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ABSTRACT

This report discusses the development of bilingual/bicultural education models. Included is information concerning the goals of bilingual education, six models of program realization, and problems and possibilities in implementing the models. Also included are footnotes and a bibliography. The appendixes present various articles: "A Brief Survey of Selected Bilingual Programs and Curricula," by Judith Perez de Heredia; "The Descriptive Analysis, Establishment, and Measurement of "Bilingual" Verbal Behavior," by Stanley Sapon; "Bilingual Education: An International Perspective," by Charles Ferguson, Catherine Houghton, and Marie Wells; "Pedagogical Models of Bilingualism--A Sociolinguistic Appraisal," by William Stewart, and "Biculturalism-Bilingualism," by Harvey Sarles. [Not available in hard copy due to marginal legibility of original document.] (SK)

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DEVELOPMENT OF BILINGUAL/BICULTURAL EDUCATION MODELS

FINAL REPORT

OEO GRANT # 30061

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DEVELOPMENT OF BILINGUAL/BICULTURAL EDUCATION MODELS

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DEVELOPMENT OF BILINGUAL/BICULTURAL EDUCATION MODELS

1.0 Introduction

In 1968 in response to the repeated failure of non-English speaking children in our public schools, Congress passed the Bilingual Education Act (BEA) as Title VII of the amended Elementary and Secondary Education Act (ESEA). This authorized Federal expenditures to public schools that instituted bilingual education programs for economically disadvantaged non-English speaking children. Although there were a few bilingual programs that were state supported prior to the BEA, the vast majority of non-English speaking children were placed into regular public school programs where they were expected to sink or swim.

In 1969, 76 programs were funded by ESEA Title VII monies (Pena 1970, 3); by 1972 there were 211 such programs.[1] (Office of Education, 1972) It has been estimated that the number of children currently being served by Title VII funds constitutes less than 1.7% of those children who might be eligible. (Alire 1972)

Despite the fact that only a tiny fraction of the eligible children were receiving programs initiated under Title VII expenditures, and despite the fact that none of the programs had been in existence more than three years, in early 1972 it was decided by the Department of Health, Education and Welfare (DHEW) that an evaluation of Title VII bilingual programs would be undertaken and a Request for a Proposal (RFP) concerning such an evaluation was circulated.

Responses to the RFP were evaluated by a panel involving staff from the Division of Bilingual Education as well as from the OE Management and Planning Office. There was apparently intense rivalry for the contract among Spanish-American consulting firms as well as other educational firms. It became evident in the course of the selection process that some of the individuals connected with the review panel had involvements that were highly irregular if not illegal with firms submitting proposals. Because of these apparent irregularities -- e.g., the confidential panel review comments on proposals were transmitted to firms that were competing for the contract -- it was decided to abandon evaluation efforts at that time.

Shortly after the Office of Education (OE) plans for an evaluation were dropped, the Office of Economic Opportunity (OEO) decided to conduct a planned variation study in which various models of bilingual education would be constructed in order to determine models of effective bilingual education.[2]

The rationale behind a planned variation study is that such large-scale, systematic experimentation will present a data base for more intelligent policy making as regards the choice of options for allocation of resources. Such a rationale assumes several things:

1. Policy making can be de-politicized by the infusion of science. Baratz (1970) gives us some evidence that this might not be the case when he reports the following incident:

> . . . in my wanderings through the "research to order" world the best definition, [of policy relevant research] and perhaps the most operational one, came from an ex-member of the Cabinet who looked at me with an infectious smile and said, "Policy relevant research, my boy, is whatever research I need to support my policy." (Baratz, S. 1970, 3)

2. The options available can be manipulated within a policy frame. This does not necessarily appear to be the case. One can easily create and carry out a policy that there shall be one teacher to every five children, but policy stating that teachers shall not be ethnocentric is not so easily implemented.

3. The options being varied (for example, models of education) are the ones crucial to solving the problems (e.g., poverty). They may, in fact, not be the crucial ones, or they may be necessary but not sufficient.

