (group A: 15.37 and group B: 17.39) indicate this overall difference. It is also worth mentioning that group A, which studied the audiolingual exercises, had a harder time dealing with more cognitive types of tests (Test II) than group B did with the audiolingual type tests (Test I). Actually group B, which studied pronunciation and grammar through the synthesized exercises, could handle both types of tests very well. Group B was able to keep above 95% in both Test I and Test II, whereas group A, which managed to score around 95% in Test I, dropped down to percentiles in the 70's each time in Test II.

The experiments that I have reported in this section were conducted on a limited number of students using parts of the exercises developed in my paper. I am aware that to draw justifiable conclusions an experiment must be replicated on a larger population with a larger test for a longer
period of time. My experiments, therefore, may not provide as reliable data as tests given in a larger scale would. But I believe that within that limited scale these two experiments that I have introduced certainly work as strong evidence to support the argument of my thesis. And the data that I have collected are my small contribution to a trend which synthesizes the audiolingual and the cognitive approaches.
Conclusion

During the last ten years, the decline in the use of the language laboratory has been reported by several scholars of language education. Especially they have pointed out that the main problems exist in out-dated laboratory software.

In order to improve the situation and bring forth better laboratory drills and exercises, I brought two approaches, the audiolingual and the cognitive, together. In this synthesis, the cognitive approach promotes student thinking about the grammatical rules and language patterns while the audiolingual approach contributes to the oral production practice in the target language. This synthesis also makes simultaneous teaching of listening, speaking, reading, and writing skills possible.

As the means to this synthesis, to reduce the strangling effect of cognitive learning, I applied contextualization to the exercises that I produced. The contextualized exercise chosen according to the students' needs and interests prepare the students to leap from the "skill-getting" to the "skill-using" stage.

The evidence that these exercises work better for the students than the traditional audiolingual exercises is found not only in the scholastic work which I pointed out, but also in the drills and the exercises that are
selfevidently better: the pronunciation drills which are made more sensible through contextualization and visualization; the grammar exercises which are in logical context; the vocabulary expansion exercises which promote students' sensible guessing; the listening comprehension exercises that stress the understanding of the students rather than calling for certain responses to set stimuli; the speaking exercises which allow students to use their own creative expressions within the fixed settings; the reading exercises which lead the students to be aware of syntax and semantics of sentences in a meaningful sequence; and the writing exercises which emphasize logical thinking process and some creative self expression within the fixed frame.

The combination of scholastic work and the small experiments that I have introduced in my paper not only confirms my argument but also supports a trend which synthesizes the audiolingual and the cognitive approaches, a movement which unites old and new approaches together.
Bibliography


"Toward the Acquisition of Linguistic Competence: from contrived to controlled materials."


A SYNTHESIS OF AUDIOLINGUAL AND COGNITIVE APPROACHES TO LABORATORY SOFTWARE

by

HIROKO WAGNER

B.A., University of Nebraska At Omaha, 1972

AN ABSTRACT OF A MASTER'S THESIS

submitted in partial fulfillment of the requirement for the degree

MASTER OF SCIENCE

COLLEGE OF EDUCATION
Department of Curriculum and Instruction

KANSAS STATE UNIVERSITY
Manhattan, Kansas

1982
Facing the problem of decline in the use of language laboratory in the last ten years, several language scholars have pointed out as the main cause the outdatedness of ESL laboratory software. My research attempts a synthesis of the audiolingual and cognitive approaches applied to laboratory exercises and drills in the belief that students using them will improve their attitudes and achievements in laboratory work.

In producing the synthesized exercises, I combined the two approaches, the audiolingual to bring forth practice in oral production and the cognitive to promote student thinking about grammatical rules and language patterns. Furthermore, as means to a meaningful synthesis, I emphasized 1) contextualization, 2) activities and programs selected to satisfy the needs and interests of students, and 3) a balanced use of spoken and written forms of language. Contextualization not only calls for better understanding of the target language, but also prepares the students for a leap from the "skill-getting" to the "skill-using" stage. The activities and programs that were developed in accordance with the students' needs and interests simply motivate the students to study more with higher interest. Moving away from the overemphasis on phonology in the audiolingual approach, the cognitive approach stresses the integrated use of spoken and written modes of language, and thus leads the students to the acquisition of speaking, listening,
reading, and writing skills.

The evidence that these synthesized exercises and drills work better than the audiolingual can be found in the theoretical underpinnings of the exercises that I developed, and in the results from experiments with two levels of ESL students. A synthesizing of audiolingual and cognitive elements in exercises and drills obviously demands of the students sensible thinking, reasoning, and even some creating rather than just parrotting without much cognition. Some observations made by several scholars and other experiments that I conducted myself in our laboratory indicate that the students in general react very positively to the exercises. The results tend to verify my assumption that these synthesized exercises and drills do improve the students' achievements as well as their attitudes in laboratory work.