ABSTRACT

THE EFFECTS OF CUING AND REPETITION IN INDUCING AND MAINTAINING BIDIALECTALISM

By

Mark Blaine Milkovich

In this research Bandura's social learning theory was employed in an effort to induce and maintain functional bidialectalism in lower and middle socioeconomic status Chicano children. Uing the variables cuing and repetition, operationalizations of Bandura's attentional and motoric reproduction processes, four experimental conditions were generated: (1) non-cuing and nonimitation, (2) non-cuing and imitation, (3) cuing and nonimitation, and (4) cuing and imitation. Two dependent variables were employed: (1) learning--the use of the appropriate syntactic structure (the one used by the model) in the presence of the experimental variables; and (2) retention--the use of the appropriate syntax in the absence of the experimental variables.

Subjects participated in three treatment sessions. In the first two they were exposed to a model who alternately used Spanish syntactic structures and Phonology or English syntactic structures and regionally standard phonology while employing the English lexicon to describe pictures. Subjects were judged as having employed the appropriate syntactic structure if it matched that of the model. The number of

these matches constituted the value of the learning variable. In the third treatment session the subject was judged to have employed the appropriate syntactic structure in the employed Spanish syntax in responding to the model's Spanish phonology or English syntax in response to the model's English phonology. In this third session the model employed syntactic structures which were the same in Spanish and English. Cuing increased learning but not retention. Imitation failed to increase either learning or retention. The results are discussed in the light of a general pattern of linguistic rule learning.

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CHAPTER I

INTRODUCTION

Overview

This study tests a method for inducing and maintaining functional bidialectalism in children. Children from lower socioeconomic groups, especially those who are members of racial and ethnic minorities, are often faced with a difficult problem. They need to know one version of the English language to perform well in the school and another to function in their homes and neighborhoods. This chapter presents the long range problem these children face and reviews the strategies which have been suggested for dealing with it. Considerable space is devoted to that discussion because any future policy decisions on teaching Standard English to children who now employ Nonstandard English will be greatly influenced by the social issues which surround the suggested strategies. The chapter closes by considering the implications of the two major strategies and discussing the variables which need to be examined prior to successfully implementing one of them, functional bidialectalism. Later chapters discuss the methods and procedures, results, and implications of the research.

Background

Individuals acquire their speech styles from those around them. If someone sounds like a southerner, it is because he has spent more time interacting with southerners than northerners. These regional language variations first emerged because geographic barriers like mountains, rivers, and distance limited communication between people in different parts of the country. Over time the language of any group changes and the changes themselves differ from group to group. The less people from different regions talk to one another, the less their language versions can influence one another, and the more dissimilar their speech styles or dialects will become.

Regional dialect differences are more interesting than bothersome. Although they result from a lack of communication, they seldom prevent it. Dialects develop not only from the isolation imposed by geographical factors, but also from the isolation imposed by social class, racial, ethnic, and cultural group membership. Most people spend relatively little time interacting in socioeconomic groups much different than their own. As a result, different versions of the language develop within different social groups. Social dialects not only result from isolation, they also enhance it. This could happen because the group members want it that way ("I'm proud of my heritage and the speech that goes with it. I wish to associate with those who share that

pride.") and/or because nonmembers want it that way ("You've got your speech and heritage and I'm not going to let you forget it. I'll let you know when I want to interact with people like you.").

From a purely linguistic perspective, differences among social dialects are superficial (cf. Houston, 1970; Cannon, 1973; Macaulay, 1973); no native speaker of English is linguistically retarded because he uses one particular dialect instead of another. In discussing different dialects, Marckwardt (1971) said: "No linguist has ever called this into question, but no linguist in his right mind could ever say they have equal prestige" (p. 33). Although there is no single dialect which is the prestige dialect, there are regionally standard dialects which "the majority of educated speakers [in a geographical region] habitually use," (Allen, 1969) and they have the characteristic that speakers of one regionally standard dialect have little trouble understanding speakers of another regionally standard dialect. That is, the syntactic variations among the various standard dialects are minimal. However, prestige is a relative thing; one group's prestige dialect is a non-prestige dialect in another group's eyes. Thus, Negro Nonstandard English, whose existence as a single dialect is probably as mythical as that of a single Standard English dialect, confers status on its users in some quarters but not others. Nonstandard dialects are likely to be maintained because social

pressures quietly but firmly push the speaker to employ the prestige dialect of the group whether or not it is a standard dialect. It does not much matter what we label the different dialects or, for the purposes of this paper, that different people speak different dialects; the focus here is on the consequences of those differences. Williams (1970) argues that the socioeconomically disadvantaged are caught up in a poverty cycle that includes developmental, educational, occupational, and economic disadvantages. He points out that while these groups share a number of common socioeconomic problems, a major distinguishing feature of a particular group is their language and the way they use it. Delia (1975) and other Communication scholars have shown that these individuals are employing more than just a distinctive language style, they are employing a distinctive communication style involving both verbal and nonverbal behaviors. If the assumption that educational disadvantage leads to occupational and economic disadvantages, there is reason to believe that the communication styles of the socioeconomically disadvantaged may be a cause of their problems.

Williams, Whitehead, and Miller (1972) presented video tapes of Mexican-American, Anglo, and Black children from "middle and low status homes" to teachers and obtained the following results:

> (1) teachers tended to give global evaluations of language samples along dimensions identified as

> confidence-eagerness and ethnicity-nonstandardness; and (2) teachers' expectations of children's performance in subject matters are partially predictable upon the basis of language attitudes; the degree of prediction increases when the subject matter area is directly within the language arts (p. 275).

Crowl and MacGinitie (1974) examined the direction of such predictions. They tape recorded identically worded answers to typical school questions using six white and six black ninth graders to generate the stimulus tapes. They found "significantly higher grades were assigned by sixty-two experienced white teachers to the recorded answers when spoken by white students than when spoken by black students" (p. 304). It was not possible to distinguish teacher's susceptability to dialect influence on the basis of their "sex, age, years of teaching experience, most frequently taught grade level, or the percentage of black students most frequently taught" (p. 304).

Given Delia's (1975) recent evidence that the problem is communication rather than language based, Communication scholars will be required to help solve it. However there are advantages to initially restricting research to language rather than the whole of communication behavior. First, many of the background studies have been conducted for the needed research on verbal communication. And, second, language differences are more obvious and easier to work with than nonverbal differences.

Strategies for Dialect Change

The research conducted here focuses on the pedagogical rather than the social problems resulting from this discrimination. Since the two are so highly interdependent however, it is necessary to discuss both. As Shuy (1973) lists them, three strategies have been proposed for dealing with nonstandard dialects and resultant discrimination. The first is to eliminate them and replace them with the regionally standard dialect. Even before we acknowledged the prestige factor in dialect differences, this was standard procedure in the classroom. Some argue that it is still the prevailing attitude. "Unconventional speakers from Huckleberry Finn to the latest ghetto dropout have traditionally been treated as linguistic pariahs up with whom no standard speaker should have to put" (Eskey, 1974, p. 769).

The second strategy is based on the premise that while it is important for the student to be able to use a standard dialect, there is also a need for the nonstandard dialect. Given this, the bidialectical child could switch back and forth between dialects as he thought the situation demanded.

The third strategy advocates changing "the attitudes of the majority to accept linguistic and cultural pluralism" (Shuy, 1973, p. 302), accepting individuals for what they are instead of for their social and cultural group membership. This strategy is more attitude than action (no large scale attempts have been made to modify the majority's position on

linguistic pluralism) but it has been a sounding board for arguing against the idea that "the prejudices of middle-class whites cannot be changed but must be accepted and indeed enforced on lesser breeds" (Sledd, 1969, p. 1309). The arguments for and against each of these strategies are examined below.