4. The options being tested represent the universe of alternatives related within the policy issue. In reality, the models tested may be the ones most easily implemented but perhaps not the ones necessary to solve the problem (even if the solution lies in finding the right model).

5. The options that may be demonstrated to be effective in a planned variation study are eventually deliverable outside of the planned study. Evidence with other attempts at educational innovation (see, for example, Sarason's (1971) descriptions of experiences with 'new math') do not seem to support such an assumption.

The preliminary evidence of earlier "planned variation" studies does not suggest the productivity of such a procedure for offering solutions to complex educational problems that would be of great help to policy makers. Nonetheless, OEO and OE have begun the implementation of a planned variation

study of bilingual education.[3] This report represents Phase I -- the construction of bilingual/bicultural models -- for this planned variation study.

It is important to note here that an underlying assumption of the OEO planned variation study is that it is the absence of testable models in existing programs that make an evaluation of them, in terms of discovering the crucial elements for successful education, impossible. The factors that have contributed to the difficulties in existing programs (absence of teacher training, adequate personnel, curricula, etc.) and their evaluations (political issues as well as the absence of adequate measurements) are the same ones that may make for the difficulties in implementing a planned variation study of bilingual/bicultural models of education that will yield ready answers to the endemic problems of education for minority group children in the United States. The difficulties inherent in bilingual education programs today may not be a simple one of a dearth of models, therefore, the provision of more fully explicated models is not likely by itself to yield promising answers to the problems of educating non-English speaking disadvantaged children. Unlike basic research, where the failure of one suggested solution does not affect the rationale for continued study of possible causes and remedies, a planned variation study of bilingual education (given the present lack of knowledge and materials and the consequent difficulties with implementation) may only provide a rationale for the policy maker who needs "science" to support his desire to cut back such programs.

1.1 Bilingual education versus education of minority group children

With the 1954 Supreme Court decision involving Brown v. Board of Education, Topeka, Kansas, came a burst of concern on the part of educators for the economically disadvantaged minority group child. In 1964, the Civil Rights Act called for the conduct of a survey to determine 'the lack of availability of equal educational opportunities for individuals by reason of race, color, religion or national origin' within the nation's public schools. That survey, completed in 1966, and known popularly as The Coleman Report, dramatically documented the educational failure of disadvantaged minority group children. There followed a three pronged educational policy -- integration, more money and finally community control -- designed to cure these educational ills.[4]

The initial response concerning the educational failure of poor minority group children (it was to some extent a class-based phenomenon in that our schools appeared to be able to educate middle class children from minority group families) was to embrace the "culture of poverty" model. Indeed, the three policy efforts outlined above can be seen as generated from such a model. The "culture of poverty" model postulates that the conditions of poverty produce a culture (i.e., psycho-social environment) which when transmitted to a child produces a pathology in that the child is unable to function adequately in terms of the mainstream society. Integration postulated that the experiences of going to school with "successful" children (by mainstream definition) would in itself produce educational improvement in minority group children in that it would reduce the stigma of segregation, and in many instances provide minority group children with 'better' schools and teachers -- that is schools and teachers that had demonstrated success in the past with their majority group student populations. Integration proposed no fundamental change in goals, what was to be taught, or how it should be taught. Competence in basic skills was still the measure of success.

More money addressed the issue of the former unequal distribution of goods and services to poor, minority group students, and to the need of remediating the skills of minority group children who were to be integrated with majority group children who were already achieving at or above the national norms on tests of basic skills. This additional money was generally used for special services (e.g., psychologists and reading specialists), new equipment (e.g., slide

projectors and tape recorders), new materials (e.g., library books, commercial curriculum) or to reduce teacher/pupil ratios. Again the general procedure was not one of fundamental educational change but rather of intensity -- more of the same.

