Language and Reading Development of Bilinguals in the United States.

This paper presents an overview of research on bilingual children's language and reading development, identifying the problems and biases of past research and indicating future research needs. The paper notes that past research tended to reflect prevailing societal attitudes and an essentially linguistic bias. In recommending future research priorities, the paper stresses the use of nonbehavioral science tools and miscue analysis for the description and analysis of semantic processes, sociolinguistic phenomena, and psycholinguistic phenomena. A bibliography is included. (RL)
LANGUAGE AND READING
DEVELOPMENT OF BILINGUALS
IN THE UNITED STATES

BY

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The purpose of this paper is to present an overview of the research on the language development of bilingual children. This paper is not the final word; rather, it synthesizes the research for purposes of identifying research needs in the language development of bilingual children. In 1972, I began an intensive search and analysis of studies focused on the language development of Mexican American bilingual children. Soon I expanded the search to include bilingual children of the United States but found that the greatest bulk of language development research had been conducted among Mexican Americans. Unfortunately, substantial research on the language development of other bilingual groups—to my knowledge—does not exist.

I will begin the review by presenting a brief historical account of the studies conducted about Mexican American bilingualism.

Until the early 1960's, the majority of the studies focused on Mexican American bilingualism reviewed by me tended to reflect prevailing societal attitudes of the times. Briefly, I would characterize the history of these studies into four eras:

1. Pre-1935: Mexican American bilingualism as a pathology of cultural deprivation.

2. 1935-1955: Mexican American bilingualism as a pathology of linguistic deficiency.


Pre-1935 documents presumed that Mexican American bilingualism was symptomatic of cultural deprivation. Formulation of language legislation
in the Southwestern United States, as well as educational policies and practices, reflected these presumptions, i.e., the "No-Spanish" and "English-Only" laws and public policies that prohibited Mexican Americans from using Spanish in public institutions, including the public school classroom. Language segregation and, in effect, cultural isolation alienated the Mexican American from public institutions, especially the political and economic spheres.

Documents of the second period, 1935-1955, revealed that the language legislation and public policies remained, but the studies' presumptions shifted to Mexican American bilingualism as a linguistic deficiency. These studies described bilingualism as the cause of the "alingual" condition of these Americans. Since the Mexican American speaks a "hodgepodge" of Spanish and English, the reason ran, he does not speak an acceptable form of either language. Therefore, he was without a language, or "alingual." Sociological texts were written during this time that embraced the "alingual syndrome" of Mexican Americans and recommended special education programs to ameliorate the language retardation caused by the "syndrome". Southwestern state legislators debated the wisdom of bilingual public documents and public meetings since, in theory, the Mexican American was without a language.

Documents of the third period, 1955-1968, shifted from presumptions of cultural deprivations and linguistic deficiencies to a more neutral and less ethnocentric presumption: Mexican American bilingualism as a purely linguistic phenomenon. Studies during this period were confined to linguistic or psychological descriptions, excluding cultural and socio-economic factors critical to the acquisition and development of two
languages simultaneously. Consequently, language legislation and educational policies and practices retained the presumptions of cultural deprivation and linguistic deficiency. For example, federal legislation, especially the War on Poverty programs, authorized millions of dollars for compensatory programs to remedy the language deficiencies of the Mexican American.

Changes have occurred in the contemporary period, 1968-present, in language legislation, Supreme Court rulings, and public policy statements that signal divergent presumptions regarding Mexican American bilingualism. These public documents, as well as research projects, are confronting and, at times, disputing the presumptions of deprivation and deficiency. It is too early to discern whether this trend is a significant divergence or merely a momentary shift of public attitudes and scholarly presumptions.

Nevertheless, the research and documents of the first six decades of this century, in effect, rendered the Mexican American and his bilingualism—which have a history of more than 200 years of linguistic and cultural development—speechless and culture-less. My knowledge of Mexican American culture and languages, as well as the well-established history of Mexican American colonization of the Southwestern United States, led me to seriously doubt the validity of such presumptions. On careful examination of the research in each period, I noted that the pre-1935 studies were merely exploratory. Methodologies were poorly contrived, and basic definitions of terms, such as "bilingualism", were at best based on the researchers' opinions. Few of the studies exhibited a knowledge of Mexican American English and Spanish and the attendant bilingual culture.
of the group.

Studies during the second period were better designed, but they also exhibited little knowledge of Mexican American languages and cultures. Additionally, they were outwardly ethnocentric, referring to Mexican American Spanish and/or English as "bastardized", "adulterated", or similar pejoratives. The studies lamented the Mexican America's lack of cultural upbringing, referring to this group as a cultural hybrid, neither Mexican nor American.