The original strategy for dealing with non-prestige dialects, eliminating them, is no longer advocated. The space is taken to discuss it here because an important issue in examining the third strategy will be the contention that the dialect elimination strategy has been reincarnated in the second (bidialectalism) strategy. The contentions of the first position were:

> (1) the language of the disadvantaged child is deficient [i.e. an incomplete language system]; (2) the disadvantaged child does not use words properly; (3) the language of the disadvantaged child does not provide him with an adequate basis for (abstract and other) thinking; and (4) to the disadvantaged child, language is dispensable; such children tend to communicate nonverbally in preference to verbally (Houston, 1970, pp 952-53).

These assumptions had been around a long time and they died hard. As late as 1964, Stewart used the term "substandard" in talking about dialects and Brottman (1968, cited in Hall and Turner, 1974) asked if the language of lower socio-economic groups was adequate for learning the concepts necessary for school. For the most part, however, "Miss Fidditch's dream of language intrinsically good" [read superior] (Sledd, 1969, p. 1308) finally succumbed, in the

mid 1960's, to the arguments advanced by a number of developing social sciences.

Shuy describes the situation this way. Educational, psychological, and linguistic theory were all in need of a "real world" issue to flex their new theoretic muscles and the funding to make flexing possible. The study of dialect and the plight of Blacks in the ghetto had both needed ingredients. The research efforts resulted in the overthrow of the dialect elimination strategy, largely on the basis of Chomsky's arguments that all dialects are created equal and, as complete language systems, nonstandard dialects are as completely capable of serving any communication needs of their users as any other linguistic system. Support for this position came from several sources. Labov et al. (1968) demonstrated the equal complexity of the language used by lower socioeconomic class Blacks and middle-class Whites; Sinclair de Zwart (1969) showed how, according to Piagetian theory, language was neither a necessary nor sufficient condition for certain mental operations; and the bias built into standardized tests of language abilities was documented.

The work of Labov and others in the area is important not because it prevented the elimination of nonstandard dialects, but because it provided the data which can be used to make informed decisions about dialect issues. The elimination strategy which not only sought to get rid of

the non-prestige dialect but also replace it with the prestige dialect of the region was doomed from the start. The only way people have ever been baptized into new languages is by immersion (Falk, 1973). As long as the dialect being taught in the schools does not meet the child's language needs in the home, there is no way he can give up his nonstandard dialect. This point is consonant with what we know about foreign language teaching. As Falk (1973) points out the only way to make a fluent Spanish speaker out of an English speaker has been to embed him in a Spanish speaking community where he will not need or have any use for his English. The best situation the elimination strategy could hope for was some dialect leveling. That is, by being exposed to the standard dialect, the child incorporates some of its features in his own speech. When speakers of different versions of a language come in contact with one another, some leveling occurs. The amount of leveling depends on the amount of contact.

Out of the demonstrations of the adequacy of nonstandard dialects as communication systems came the arguments for functional bidialectalism. Functional bidialectalism would allow the child to maintain a nonstandard dialect for use in the home and community and provide a key to social and vocational mobility, a standard dialect. At least those are the hoped for results. Matison (1974) points out that teaching a standard English dialect is usually defended on

the following grounds: (1) "having control of a Standard English may provide the opportunity to gain access to certain social groups"; and (2) ". . . learning to speak a standard dialect may be vocationally beneficial and economically expediant" (p. 492). However, Cannon (1973) lists "four huge, presently unresolvable kinds of problems facing the teacher" (p. 385) which are associated with bidialectalism. First, we lack adequate descriptions of the relevant dialects. As it now stands, teachers cannot be sure whether they are admonishing the child for his bad Standard English or his good Standard English. Second, until dialect descriptions are obtained there can be no adequate teaching materials for teaching the child the syntactic rules of his nonstandard dialect. Third, until the dialect descriptions and teaching materials are obtained, teachers cannot receive the necessary training to make them bidialectical. And, fourth, once these language related problems are solved there are still communication problems which will arise when members of different cultures or subcultures interact. Although Hymes (1974) has dealt extensively with the communication rules followed in different subcultures such as who speaks when, what is appropriate to say, etc., these issues have received very little attention in education publications. Even when they are considered (cf. Kocher, 1974), they are treated as linquistic rules, part of the language itself.

These four problems are usually acknowledged by the proponents of bidialectalism but they temper criticisms by pointing to advances which have been made on all of them (cf. Shuy, 1973). Opponents of bidialectalism, who argue for the third strategy of leaving the language of the non-standard dialect user alone, offer more vitriolic criticisms:

> In the annals of free enterprise, the early sixties will be memorable for the invention of functional bidialectalism, a scheme best described by an elderly and unregenerate Southern dame as 'turning black trash into white trash' (Sledd, 1969, p. 1308);

or

> Bidialectalism . . . is a less vague and haphazard continuation of earlier attempts, as old as popular education, to eradicate dialect. And it offers the lower class a traditional choice; covert so that the ongoing social game will be fairer to you. There is no offer to change the rules of the game or its name (O'Neil, 1972, p. 433).

They suggest that instead of teaching standard dialects we ought to be persuading the public to accept linguistic pluralism.

The foundations supporting such criticism are readily available. As already noted, there is no basis for contending that one dialect is linguistically superior to another. In addition, support for the argument that student-teacher dialect differences cause comprehension problems in the school is withering. Weener (1969) found that middle not lower socioeconomic class children suffered significant comprehension loss when messages were presented in dialects other than those used in their home.

Hall and Turner (1974) offered the following explanation for the opposite findings in earlier studies. Typically these studies required children to repeat phrases or sentences and exact repetition is taken as evidence of comprehension. In encoding the message which was just given, the nonstandard dialect user structures the message according to the syntactic rules of his own dialect. His repetitions are therefore systematically different from the original messages but as the result of encoding rather than decoding (comprehension) processes. Since the lower socioeconomic class child has already learned to comprehend the standard dialect it seems more equitable to require nonstandard dialect comprehension skills of the middle socioeconomic class child than to require lower socioeconomic class children to also acquire standard dialect production skills.

As the theory of bidialectalism can be attacked so can its practice. The bidialectalists simply cannot demonstrate that they are teaching anybody a standard dialect. At best, they are able, through such things as long sessions of pattern practice drills, to teach a particular syntactic rule of Standard English and show how it differs from the corresponding rule in the nonstandard dialect. In criticizing such teaching techniques, Sledd (1969) comments:

> . . . Professor Troike can argue the success of his methods by showing that after six months of drills

> a little black girl could repeat his hat after her teacher, instead of translating automatically to he hat. Unfortunately, tapes do not record the psychological damage, or compare the effectiveness of other ways of teaching, or show what might better have been learned in the same time instead of learning to repeat his hat (p. 1312).

Although no data support Sledd (1969), the idea of psychological damage resulting from teaching a standard dialect is often cited (cf. Chisholm, 1974; Isenbarger and Smith, 1973) as a weakness of the bidialectalism position. The issue is not new; opponents of bilingual education in the 1920's suggested that "children who are instructed bilingually from an early age will suffer cognitive or intellectual retardation in comparison with their monolingually instructed counterparts" (Tucker and D'Anglejan, 1971, p. 491).

What seems to happen on both sides of the bidialectalism fence is that a data-based argument is pushed aside for a more emotion-packed issue about which there are no available data. In large part it has resulted from the all out effort to win rather than resolve the social dialects confrontation. As Shuy (1973) describes it:

> There has at no time been a willingness to accept the motives of the camp whose position was attacked as even potentially sincere. The issue has made enemies irrationally, probably because of the heavily charged emotions involved . . . . Otherwise respectable scholars have resorted to tactics of name calling, inuendo, wrenching from context, doctored quotations, and selective reading in the attacks on presumably opposing positions (p. 302-3).