Community control, which came on the heels of the apparent failure of the initial policies, again was not so much an educational change as a shift in terms of responsibility for service delivery. It, too, was born out of the "culture of poverty" model in that it was an effort to reduce the "feeling of powerlessness" that was so often described in the literature as characteristic, while at the same time creating "role models" for the minority group children to aspire to.

The Bilingual Education Act was passed when these educational policies were in full swing and indeed, they are reflected in the act itself. Integration was not emphasized; however, the Office of Education guidelines did specify that "children from environments where the dominant language is English are eligible to participate when their participation is such as to enhance the effectiveness of the program." (Anderson and Boyer, Vol. II, 1970, 10) The Bilingual Education Act was a compensatory act in that it was initiated to provide extra funds for the special needs of non-English speaking children living in areas with a hgih concentration of families with incomes under $3,000. Among the criteria used to evaluate proposals submitted to OE for the creation of bilingual programs was the inclusion of evidence that such a program would provide "for extensive involvement of non-English speaking parents and other adults in the community. (Anderson and Boyer, Vol. II, 1970, 13)

The aspect of bilingual education that was unique concerning educational policy for economically disadvantaged children was the infusion of the notion that the culture of these non-English speaking children was distinct and valuable. Title VII was distinguished from other Titles of the Elementary and Secondary Education Act in that it appeared to infer, at least superficially, that the "special needs" of non-English speaking poor children was not so much a direct consequence of a culture of poverty, as it was the presence of their own unique, non-Anglo-Saxon culture. Bilingual programs were not merely to teach a second language, English, but also to teach the native culture of the child. In this sense, the Bilingual Education Act proposed a fundamental change in the goals as well as the content of what was to be the education of minority group, non-English speaking children.

2.0 Goals of bilingual education

Bilingual education programs can operate from many different perspectives. Ferguson, Houghton and Wells (1972) have detailed some of the goals implicit in diverse bilingual programs around the world.

1. To assimilate individuals or groups into the mainstream of society.
2. To unify a mulitlingual society.
3. To enable people to communicate with the outside world . . . so as to make it possible for nationals to interact with foreigners.
4. To gain an economic advantage for individuals or groups.
5. To preserve ethnic or religious ties.
6. To promote understanding between privileged and deprived groups.
7. To reconcile different political or socially separate communities.
8. To help meet the individual's spiritual or emotional needs.
9. To introduce individuals to foreign cultures, via language.
10. To urge the learning of language for its own sake.
11. To spread and maintain use of a colonial language.
12. To embellish or strengthen the education of elites.
13. To give two languages already present in the society in unequal distribution a more equal prominence.

(Ferguson, Houghton and Wells)[5]

Some of these implicit goals have motivated educational policy in the United States even prior to the 1968 Act. Indeed, if we look at the history of bilingual education in the United States we find that different goals have been emphasized at different times and in different locations. Thus the desire to preserve an ethnic heritage led immigrant groups such as the Germans in the mid-west in the nineteenth century to establish their own bilingual schools. At that time public policy regarding education in Ohio, Indiana and Minnesota was influenced by this goal to such an extent that specific ethnic groups were allowed their own schools within the public educational system (Fishman 1966, 233).

At a later date society found the goal of assimilation and unity more crucial. The policy changed and these public bilingual schools were eliminated.

Moreover, the crucial goals and therefore policy, were not the same throughout the country. At the same time that German immigrants had access to public schools in their own language, Spanish-Americans in the Southwest did not. Even when public schools were established in the Southwest they paid little attention to the problems of the Spanish speaker. In 1870, California statute required that school be taught entirely in English. (One of the major reasons for the policy differences was undoubtedly sociopolitical in that German held a prestigious position as a language of science and literature whereas Spanish had come to be associated with a poverty class population. The advent of World War I markedly altered the sociopolitical prestige of the German language.)

In regard to current policy as incorporated in the ESEA Title VII legislation and the OE guidelines, it is clear that both assimilation to the mainstream and preservation of ethnic ties are important goals. On the society level, the assimilationist-maintenance goal is an attempt to make the society more tolerant of bilingualism and more aware of cultural diversity. On the individual level, the assimilationist-maintenance goal is to gain new competencies while retaining a positive self-image.