Studies of the third period avoided the research pitfalls and ethnocentric biases of the first and second period studies, but they ignored socioeconomic and cultural factors which speak directly to the immense language diversity among Mexican Americans. Studies in the fourth period have refuted the presumptions of deprivation and deficiency, and have expanded to consider socio-and psycho-linguistic dimensions. More on these variables later.

As you can see, studies on the language development of Mexican American children is wrought with serious empirical problems. Linguists have either been utterly naive, ethnocentric, or at worst, linguistic functionaries whose research has reflected the ethos of regional politics and politicians. It is essential that would-be researchers who request federal or state funds to conduct research on the language development of linguistic minority children maintain (and be allowed to maintain) an academic, scholarly distance from the funding agency.
Characteristics of the Language Development Studies of Bilinguals

To characterize the studies on language development of bilingual children, I posed the following questions:

1. What is known about the language development of bilinguals?
2. What is known about the relationship between bilingualism and language development?
3. What is known about the relationship between language development and social stratification?

The speaking differences exhibited by the bilingual has been broadly described as "interference." When the bilingual is producing speech in one of his languages, phonemes and morphemes from his second language may intrude upon the speech of the first, and thus interference due to the contact of the two languages has occurred.

Weinreich, one of the first scholars who attempted to describe the semantic system of the bilingual, proposed that interference occurred in three linguistic categories: the phonic, the lexical, and the grammatical. Mackey, with his contrastive analysis of the English of bilinguals, added to the three categories cultural and semantic interferences and included in the phonic category rhythmic, articulatory, and intonational interferences.
Language Development

The majority of studies reviewed by me dealt with three levels of structural analysis: phonetic, morphology, and syntactic. Most of the studies described the English characteristics of Mexican American children. A few studies treated other linguistic groups.

The studies reported that bilingual children experience phonetic interferences with English phonemes that either do not exist or are pronounced differently in the first language. Other studies report that bilingual children experience lexical interferences. Generally, the studies reported that bilinguals borrow words and idioms from either the first or second language when they do not or cannot immediately recall the equivalent in the language they are speaking.

Studies on syntactic interference were sparse. Two dissertation studies on Mexican American bilingualism report that interference does not occur at the syntactic level of language performance. Alvar Peña conducted a study to ascertain whether first graders could control basic syntactic patterns of Spanish and English. Peña reported that the bilingual first graders could utilize basic Spanish and English syntactic patterns, and that the bilinguals had little or no difficulty generating transformations in Spanish and English. García conducted a study to identify and compare the oral English syntactic patterns utilized by adolescent, bilingual, lower and middle class Mexican Americans. The results of the study indicated that the Mexican Americans utilized all of the syntactic patterns basic to standard English. While other studies exist, a sufficient number does not exist to warrant generalizations. To
my knowledge, no substantial body of studies exists to describe the semantic processing of bilinguals.

What is known about the relationship between language development and bilingualism? Two divergent themes concerned with the effects of bilingualism on language development was found in the literature. One theme proposed that bilingualism had a negative effect upon language development to the extent that bilingualism was believed to cause retardation in the language development of the bilingual. The retardation of language development was attributed to interferences which occurred between the two languages of the bilingual. Another theme proposed that bilingualism had a positive effect upon language development to the extent that bilingualism was believed to enhance the language development of the bilingual. Thus, whether bilingualism positively or negatively effects language development has not been determined.

What seems to be clear is that bilingualism is a complex sociolinguistic phenomenon which must be approached from more than a purely linguistic bias. Contemporary sociolinguists fault the early linguistic and psychological studies on bilingualism for being confined to only linguistic variables in disregard of social and environmental factors which effect the language development of the bilingual.

What is known about the relationship between language development and societal stratification? An emerging sociolinguistic theme was found in a considerable number of recent studies.

The sociolinguistic theme was posited thusly: if a language community is socially stratified, and if there is variation in the language of the community, then some of the variation should relate to the
community's social stratification. Given the findings of sociolinguists that different classes of people in the same language community speak different codes of the same language, the possibility was suggested that a relationship exists between the bilingual's language development and his socio-cultural status.

Basic Problems With The Research
Language Development of Bilinguals

First, linguists disagree on the conceptual components of bilingualism. In a survey of more than two decades of research on bilingualism, Jensen found at least twelve distinctly different definitions of bilingualism. Some linguists defined the bilingual as one who has the ability to speak two languages, or one who has native-like control of two languages. Some defined a bilingual as a person who has been exposed to two languages. Also, at a Georgetown conference on bilingualism, scholars reached no consensus on the conceptual components of bilingualism although most of the conference topics revolved around the topic of bilingualism. Readings from the conference reveal that scholars are very much in disagreement as to what the term means, and that Weinreich's classic coordinate-compound distinction must be much more closely examined. Frustration was expressed concerning the distinction, which describes two possible bilingual semantic systems, because little has been done to describe the semantic system of monolinguals.