As a result of this persuasion campaign strategy, the two themes which permeate the arguments against teaching

Standard English are: (1) "it is morally wrong to teach a standard dialect, for it may alienate nonstandard speakers from their subcultures," and (2) "it may be educationally impossible or at least inefficient to teach a standard dialect" (Hess, 1974, p. 284).

Why Bidialectalism

To successfully argue for bidialectalism it is necessary to counter these two arguments as well as the "four huge, presently unresolvable kinds of problems facing the teacher" (Cannon, 1973). Educationally inefficient methods will not be tolerated. The arguable position is not that there cannot be efficient methods but that it is up to proponents of bidialectalism to find them if they are ever to be developed and used.

The ability to understand and communicate with another will not guarantee acceptance of the other's world view. Sharing a social dialect is a necessary though not sufficient condition for inducing the acceptance of cultural pluralism. Although the communication rules do differ between subcultures as Hymes mentions, there is increasing evidence that all members of our culture may share more of a social interaction rule system than we usually imagine. The research of Berger and his colleagues (Berger and Larimer, 1974; Calabrese, 1975; Berger et al., 1975; and Larimer and Berger, 1974) has shown that even across social classes, we all sequence information in initial interactions in much the same way.

We begin with the exchange of biographical-demographic information which can be used to judge the appropriateness of alternative messages for the other. Before long the conversation shifts to the sharing of attitudes and opinions. As Miller and Steinberg (1975) point out, when we have and employ this sort of information, information about the other as an individual, we are no longer stereotyping. Since stereotyping is a prerequisite for prejudice, overcoming it is a step toward the acceptance of cultural pluralism.

The major issue facing bidialectalists is the equity of teaching dialects. Although there are data that nonstandard dialect speakers can comprehend standard dialects, there are no data indicating standard dialect speakers can adequately understand the nonstandard dialect. The nonstandard dialect speaker is exposed to Standard English throughout the educational system; the standard dialect speaker has not been continually exposed to any of the several forms of Nonstandard English. The solution suggested by Sledd is teaching Nonstandard English to Standard English speakers.

One of the few certainties with respect to dialect change is that the process is truly democratic, the majority rules. Nonstandard dialects cannot be taught to Standard English speakers without teaching standard dialects to Nonstandard English speakers. Not only does this idea have at least a chance of succeeding, it is also the most equitable. It appears almost impossible to persuade a white middle-class

majority to accept minority group dialects unless they have either learned that dialect or are developing interpersonal relationships with minority group members. In this case, group characteristics such as dialects cease to be the most important items. Either option includes teaching Standard English to Nonstandard English speaking students.

If we can develop methods for teaching second dialects, it is likely that teachers will be the only members of the middle-class who will be required to learn Nonstandard English. Although it is not the most equitable solution, many will argue that it is the large economic, occupational, and educational rewards the nonstandard dialect speaker obtains which justify teaching second dialects at all. Since standard dialect speakers will not obtain such large rewards, second dialect learning is, for them, not worth the time expenditure. Although not totally equitable, teaching standard dialects is not as inequitable as Sledd and O'Neil argue given the alternative. In the past we have argued that teaching standard dialects is justifiable because it provides access to the rewards allotted the middle-class. Let us shift and examine the harm which presents itself if standard dialects are not taught.

Court ordered busing is forcing contact among members of different language groups. Increased contact will produce dialect leveling. The standard and nonstandard dialects will become more alike as a function of greater contact with one

another. The nonstandard dialect speaker will lose or modify the speech style we argue is so much a part of his social and cultural heritage and become the "white trash" Sledd's "unregenerate Southern dame" describes. There is evidence that such leveling is occurring now. Seitz (1975) studied the imitative ability of black children in integrated and segregated schools and found that "those who attended an integrated school were both better on standard and poorer on nonstandard sentences than those who attended a segregated school" (p. 217). If the nonstandard dialect is as important to minority group children as we argue it is, we need efficient and effective means of teaching these children to distinguish and maintain both standard and nonstandard dialects.

The Research Problem

The purpose of this study was to determine whether children could learn and retain two syntactic systems and employ whichever is appropriate for a particular social setting. The underlying proposition is that if the child uses cues from the social setting to determine the appropriate set of structures and if he can use either set, he will be functionally bidialectical. The theoretic model for this study is Bandura's social learning theory. It posits that much of what we learn can be obtained by observing models perform the behavior. In a review of research on children's learning of rule governed behavior, Zimmerman and Rosenthal (1974) conclude that "modeling procedures, both alone and in conjunction

with other variables, were effective in teaching children drawn from diverse populations to respond according to generalized linguistic rules" (p. 32). A number of the studies they reviewed used Mexican-American children as subjects (e.g. Carroll, Rosenthal, and Brysh, 1972; Rosenthal and Whitebook, 1970; and Harris and Hassemer, 1972).

The theory argues that social learning is governed by four processes: (1) attentional processes - awareness of the critical features of the modeled behavior, (2) motoric reproduction processes--imitating the critical features of the modeled behavior, (3) reinforcement processes--rewards offered for the successful imitation of the modeled behavior, and (4) retention processes--integrating and retaining the critical features of the modeled behavior to allow for correct future performance. The function each process serves in the present study is given below.

"A person cannot learn much by observation if he does not attend to, or recognize, the essential features of the model's behavior" (Bandura, 1971, p. 6). Until recently this common sense assertion did not receive direct support. However, Yussen (1974) has demonstrated that attention levels influence recall. In his study there was a .79 correlation between frequency of attention and recall and a .55 correlation between duration of attention and recall. The correlation between frequency and duration of recall was .78. Yessen also found that instructions to remember what was modeled

also increased attention and recall. Studies of rule governed behaviors other than those associated with language have also found that the more explicit the information about critical features of modeled behavior the greater the learning (cf. Rosenthal and Zimmerman, 1972). On the basis of these studies it is hypothesized that:

H_1: Cuing (signaling) the critical features of the modeled behaviors will significantly increase retention.

H_2: Cuing (signaling) the critical features of the modeled behaviors will significantly increase learning.

The operational definitions of learning and retention are made clear in Chapter III. For now it is important to note that learning refers to correct usage of linguistic structures modeled during two treatment sessions, while retention refers to correct usage of those structures in the absence of modeled behaviors on a day following the second treatment session.

The second process, motoric reproduction, has been found effective in teaching some syntactic structures. Whitehurst, Ironsmith, and Goldfein (1974) presented two groups of four and five year old children with pictures. In the modeling condition the experimenter described twenty pictures using passive sentences and the children were asked to describe another twenty pictures. In the control condition the child was presented with twenty pictures and asked to describe them all. The experimenter did not

describe any pictures in this condition. All children in the modeling condition produced passives while none of the children in the control condition did so. A comprehension test indicated that the modeling procedure provided the greatest increments in comprehension of that structure.

More direct evidence of learning facilitation through motoric reproduction comes from a study by Whitehurst and Novak (1973). The study has a limited utility here, however, because the pre-school aged subjects went through four training sessions a week "over a number of weeks." In the modeling condition the experimenter described training pictures using participial, prepositional, appositive, or infinitive phrases. The subjects then described a number of probe pictures. In the imitation condition the subjects performed an additional task; they were rewarded for exact repetitions of the experimenter's description of the training pictures. Imitation was effective in inducing production of modeled structures by all subjects for all phrase types. In the modeling only condition some subjects successfully produced some phrase types.

Although no studies could be found which examined the relationship between imitation and retention, the studies which examined imitation and learning and Bandura's theoretic position on the relationship between retention and learning suggest the following hypotheses:

H_3: Imitation will significantly increase retention.

H_4: Imitation will significantly increase learning.

There are a number of other variables which may influence the effects of the treatments. They include age (grade), sex, and intelligence. Because the study is designed to test a method which has to work for all children, there are no hypothesized relationships between these variables and the two dependent variables.