The term transfer oriented is often used to refer to programs with assimilationist goals while maintenance oriented refers to programs with goals of preservation of ethnic language and culture. Because both maintenance and transfer goals are often held by the same minority group, the attempt to define models for this report within a discrete maintenance or a discrete transfer paradigm appeared to be futile.

The Amish appear to have the only distinctly maintenance oriented public education for a minority group in the United States. When their right to educate their children outside the mainstream culture was upheld by the Supreme Court, the Court noted this exception, and specifically stated that their decision was not generalizable and related only to the unique circumstances of the Amish group.

To our knowledge, there have been no proposals for the use of public funds for the education of Spanish-speaking Americans for programs which do not include the teaching of

English and other mainstream skills. Those educators like Rolf Kjosleth (1972) who advocate what they call maintenance programs really mean a quadrilingual education involving both assimilationist and maintenance features. That is, the child begins school in his vernacular, learns the locally used English dialect and then eventually adds to his repertoire the standard dialect of each language. Thus, such models are not exclusively maintenance of the child's original culture, but process models which use that culture to reach an assimilationist goal without completely eliminating his native language and cultural heritage.

It appears that biculturation by definition produces assimilation to mainstream culture and language to some extent. While a person can control a continuum of language styles and a repertoire of interaction patterns which allow him to function appropriately in a variety of cultural contexts, there are choices he will have to make in defining his own life style as an adult. It may be easy to maintain a repertoire of language and dressing styles that can be employed when the occasion (i.e., cultural setting) demands it, however the maintenance of conflicting value systems (i.e., fatalism and non-fatalism) may not be possible.

Indeed, the issue of language and culture contact may ultimately focus on value system discrepancies and not language use per se. This factor may account for the ease in acculturation of many immigrant ethnic groups where the value system matched that of the mainstream as regards attitudes toward work ethic, success, etc., so that assimilation merely involved superficial changes in such behaviors as dressing styles and language.

Except in the context of a societal policy of multilingualism (which has not been the case in the United States), maintenance of a minority group language for more than a generation beyond the movement from poverty and cultural isolation to mainstream middle-class life is somewhat unusual. However, examination of the process of biculturalism indicates that individuals will retain features of their original cultural upbringing. This accounts for identifiable differences in behavior and values of diverse ethnic groups even within the middle class.

2.1 Societal level

Different elements of the society may give different emphasis to various goals. Thus for the mainstream at the societal level we may find that the primary goals of bilingual education are articulated in assimilationist terms. These goals can be stated simply as:

1. children shall be proficient in language arts skills in English,
2. children shall perform at or above grade level in other school subjects (academic and/or vocational),
3. children will complete schooling, at least through high school, and
4. upon leaving high school children will be able to function in mainstream settings (work, college, etc.)

Goals such as

1. children shall be proficient in their native language,
2. children shall have a high self-esteem,
3. children shall have a pride in their cultural heritage,
4. children and adults shall have an understanding and appreciation of bilingualism and cultural diversity, and
5. adults shall participate in the planning and decision making of the school

can be thought of as mediating goals within the mainstream perspective in that they are thought to be necessary for the achievement of the primary goal.

For the community, societal goals may in fact be different -- or at least of a different priority so as to reflect both maintenance and assimilationist goals. Their primary goals may be:

1. the community will have control over the school both in terms of fiscal and academic policy
2. employment of more Spanish-American professionals
3. children shall be prodicient in Spanish and English language arts skills

4. children shall have a high self-esteem
5. children shall have a pride in their cultural heritage

The mediating goals within the community perspective might well be

1. performance at grade level in other school subjects
2. appreciation and understanding of bilingualism and cultural diversity
3. children completing high school
4. children able to function in mainstream as well as native culture upon leaving high school.

2.2 Sociolinguistic level

Before we can explore alternative goals on the sociolinguistic level, it is necessary to define language from the linguists' and the educators' points of view.