Second, linguists have limited studies on bilingualism to purely linguistic variables while ignoring socio-environmental variables which play an important role in the language development of bilinguals. Darcy
conducted a diachronic survey of the research related to cognitive development and bilingualism. She discovered that the majority of the studies related to the effects of bilingualism on the measurement of intelligence have been conducted within the past decade on Spanish-English bilinguals in the United States without regard to socio-environmental variables. She also discovered that when socio-environmental variables were controlled or accounted for that the bilinguals performed equally well when compared to monolinguals on verbal and non-verbal instruments. Fishman noted that bilingual studies have been construed by linguists as purely linguistic, and that these linguistic studies failed to integrate social, cultural, and environmental variables during investigations of bilingual language behavior.

Third, little attention was paid to the semantic process experienced by bilinguals. This most critical level of analysis has been largely ignored or avoided by linguistic studies on monolinguals. Recent activities by psychoinguists offer some hope in this direction.

**Promising Research Areas For Bilingual Language Development**

There are some realities which bilinguals confront: linguistic minority bilinguals perform poorly on tests constructed with Anglo-centric values and standard English. Depressed reading scores, and G.R.E. or S.C.A.T. scores have served to hinder educational opportunities for linguistic minority bilinguals. Recent studies, Redwood, St. Lambert, Canada, etc., with bilingual-bicultural populations have reported positive academic results.
More essential questions: What is the nature of bilingualism? Does naturally acquired bilingualism differ from monolingual language acquisition? Do bilinguals process meaning (semantics) differently than monolinguals? If so, is the difference a function of culture, societal stratification? Basic notions about bilingualism as a linguistic, psychological, and sociological phenomenon still require description and validation.

A taxonomy for linguistic analysis of bilinguals would include four categories, listed in order of priority:

1. Semantic
2. Syntax
3. Morphology
4. Phonetic

Without a doubt, research that attempts to identify the semantic processes of bilinguals is of utmost importance. The incessant quibbling over the cognitive effects of bilingualism must be put to rest. What many of us feel intuitively is that bilinguals process meaning differently than monolinguals, and it is the degree of interpretive difference that serves as an advantage or disadvantage to bilinguals. Other variables that no doubt effect the bilingual's semantic processes are socio-cultural in nature.

I am not advocating a rash of post-Whorfian hypotheses, nor am I suggesting improved semantic differentials. Rather, I am suggesting Piagetian type of research projects -- ethno-linguistic in design -- whereby researchers carefully record the language behavior of bilinguals with semantic variables as correlatives.
Further, studies that examine the prevailing language and ethnic attitudes of bilingual and multilingual communities should be encouraged. Bilingual - bicultural education programs function within a context which must be examined for its effect in bilingual instruction. All too often, we examine the effects of bilingual education on youngsters and a community as though the school could change prevailing ethos rather than merely reflect them.

How bilinguals structure the syntax of language would rank second in importance as a category for research projects. A few studies exist. However, to my knowledge, no longitudinal studies exist that describe over a period of time the syntactic development of bilinguals. Walter Loban's longitudinal study, for example, followed the syntactic development of Black and White lower and middle class students. His study, conducted over a period of more than ten years, is significant in that it challenges the myths of alingual Black and lower class White dialects. Funding agencies would have to commit money for such extended studies.

Research projects on the morphological and phonetic levels should rank low in priority. What is gained in empiricizing the obvious? Bilinguals do borrow words, restructure them, and render them differently at times. Many bilinguals pronounce according to the phonetic power of their dominant language. Studies at these levels exist both on linguistic minority and majority group bilinguals.

The language acquisition of bilinguals must also be better understood. We know that bilinguals vary in proficiency as well as code usage. Some bilinguals use one or the other language for specific, specialized reasons. Why? Are there patterns of linguistic input, or output, that
influence the bilingual’s acquisition and performance? We need to answer
question, such as:

Do semantic universals exist in reference to bilinguals?

How do bilinguals semantically process their languages?

Do the language structures of bilinguals influence the
semantic process? If so, to what extent?

How are the pragmatics of bilingual communications re-
lated to semantic and syntactic variables?

Do sociolinguistic universals exist in reference to
minority linguistic groups?

Reading Development of Bilingual Children

There are a considerable number of studies which report that the
reading achievement of linguistic minority children is lower when compared
to their middle class, white peers. Federal programs, Right to Read, ESEA:
Title I, Title VII, etc., have operated from a deficit or compensatory
policy, i.e., that linguistic and racial minority children read poorly be-
cause of deficiencies in their home, community, or cultural environments.