The following chapter describes the operationalizations of the variables, data collection procedures, and data analysis techniques involved in testing the hypotheses.

CHAPTER II

METHODS AND PROCEDURES

Subjects

One hundred thirty-three first, second, and third graders, approximately 46 from each grade, acted as subjects for the study. They were drawn from schools in two Salt Lake City, Utah school districts. It was necessary to draw from two districts in order to assure a reasonable socioeconomic mix within the sample. This was the only procedure which could assure such a mix since the school districts would not allow ascertainment of the child's socioeconomic background. One district served an older section of town. The classrooms from which these children were drawn were supported by Title I and Follow Through programs. The other school district serves a new suburban, middle-class population. Equal numbers of students were drawn from each district. All of the children were exposed to Spanish in the home and the vast majority were exposed to Spanish in the schools through either teachers' or teacher aides' usage.

Stimuli

During each of the first two days of the experiment subjects were presented with twenty training pictures of children

engaged in some action. These pictures were taken from children's coloring books and presented in notebooks. The presentation of these pictures was accompanied by a tape recorded description of the action using Spanish phonology and syntactic structures or the regionally standard English phonology and syntactic structures. All such descriptions were repeated a second time. The English lexicon was used for both types of descriptions. A probe picture depicting a similar but different activity by different children was presented to the subject following each training picture. Using the phonology employed in the description of the training picture, a tape recorded message asked the child to describe the action in the probe picture. The question used was "What does he (she or they) do?"

The syntactic structures used in the study were taken from research conducted by Politzer and Ramirez (1973). They have the following characteristics. First, the use of the Spanish syntax yields ungrammatical English. In other words, the Spanish and English syntactic rules produce different surface structures for the same underlying structure. Second, the Spanish syntactic structures are often used by Mexican-American children in lieu of Standard English structures. The structures selected are presented below.

1. The violation of the mandatory subject-verb-object order of English when using Spanish syntax.

   Spanish - "Then he it broke."
   English - "Then he broke it."

2. The addition of redundant subject pronouns when using Spanish syntax.

   Spanish - "My brother he went to Mexico."
   English - "My brother went to Mexico."

3. The omission of object pronouns when using Spanish syntax.

   Spanish - "I don't know in English."
   English - "I don't know it in English."

4. The substitution of the definite article for the possessive pronoun when using Spanish syntax.

   Spanish - "The apple fell down on the head."
   English - "The apple fell down on his head."

The interference between Spanish and English does not account for all differences between the standard and nonstandard dialect. However, the child's deviations from the standard and nonstandard dialect may also be deviations from appropriate usage of the nonstandard dialect. Differences based on language interference were chosen to avoid the possibility of teaching structures which are incorrect for both the standard and nonstandard dialects. In addition, these syntactic variations cover the four major options for differences: (1) addition, (2) omission, (3) substitution, and (4)

rearrangement. Use of the English lexicon in conjunction with Spanish syntax and phonology constitutes the operational definition of the Nonstandard Mexican-American dialect.

The total of forty pictures were grouped into twenty pairs. For each of the four syntactic structures a pair was randomly assigned the Spanish or English syntax as its appropriate description and the two pictures in the pair were randomly assigned the training or probe function. Each picture was used to teach as many structures as possible.

The voice for all stimulus tapes is that of a twenty-six year old male Spanish-English bilingual. His native language is Spanish but he has been bilingual since he was four. Radio broadcast training enables him to employ regionally standard phonology in his English.

The data were collected by Caucasian females who were either school district speech pathologists or students in the Speech Pathology and Audiology Division of the Department of Communication at the University of Utah. Caucasian females were used because more women than men teach children this age and because Caucasian teachers are most likely to require a method which like this one is not of their own design.

Treatments

There were four experimental conditions in the study: (1) cuing and imitation, (2) cuing only, (3) imitation only, and (4) neither cuing nor imitation. Cuing involved

signaling both the phonological system to be used in the upcoming description and the phrase which includes the syntactic difference between the two languages. Subjects were taught to anticipate the phonological system using the following method. Subjects in the cuing and imitation or cuing only conditions were told:

> Sometimes Chicanos and Anglos talk differently. A Chicano would say "Good morning, how are you?" (Spanish phonology) while an Anglo would say "Good morning, how are you?" (English phonology). Let's try another example. A Chicano would say "You have a nice school." (Spanish phonology) while an Anglo would say "You have a nice school." (English phonology). Now I'm going to give you some sentences and you tell me if the person saying them is Chicano or Anglo.

Subjects were then presented with nine Anglo and nine Chicano sentences. If they could correctly identify the type of speakers in all instances they moved on to the next part of the training. If they made an error more example sentences were given and the subjects tested again. This procedure was repeated until the subjects correctly identified the type of speaker for all sentences.

Once the subject demonstrated an ability to distinguish English and Spanish phonology, he was taught to associate the cue word "ready" with the former and the cue word "listo" with the latter. This association was formed by telling the subject:

> When you hear "listo," the man is going to talk like a Chicano; when you hear the word "ready," the man is going to talk like an Anglo.

A series of example sentences were then presented. They were preceded by the cue word appropriate for the phonology used. A test sequence of cue words followed by sentences differing in phonology was then presented. The tape was stopped after the cue word had been given and started after his prediction about the phonology of the upcoming sentence. This allowed the subject to verify for himself the correctness or incorrectness of his responses. When the child successfully completed the eighteen sentence phonology identifications this portion of the training was considered complete.

Cuing the syntactic differences was accomplished by raising the volume of the phrase containing the syntactic difference three decibels over the volume of that phrase in the imitation only and neither cuing nor imitation conditions. Training was done by instructing the subjects:

> Part of this sentence will be said loudly. Pay attention to the loud part so you can repeat it for me.

The sentences presented employed both Spanish and English phonology and syntactic structures acceptable in either language. When the subject could repeat the emphasized phrases for the eighteen sentences, irrespective of whether he matched the syntax of the presented sentence, he was considered trained.

Procedures

All training sessions for the subjects in the cuing conditions took place immediately preceding the presentation of

the test materials. This required approximately fifteen minutes on the first day of experimental treatment and approximately ten minutes on the second day.

The subjects were then presented with two sentences describing the training picture and asked, by the tape, to describe the probe picture which was displayed by turning the page. In the cuing conditions the descriptive sentences were preceded by either "listo" or "ready." These tapes were simply dubbed and these two cuing words electronically removed for the non-cuing conditions. Electronic means were also used to raise the volume of the portion of the sentence containing the syntactic variation three decibels. In the imitation conditions the child shadowed the tape as the speaker uttered the descriptive sentence the second time. This sequence was followed for twenty training/probe picture pairs on each of two days. The pairs alternated between Spanish and English syntax.

On the third day children in all conditions were exposed to the same stimulus. This was a series of questions asking the child to describe the action in forty different pictures each of which was presented twice. In one presentation the question was asked using Spanish phonology, in the other English phonology was employed. The sequence in which the pictures were displayed was determined using a table of random numbers.

Each of the subjects was exposed to only one syntactic structure over the three days. Subjects were randomly assigned to both structures and experimental conditions.

The women administering the tapes were trained to follow the following procedures with respect to rewarding the child during the treatment sessions. They were to verbally reward the child if and only if the child began to show signs of fatigue or disinterest. Although reinforcement has been found effective in teaching linguistic structures through modeling, its presence is not necessary (Zimmerman and Rosenthal, 1974). In this study it presented a complication. The purpose of the study was to train children to talk like the individual they were talking with. An alternative, therefore was to have the child rewarded with both "bueno" and "good." However that could be considered as a cuing stimulus and was therefore not acceptable for the non-cuing conditions. The other alternative, consistently using either "bueno" or "good," could have reduced the effectiveness of the language differences portrayed in the tapes. This seemed the better alternative but in order to minimize its potential effects the reward "good" was used sparingly and only under the conditions specified above.

The data were collected by simultaneously tape recording both the stimulus materials and the child's responses to them. Coders later went through the tapes and noted whether the child employed the structure modeled for him and, in the

imitation condition, whether the child correctly mimicked the descriptive sentences given. The number of times the child employed the syntax of the model during the first two days is the operational definition of learning. The number of times the child used the syntax appropriately for the phonology of the model on the third day is the operational definition of retention.

CHAPTER III

RESULTS

Findings

This chapter outlines the results of this study with respect to two questions. The first question is: What are the effects of cuing and repetition on the learning and retention of bidialectalism? In this study learning is operationalized as the number of times the subject in describing probe pictures employed the syntactic structure matching that modeled in conjunction with the use of the appropriate phonology by the model in his description of the training pictures. That is, although the model employed either Spanish syntax and phonology or English syntax and phonology, the child's behavior was judged as a match if he employed the model's syntax alone. Retention was operationally defined as the number of times on the third day of the experiment the child's response to the question "What does he (she or they) do?" used the syntactic structure, Spanish or English, which matched the phonology of the model.

The second general question is: If the method is successful, how general is its utility with respect to different types of children and linguistic structures? For

maximal utility of the method two conditions have to be met. First, the method must work irrespective of the child's age, sex, and intelligence. Second, the method must work for syntactic structures irrespective of their complexity. To answer the second question, the following data were collected: (1) the child's grade, (2) sex, and (3) teacher's evaluations of academic achievement. For the purposes of the first question all syntactic structures employed in the study were assumed to be of equal difficulty in spite of the fact that the assumption was known to be false. For the purposes of the second question a measure of syntactic difficulty was obtained by counting the number of times subjects in the repetition conditions failed, in the forty trials, to correctly mimic the model's descriptions of the training pictures. The mean of the score was taken as the structural difficulty for that structure.

Although the first question is primarily theoretic and the second primarily pedagogical, the strong relationship between the two makes it useful to present the analyses done to answer both questions before detailing the results of those analyses.

Social learning theory predicts that correct performance of a behavior and the retention of that behavior for use in future situations are positively correlated. Whether or not they were correlated in this data was not only a theoretic but also a methodological issue. If they were correlated,

data analytic procedures for multiple dependent variables were required. If not, data analytic procedures for individual dependent variables were called for. A Pearson correlation computed between the learning and retention variable yielded an r = .08. For this reason two-way analyses of variance for single dependent variables were used to assess the effects of cuing and imitation on the learning and maintenance of Spanish and English syntactic structures.

Hypotheses 2 and 4 predict that cuing and imitation respectively will significantly increase learning. The results of the two-way analysis of variance used to test these hypotheses are presented in Table 1.

Table 1. The Effects of Cuing and Imitation on Learning

Source of Variation	S. S.	d.f.	M.S.	F.
Cuing	3.995	1	3.995	1.108
Repetition	13.918	1	13.918	3.859*
Interaction	.415	1	.415	.115
Residual	465.307	129	3.607	

*$p < .05$

The results of this analysis lead to the following conclusions: (1) cuing cannot be said to increase learning, and (2) repetition did increase learning. The results of the two-way analysis of variance used to test the retention hypotheses are presented in Table 2.

Table 2. The Effects of Cuing and Repetition on Retention

Source of Variation	S. S.	d.f.	M.S.	F.
Cuing	.045	1	.045	.004
Repetition	8.036	1	8.036	.735
Interaction	3.284	1	3.284	.300
Residual	1422.391	129	10.937	

The results of this analysis lead to the conclusion that neither cuing nor imitation can be said to increase retention.

A regression analysis was then used to determine the effects of child's age, sex, intelligence, and difficulty of the structure on learning and retention. Here again the lack of correlation between the dependent measures required two analyses. Table 3 contains the contribution of these predictor variables to the variability in learning.

Table 3. Effects of Structural Difficulty, Grade, Sex, and I.Q., on Learning

Variable	Simple r	Multiple R	r square	r^2 Change
Difficulty	-.04963	.04963	.00246	.00246
Grade	.08415	.10208	.01042	.00796
Sex	.15241	.17973	.03230	.02188
I.Q.	-.01618	.17975	.03231	.00001

None of the simple correlations are significant and, with the exception of sex, none of the variables account for even 1% of the variability in learning. In the overall regression the F value for these variables with 4 and 106

degrees of freedom was .88479. These degrees of freedom are lower than those in the previous analysis due to casewise missing data options.

Table 4 lists the contributions of structural difficulty, grade, sex, and I.Q. to variablility in retention.

Table 4. Effects of Structural Difficulty, Grade, Sex, and I.Q., on Retention

Variable	Simple r	Multiple R	r square	r^2 Change
Difficulty	-.06432	.06432	.00414	.00414
Grade	.09474	.11993	.01438	.01025
Sex	.05669	.13041	.01701	.00262
I.Q.	-.11319	.17346	.03009	.01308

Here again, none of the correlations are significant, and the predictor variables accounted for only minute proportions of the variability in retention ($F = .82205$, d.f. = 4 and 106).

These analyses lead to the following three major conclusions. First, cuing did not increase either learning or retention. Second, repetition increased learning but did not increase retention. Third, the method seemed to operate independently of the child's grade, sex, I.Q., and the structure's difficulty. These findings raise the questions: (1) why weren't learning and retention correlated?, (2) why did repetition have an effect on learning while cuing did not?, and (3) why did cuing and repetition fail to affect retention? These questions get at the heart of not only

what was going on in this study but also what are the interrelationships among the processes which govern learning from the social learning theory perspective. The answers come from a direct examination of the raw data rather than from any statistical analyses. Let me begin by explaining why there were no retention findings of statistical significance.

The first two points to consider are these: (1) the subjects were only exposed to the syntactic differences for ten minutes a day for two days, and (2) a full day elapsed between this exposure and the retention measure. Taken together this means the subjects were each exposed to twenty sentences of each type of syntactic structure and experienced considerable delay before they were able to demonstrate retention. The mean score for retention was 40.0 with a small standard deviation of 3.3. On the surface of things this is exactly what is expected by chance so the conclusion that there were absolutely no effects seems reasonable. However, there is an important difference which emerges from a careful examination of the data. There are two ways subjects could obtain the score expected by chance. First, they could consistently employ one structure. Second, they could alternate between the Spanish and English indiscriminately. In other words, they might be aware of a difference but unsure about the relationship between the model's phonology in asking the questions and the two syntactic structures.

To get at this the structure with the least difference between the conditions on both the learning and retention scores was examined. Each of the subjects was dominant in one language or the other as evidenced by their tendency to use one language's syntactic structures more than the other. I then divided the number of matches on the retention task into two groups, those where the child matched using his dominant language's syntax and those where he matched using the second language's syntax. The former was then divided by the latter. This produces a ratio where the larger the ratio the greater the child's reliance on one language in responding to the questions, and the smaller that ratio the smaller the reliance on any one language. These ratios are:

Non-Cuing Non-Repetition	5.3
Non-Cuing Repetition	5.2
Cuing Non-Repetition	4.6
Cuing Repetition	4.3

This indicates that in situations where no learning was evidenced there was still a difference in flexibility of language usage attributable to cuing.

To see if this trend held in situations where there was learning, these procedures were applied to the structure where there was the greatest amount of learning on the first two days of the experiment. The ratios for each of the conditions are:

Non-Cuing Non-Repetition	2.1
Non-Cuing Repetition	1.5
Cuing Non-Repetition	1.9
Cuing Repetition	3.0

This pattern is much different than the one obtained in the low learning situation but for an unexpected reason. Twenty-nine percent of the subjects in the cuing conditions actually shifted their dominant syntactic structures between the first two days and the third. That is, if they primarily relied on English structures on the first two days, they shifted to Spanish on the third day and vice versa. There is a general pattern in adopting linguistic structures where the child begins by using a structure sparingly, he then begins to employ it indiscriminantly, and he cuts back on its usage gradually to finally employ it only in appropriate situations. This argument is supported by the fact that the patterns of means for the four treatment groups for each of these structures was the same. Based strictly on the number of matches, the cuing groups matched more than the non-cuing groups and the repetition groups matched more than the non-repetition groups.