We now hypothesize that the linguistic minorities’ low reading
achievement scores can be attributed to differing home, community, and
cultural environments. The reading achievement of linguistic minority
children is proportionate to the degree which the children’s cultures
differ from the culture embedded in the standardized achievement tests
used by most public schools. Thus, depressed reading achievement is
largely a function of cultural biases and differences rather than environ-
mental deficiencies of linguistic minorities and a psycholinguistic paradigm
would be a more appropriate descriptor.
A psycholinguistic paradigm is a cycle of sampling, predicting, testing, and confirming. (See figure 1.)

Figure 1
Psycholinguistic Reading Paradigm

As a person reads, he decodes rapidly, sampling cues along the way by relying on the redundancy of language. Then he predicts the structure of what lies ahead; he tests his predictions by comparing them to the semantic context of what he's already read. Then he confirms or disconfirms the prediction as he continues reading.

The paradigm describes the reading process experienced by monolingual, English-speaking Anglos. What about the bilingual youngster who has been reared in a bilingual environment? It is likely that he will read the same words and sentences (as a monolingual peer) but predict the meaning differently and thereby comprehend the meaning differently.

The semantic differences bilinguals bring to the reading process are culturally based. In the semantic sense, a person is as bilingual as he is bicultural. Or, in other words, a person understands one or more languages to the extent he understands one or more cultures. Thus, one way of determining a bilingual's dominant (semantic dominance) language is by first determining his dominant bicultural identity.
I've developed a language and cultural typology for bilinguals to help conceptualize this notion. (See Figure 2.)

**Figure 2. Cultural and Language Characteristics of Linguistic Minority Bilinguals**

<table>
<thead>
<tr>
<th>Type(s)</th>
<th>Culture(s)</th>
<th>Language(s)</th>
</tr>
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<tbody>
<tr>
<td>1) Monolingual and Monocultural</td>
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<td>2) Compound Bilingual and Bicultural</td>
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<td>3) Coordinate Bilingual and Bicultural</td>
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<tr>
<td>6) Compound Bilingual and Bicultural</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monolingual and Monocultural</td>
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</table>
By inserting characteristics of a linguistic minority bilingual, e.g., Mexican American, we can see the corresponding relationship between culture and semantic dominance. (See figure 3.)

Figure 3. Cultural and Language Characteristics of Mexican American Bilinguals

<table>
<thead>
<tr>
<th>Type(s)</th>
<th>Culture(s)</th>
<th>Language(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Monolingual and Monocultural</td>
<td>Member of Mexican ethnic, regional, or social group</td>
<td>Some dialect of Mexican Spanish</td>
</tr>
<tr>
<td>2) Compound Bilingual and Bicultural</td>
<td>Mexican cultural group dominant/Anglo group subordinant</td>
<td>Compound Bilingual: Mexican Spanish dominant/ American English subordinant</td>
</tr>
<tr>
<td>3) Coordinate Bilingual and Bicultural</td>
<td>Equally function in Mexican and Anglo cultural groups</td>
<td>Separate and balanced control of Spanish and English</td>
</tr>
<tr>
<td>4) Compound Bilingual and Biculture</td>
<td>Anglo cultural group dominant/Mexican group subordinant</td>
<td>American English dominant/ Spanish subordinant</td>
</tr>
<tr>
<td>5) Monolingual and Monocultural</td>
<td>Monocultural: Member of Anglo-American cultural group</td>
<td>Monolingual: Some dialect of American English</td>
</tr>
</tbody>
</table>

As with other typologies, we should remember that I am speaking of matters of degrees rather than absolutes, that variations within types exist, and that a person can slip from type to type during a lifetime. What is important to consider is the cultural dominance of linguistic minority children. Cultural dominance should serve as a semantic indicator from which a reader's predictions can be attributed.
Recommendations for Research Priorities
On Language and Reading Development of Bilinguals

Based on my understanding of the research on language and reading development of bilinguals, the following areas of research are recommended on an equal order of priority:

1. Research studies describing and analyzing the semantic processes of bilingualism;
2. Studies describing and analyzing bilingualism as a sociolinguistic phenomenon:
   A. Community attitudes toward first and second language learning;
   B. Community attitudes toward its linguistic minority members;
   C. Community attitudes toward the education of its linguistic minority members;
   D. Degree, extent, and reasons bilinguals specialize in their use of both languages;
3. Studies describing and analyzing bilingualism as a psycholinguistic phenomenon;
4. Studies designed with non-behavioral scientific tools, e.g., ethnolinguistic tools, etc;
5. Miscue analysis of bilingual's teaching behavior.

Basic and applied research should be encouraged especially since bilingual education programs urgently require answers to troubles and pedagogical problems regarding language dominance, appropriate language of instruction and instructional practices. These recommendations are made on the basis of my understanding of the research language and reading development of bilinguals. They are offered for purposes of discussion
with the hopes that they will benefit bilingual children.
BIBLIOGRAPHY