The structures where intermediate amounts of learning were evidenced were then examined. The subjects exposed to these structures relied solely on their dominant language to provide the retention data. This will not make sense until another factor involved in the study is considered.

The finding, however, is consistent with the one obtained from examining the two sets of extreme scores. That is, although repetition did not affect retention, cuing did. That effect depended on learning which in turn depended on repetition.

This coincides with a developmental pattern typically followed by children when they are adopting linguistic structures. First, they employ the new structure hesitantly. Second, this hesitation is lost and they begin to use the new structure indiscriminantly in all situations. Third, they gradually cut back on the usage of the new structure until it is only used in appropriate situations. It appears that for the low learning structure the children got to the first of these steps. In the high learning situation the subjects were performing in concert with the second step. And, none of the conditions was able to bring the subject's behavior to the third stage.

To explain the behavior of the subjects exposed to the structures in which there was intermediate learning it is necessary to answer the questions posed earlier: (1) why did repetition effect learning while cuing did not, and (2) why weren't learning and retention correlated?

During the first two days of the experiment the repetition actually served a cuing function. When shadowing the model it became immediately apparent to the subjects in the repetition conditions that the model was using two

different syntactic structures. In the non-repetition conditions however no subject had a sequence of four consecutive matches before reaching the final six items on either of the first two days. In other words, in the non-repetition conditions even the subjects who knew there were to be differences in the sentence's phonology and did apparently recognize syntactic differences as evidenced by their use of both earlier on during these two days, did not link phonology and syntax until 70% of the trials on each day had been used up. Shadowing, on the other hand, forced the subjects to make that connection and note the difference they hadn't been told about from the start of the experimental treatments on the first two days. As a result, the subjects in the repetition conditions had the automatic advantage of a cuing procedure.

The fact that it was cuing and not repetition which influenced retention is reasonable. The accidental cuing associated with repetition during the first two days of the experiment was situation bound. It was the presence of the model's sentences which provided that information. When the third day arrived the repetition subjects showed no evidence of having abstracted and integrated that relationship between phonology and syntax. The subjects in the experimentally induced cuing conditions had that abstraction done for them in the form of the cuing training tapes used before the first two day's experimental treatments. They

were in a position to apply that knowledge during the third day and apparently did so as evidenced by their increased flexibility in moving back and forth between Spanish and English syntactic structures.

Given this, the subjects in the moderate learning situations were faced with the following. Unlike the subjects in the low learning situation, they knew that cuing information alone was not enough, thus they couldn't just be flexible in their selection of structures without knowing that wasn't all there was to it. Unlike the subjects in the high learning situation they didn't learn enough from repetition to know that their syntax was to match the phonology. It is not unreasonable that they would then place their reliance on the structures of their dominant language. If it hadn't been the most useful tool in the past it would not be their dominant language.

Summary

The primary purpose of this study was to test four hypotheses which focused on how cuing and repetition influenced the learning and retention of bidialectalism. Hypothesis 1 stated that cuing the critical features of the modeled behaviors will significantly increase retention; the null was not rejected. Hypothesis 2 stated that cuing the critical features of the modeled behaviors will significantly increase learning; the null was rejected. Hypothesis 3 stated that imitation will significantly increase

retention; the null was not rejected. Hypothesis 4 stated that imitation will significantly increase learning; the null was not rejected.

The secondary purpose of the study was to determine how child's grade, sex, and I.Q. as well as the difficulty of learning a particular linguistic structure would influence the learning and retention processes. The results indicated that these variables played extremely small or no roles in the learning and retention process.

Given the results of the hypothesis testing, post hoc analyses were used to attempt to understand why no significant differences were found for the hypothesis which focused on retention. That analysis suggested that cuing did play a role in the subjects' retention although this role was not the one it was expected to play. Instead the cuing appeared to induce the linguistic flexibility which can be construed as a logical prerequisite for retention as it was operationally defined. The effects of cuing were confounded by learning. In the low learning, cuing situation subjects evidenced the greatest amount of flexibility. In the moderate learning, cuing situation subjects demonstrated the greatest amount of rigidity. In the high learning, cuing situation subjects were linguistically rigid but employed the linguistic structure associated with the language used least during the two days of experimental treatments.

CHAPTER IV

CONCLUSIONS AND IMPLICATIONS

This chapter discusses the results in terms of their implications for social learning theory, teaching bidialectalism, and future research in the area. It begins however by considering the conclusions which appear reasonable in the light of the results obtained in testing the hypotheses.

The primary research question in this study was: what effects do repetition and cuing have on the learning and retention of bidialectalism? This question was broken into four parts each of which assumed the form of a research hypothesis.

One hypothesis predicted that learning would be increased significantly as a result of repetition. Past studies had shown that repetition would lead subjects to produce modeled linguistic structures. However, none of the past studies required subjects to produce two structures equally capable of conveying a single denotative meaning in accordance with extralinguistic rules. The implicit extralinguistic rule in this case consisted of the selection of structures in accordance with the ethnic background of the other. The null hypothesis was rejected in this study.

The rejection of the null hypothesis is important. It indicates that in using social learning theory to produce bidialectalism, the theory is at least as capable of producing linguistic changes as it has been in single dialect studies. The evaluations of the past studies have been optimistic in making projections about the utility of social learning theory in language training. The similar results obtained here would suggest that a similar degree of optimism is justified.

One hypothesis where the null could not be rejected predicted that cuing would increase learning significantly. Cuing, at least as operationalized here, did not perform that function. The potential relationship between an accidental cuing, in the form of repetition, and the operationalized cuing were known from the inception of the study. Steps were taken to minimize this relationship. This was the reason, for example, why reinforcement was eliminated as an experimental variable. The steps taken to make cuing and repetition independent were not sufficient to do so. In a study like this I cannot conceive of a set of procedures where repetition would not immediately alert subjects that two different structures were being used, unless the subjects were aware of that fact prior to the study. However, it does appear that the accidental and intentional cuing do play different roles for retention.

One of the hypothesis predicted that cuing would significantly increase retention. That hypothesis could not be supported. The subjects in the cuing conditions did not use the syntactic structure appropriate for the other any more than the subjects in the non-cuing conditions. Cuing did, however, influence the subject's flexibility in selecting syntactic structures. This finding came from a post hoc analysis. The fact that no previous studies dealt with the retention of linguistic structures forces a consideration of the finding without benefit of other studies which could be compared to this one for any check on the consistency of the phenomenon. The original idea was that subjects would simply learn to associate a syntactic structure with a set of phonological cues and that information would be retained. Since this did not happen, there are two good explanations. First, the association between the speaker's phonology and syntax and the child's syntax was not learned well enough to produce retention. Second, the subjects could have been following a more complex process. The steps involved would be these. First, the subjects would recognize that there were two different structures being used. Second, they would begin to use the least used or what they considered least appropriate structure occasionally. Third, once they were satisfied that the structure was appropriate at least part of the time they would overgeneralize the rule and use it indiscriminately. Fourth, they would gradually cut back in their use of the structure until they felt they were

using it only in situations where it was appropriate.

This is an extremely complex process and one which should not be set forth on the results of the post hoc analysis alone. It is set forth here primarily on the grounds that this process governs the acquisition of many linguistic rules. The most obvious example appears in children's use of the past tense. The first verbs children learn are irregular with respect to forming the past tense (e.g. sleep/slept, run/ran). It is not until later they begin to use many regular verbs like talk/talked. When they do catch on to the idea that past tense verbs can be formed by adding -ed to the present tense they overgeneralize the rule and begin to use words like "sleeped" and "runned."

The possibility that this is the sequence children would employ in becoming bidialectical is one of the complexities that future research will have to examine. The complexity is enhanced when we consider the relationship between repetition and retention. One of the hypotheses predicted that repetition would increase retention. That hypothesis was not supported. However, it did turn out that cuing influenced or appeared to influence retention, that the effects of cuing were mitigated by learning, and that learning was influenced by repetition.

A nagging question is: why would the subjects resort to a strategy employed in initial language learning when

they were already familiar with both of the structures they were exposed to in this study? The only reasonable explanation that occurs to me has to do with the experimental procedures. The only time these children are removed from their classroom to work on a one-to-one basis with an Anglo woman is for remedial work. When it comes to language such dealings have always focused on learning standard English. All their individualized Spanish instruction has involved Mexican-American women.

In order to be useful, a method based on this research must work under the most disadvantageous circumstances. Although the United States Congress has recently been very critical of bilingual training in the public schools, it has not allocated the money needed to successfully run those programs. The bilingual programs in Salt Lake City have been supported in the total absence of federal funds. In spite of the social problems involved, bidialectical education is of much less concern than bilingual education. To implement such programs the school systems in this area must rely on college student volunteers and the vast majority of these are Anglos.

There is also the problem of time. Given the educational priority system in the schools, the children simply cannot be excused from classes for more than a few minutes each day to receive the kind of training discussed here.

This study was conducted under these same constraints. As a result there are more questions left unanswered than I would have liked. However, the questions raised by the results are both specific and answerable. The major ones are these: (1) are the effects of repetition restricted to learning rather than to both learning and retention? (2) are the effects of cuing restricted to retention rather than to both learning and retention? (3) what equation or function describes the relationship between learning and retention? and (4) do children become bidialectical by following the same developmental pattern they employed in acquiring a first language?

The second major research question in this study was: what effect do the child's age, sex, intelligence and the syntactic structure's complexity have on learning and retention? The regression analyses indicated that they had no effect. This conclusion seems justified but in need of verification. Had the four null hypotheses all been rejected these same results would be much more conclusive.

All previous recommendations have been that bidialectical training not begin until the child is in at least the upper grades of elementary school. The results obtained here at least suggest that working with younger children is a possibility which deserves further consideration. The findings with respect to intelligence are equally encouraging for future research.

The fact that optimism must be restrained comes from the correlations between difficulty and the dependent variables when one also considers the results of the post hoc analysis. Until we can be sure that the subjects were following the steps they employed in learning their first language, we cannot be sure that differences in retention were not due to some systematic differences between the two structures. The series of complex interrelationships among all the variables being discussed here all rest on the fact that the alpha level of .02 obtained on the F for repetition and learning was not one of the two times in one hundred when the relationship did appear by chance. Admittedly this is unlikely. It cannot however be ignored.

The overall conclusion that I have come to is that something was going on in the study. This is as much based on what I saw the subjects doing during the study as on the results of the statistical analyses. The results obtained do not indicate that the method proposed is ready for use, nor do they suggest that it cannot be made ready, subject to the influence of future research. In other words, the results did not provide a clear cut answer to the question: can social learning theory be used to describe the process of becoming bidialectical?

The results are sufficiently encouraging however, to suggest research which needs to be conducted. First, this study needs to be replicated with a longer training period.

There is simply too much research in related areas suggesting that there is a relationship between cuing, repetition, and retention. Even if the number of training sessions were doubled, the method would have great appeal as a solution to the problem of inducing bidialectalism. Second, these methods are capable of providing important information about the similarities and differences between bidialectalism and bilingualism. It has remained unclear whether learning a second language is more or less difficult than learning a second dialect. By definition, dialects of a language are more similar to one another than are different languages. If children exposed to this method learn different languages faster than they can learn different dialects, it would suggest that language learning is governed by a process of first detecting major differences and only later by noting similarities. The opposite would be concluded if different dialects can be learned more quickly than different languages. Such a study would provide valuable insights into human information processing and the structure of semantic and syntactic knowledge.

No method has been developed in the past which will induce and maintain bidialectalism. While this study has not established such a method, it strongly suggests that the method employed has great potential. The study also raised a critical question: in learning social interaction skills like adjusting to an audience, do children follow the same

processes they do in acquiring language skills? How children learn as much as they do in such a short period of time has often been asked. Even the hint that there might be a single pattern which governs that process is extremely exciting.

APPENDIX

Testing Procedures

APPENDIX

Testing Procedures

Days 1 and 2 - Cuing Training Session

Subjects were individually removed from their classroom by the test administrator and taken to a room containing a table and chairs. Subjects in the cuing conditions were told to listen to a tape recorded message which stated:

> Sometimes Chicanos and Anglos talk differently. a Chicano would say "Good morning, how are you?" (Spanish phonology) while an Anglo would say "Good morning, how are you?" (English phonology). Let's try another example. A Chicano would say "You have a nice school." (Spanish phonology) while an Anglo would say "You have a nice school." (English phonology). Now I'm going to give you some sentences and you tell me if the person saying them is Chicano or Anglo.

The test administrator then played a tape containing eighteen sentences. Nine of these sentences employed Chicano phonology nine employed the regionally standard phonology. Following the presentation of each sentence, the tape recorder was stopped and the child was asked to indicate whether the speaker on the tape was Chicano or Anglo. If the subjects correctly identified the type of speakers in all instances they moved on to the next part of the training. If they made an error more example sentences were given and

the subjects tested again. This procedure was repeated until the subjects correctly identified the type of speaker for all sentences.

Once the subject demonstrated an ability to distinguish English and Spanish phonology, he was taught to associate the cue word "ready" with the former and the cue word "listo" with the latter. This association was formed by presenting the subject with the following tape recorded message:

> When you hear "listo," the man is going to talk like a Chicano; when you hear the word "ready," the man is going to talk like an Anglo.

A series of example sentences were then presented. These examples contained the following: (1) the cue word (listo or ready), and (2) a sentence employing either chicano or anglo phonology. The phonology employed in the sentence was chicano when the cue word "listo" was used and anglo when the cue word "ready" was used.

Following these examples, additional cue-word sentence combinations were presented. However, in these presentations the tape was stopped following the presentation of the cue-word and the subject was required to predict whether the upcoming sentence would be spoken by an Anglo or a Chicano. The sentence was then used to allow the subject to verify the correctness or incorrectness of his responses. When the child successfully completed eighteen such trials his training was considered complete.

The third phase of the cuing training was designed to alert subjects to that part of the sentence which, in the treatment session, would contain the syntactic difference between Spanish and English. In the cuing conditions this was accomplished by raising the volume of the phrase containing the critical syntactic feature three decibels over that of surrounding linguistic material. Training was accomplished by instructing the subjects:

> Part of this sentence will be said loudly. Pay attention to the loud part so you can repeat it for me.

The sentences presented employed both Spanish and English phonology and syntactic structures acceptable in either language. When the subject could repeat the emphasized phrases for the eighteen sentences, irrespective of whether he matched the syntax of the presented sentence, he was considered trained.

There were no training procedures for subjects in the repetition conditions, they were informed about repetition in the instructions at the beginning.

Days 1 and 2 - Treatment Sessions

Repetition Conditions - Subjects in the cuing condition received the following instructions immediately after the training session described above. Subjects in the non-cuing condition received these instructions immediately upon entering the experimental setting.

> Today we are going to play a word game. The man on the tape will say something about the picture you are looking at. He will say the sentence twice; I want you to say the sentence with him the second time. After that the man will ask you a question about another picture and I want you to answer him in a complete sentence.

The subject was then exposed to a series of twenty trials of the following form:

> (1) The boy sails the boat.
> (2) The boy sails the boat.
> (3) What do they do?

The subject was exposed to a picture of a boy sailing a boat while he listened to #1. The child remained exposed to the picture while he followed along with the stimulus tape in articulating #2. The child was then exposed to a picture of a number of children engaged in some activity while he listened to #3. The subject then responded to #3. These procedures were repeated for the twenty trials. In the cuing condition, numbers 1 and 2 were preceded by a cue word (either "listo" or "ready").

These procedures were repeated on Day 2.

Non-repetition Conditions - The procedures were identical to those described above with two exceptions. First, the instructions were modified to say:

> Today we are going to play a word game. The man on the tape will say something about the picture you are looking at. He will say the sentence twice; I want you to listen to it both times. After that the man will ask you a question about another picture and I want you to answer him in a complete sentence.

Second, in accordance with the instructions, the child simply listened to #2 rather than shadow the stimulus tape.

In the cuing condition, numbers 1 and 2 were preceded by a cue word (either "listo" or "ready").

These procedures were repeated for twenty trials on each of the two days of treatment.

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Day 3 - Retention Measurement

On the third day subjects were exposed to twenty different pictures, each of these was presented twice for a total of forty exposures. All subjects were subjected to the same procedures, in other words, there were no differences attributable to differences in the conditions used during Days 1 and 2. The subjects were told to answer the question asked by the stimulus tape. The tape asked forty questions of the form "What does he do?"; "What does she do?"; or "What do they do?". Each picture was exposed once in conjunction with Chicano phonology and once in conjunction with Standard Regional phonology.

REFERENCES

REFERENCES

Allen, V. F. Teaching standard English as a second dialect. Florida FL Reporter, 1969, 7, 123.

Bandura, A. Social learning theory. Morristown, N.J.: General Learning Press, 1971.

Berger, B. R., Gardner, R. R., Clatterbuck, G. W., & Schulman, L. S. Perceptions on information sequencing in relationship development. Paper presented at the annual convention of the Speech Communication Association, Houston, December, 1975.

Berger, C. R., & Larimer, M. W. When beauty is only skin deep: The effects of physical attractiveness, sex and time on initial interaction. Paper presented at the annual convention of the International Communication Association, New Orleans, April, 1974.

Calabrese, R. J. The effects of privacy and probability of future interaction on initial interaction patterns. Unpublished dissertation study, Department of Communication Studies, Northwestern University, June, 1975.

Cannon, G. Multidialects: The student's right to his own language. College Composition and Communication, 1973, 24 (5), 382-385.

Carroll, W. R., Rosenthal, T. L., & Brysh, C. G. Social transmission of grammatical parameters. Journal of Educational Psychology, 1972, 63, 589-596.

Chisholm, F. E. The linguistically disadvantages: Some suggested approaches and solutions. The English Record, 1974, 25 (2), 67-74.

Crowl, T. K., & MacGinitie, W. H. The influence of students' speech characteristics on teachers' evaluations of oral answers. Journal of Educational Psychology, 1974, 66 (3), 304-308.

Delia, J., & Clark, R. A. A cognitive-developmental approach to communicative competence. Presented at the Speech Communication Association Convention, Houston, Texas, 1975.

Eskey, D. E. The case for the standard language. College English, 1974, 35 (7), 769-774.

Falk, J. Linguistics and language. Lexington, Massachusetts: Xerox College Publishing, 1973.

Hall, V. C., & Turner, R. R. The validity of the "different language explanation" for poor scholastic performance by Black students. Review of Educational Research, 1974, 44 (1), 69-81.

Harris, M. B., & Hassemer, W. G. Some factors affecting the complexity of children's sentences: the effects of modeling, age, sex, and bilingualism. Journal of Experimental Child Psychology, 1972, 13, 447-455.

Hess, K. M. The nonstandard speakers in our schools: What should be done? The Elementary School Journal, 1974, 74 (5), 280-290.

Houston, S. H. A reexamination of some assumptions about the language of the disadvantaged child. Child Development, 1970, 41, 947-963.

Hymes, D. Foundations in sociolinguistics: An ethnographic approach. Philadelphia: University of Pennsylvania Press, 1974.

Isenbarger, J., & Smith, V. How would you feel if you had to change your dialect? English Journal, 1973, 62, 994-997.

Kocher, M. If you care. . . . Elementary English, 1974, 51, 483-487; 524.

Labov, W., Cohen, P., Robins, C., & Lewis, J. A. A study of the non-standard English of Negro and Puerto Rican speakers of New York City. Final Report on Contract OEC-6-10-059, Cooperative Project 3288, 1968.

Larimer, M. W., & Berger, C. R. Interpersonal compatibility and the development of interpersonal relationships. Paper presented at the annual convention of the Speech Communication Association, Chicago, December, 1974.

Macaulay, R. Double standards. American anthropologist, 1973, 75, 1324-1337.

Marckwardt, A. H. The concept of standard English. In National Council of Teachers of English, The discovery of English: National Council of Teachers of English, 1971, distinguished lectures. Urbana: National Council of Teachers of English, 1971.

Matison, J. R. Language learning: A new direction. Elementary English, 1974, 51, 492-497; 514.

Miller, G. R., & Steinberg, M. Between people: A new analysis of interpersonal communication. Chicago; Science Research Associates, Inc., 1975.

O'Neil, W. The politics of bidialectalism. College English, 1972, 33, 433-439.

Politzer, R. L., & Ramirez, A. G. An error analysis of the spoken English of Mexican-American pupils in a bilingual school and a monolingual school. Language Learning, 1973, 23, 39-61.

Rosenthal, T. L., & Whitebook, J. S. Incentives versus instruction in transmitting grammatical parameters with experimenter as model. Behavior Research and Therapy, 1970, 8, 189-196.

Rosenthal, T. L., & Zimmerman, B. J. Instructional specificity and outcome expectation in observationally-induced question formation. Journal of Educational Psychology, 1972, 63, 500-504.

Seitz, V. Integrated versus segregated school attendance and immediate recall for Standard and Nonstandard English. Developmental Psychology, 1975, 11 (2), 217-223.

Shuy, R. W. The study of Vernacular Black English as a factor in educational change. Research in the Teaching of English, 1973, 7, 297-311.

Sinclair-De-Zwart, H. Developmental psycholinguistics. In D. Elkind & J. Flavell (Eds.), Studies in cognitive development. New York: Oxford University Press, 1969.

Sledd, J. Bi-dialectalism: The linguistics of white supremacy. English Journal, 1969, 58, 1307-1315; 1329.

Tucker, G. R., & D'Anglejan, A. Some thoughts concerning bilingual education programs. Modern Language Journal, 1971, 55, 491-493.

Weener, P. D. Social dialect differences and the recall of verbal messages. Journal of Educational Psychology, 1969, 60 (3), 194-199.

Whitehurst, G. J., Ironsmith, M., & Goldfein, M. Selective imitation of the passive construction through modeling. Journal of Experimental Child Psychology, 1974, 17, 288-302.

Whitehurst, G. J., & Novak, G. Modeling, imitation training, and the acquisition of sentence phrases. Journal of Experimental Child Psychology, 1973, 16, 332-345.

Willimas, F. (Ed.). Language and poverty: Perspectives on a theme. Chicago: Markham Publishing Company, 1970.

Williams, F., Whitehead, J. L., & Miller, L. Relations between language attitudes and teacher expectancy. American Educational Research Journal, 1972, 9 (2), 263-277.

Yussen, S. R. Determinants of visual attention and recall in observational learning by preschoolers and second graders. Developmental Psychology, 1974, 10 (1), 93-100.

Zimmerman, B. J., & Rosenthal, T. L. Observational learning of rule-governed behavior by children. Psychological Bulletin, 1974, 81 (1), 29-42.