From a linguist's point of view, a language is the system of communication within a given speech community. All languages (dialects, vernaculars, pidgins, creoles) have definable phonological and syntactical systems which can be described in terms of rules which govern the speaker's production of sentences which are grammatical (acceptable, understandable) within the speech community. While individuals within the community differ in their speech performance, they share enough features in common for the linguist to describe the sound system, the lexicon, and the grammar which underlie the individuals' speech.

The standard form of a particular language is only the dialect of one locale which because it is (was) the center of learning or government has become the dialect used for writing down history, government documents and almost all literature. From a linguistic point of view, however, the dialect which is the standard language is no more highly developed or grammatical than any other dialect of that language. (Weinreich clearly indicated that there are no inherently greater linguistic values in a standard variety of a language when he remarked, "A language is merely a dialect with an army and a navy.") All language systems -- e.g., dialects -- are internally consistent, follow rules, and are therefore grammatical. While in many countries the dialect which has become the standard language has spread from its original locale to become the native dialect of most speakers, that is by no means universally true. For

many children, their native dialect is significantly different from the standard spoken or written language.

Linguists and anthropologists studying cultures all over the world have observed that

> every normal child, in every known society, gains control of the language of his environment. The pattern of development is everywhere the same, whatever the child's intelligence, whatever the social or economic or educational background of his parents . ... A child who reaches the age of six not speaking the language of his surroundings is a rare exception indeed. (Spolsky 1972, 1, 2)

The language of the child's surroundings may not be the language of traditional schooling and it indeed may not be a formally recognized language at all, but all language types -- standard, dialect, vernacular, etc. -- are equally valid as systems, and are classified as standard, vernacular, creole, etc. on other than linguistic attributes. (Stewart 1968)

Educators, on the other hand, have tended to view dialects as poorly learned language. In so doing, they define the standard variety of a linguistic system as "language" and all of the variants of the standard as "incorrect" and "pathological" attempts at producing language. The literature on educating minority group children is replete with statements that these children "can hardly speak" when they come to school, that they "can't even form a complete sentence," that Black children can't express concepts of negation, that not only do Mexican-Americans not speak English, they "can't even speak Spanish." Comments such as these come from a normativistic viewpoint that is embodied in the deficit model of education. Educators, administrators and laymen in both the mainstream and the minority community share this definition of one linguistic variety as "language" compared to which all other varieties are "incorrect," "substandard" or "deficient."

Educators, in general, do not see the production of language as an innate, natural consequence of being human, but rather as the result of having learned a behavior adequately or inadequately. The explanation that is frequently provided to account for the "inadequate" learning is the "culture of poverty" model; that is, the child was not provided adequate sensory stimulation, the mother didn't talk to him, etc.

Consideration of these two definitions of language affects our appreciation of who a bilingual is and what the goals of a program for him should be. It is our understanding that the vast majority of the children who would be included in the bilingual education programs in this study speak a non-standard dialect of Spanish or English. The sociolinguistic goals of these programs will then depend largely on two perspectives: whether bilingualism is viewed as associative or disassociative and whether bilingual education is seen as process or product.

The disassociative view considers the bilingual (bicultural) person to be the sum of two independently operative monolinguals (monoculturals). In some sort of schizoid fashion the bilingual is seen as moving consciously back and forth from one language and culture to another kept always distinct and mutually independent.

The notion of associative bilingualism (biculturalism), on the other hand, recognizes the individual as a functional unit whose knowledge, including his control of various languages and behavior patterns, forms an interrelated whole. Even supposedly monolingual, monocultural speakers are actually multilingual and multicultural in the sense that they control many different language codes (registers,styles) and many different behaviors appropriate to various roles (functions, interactions) which they fill every day. (Ferguson 1959)

In addition, the process approach conceives of bilingual education as a means to a goal and not as an end in itself. The rationale for bilingual education as process has been clearly stated in the 1953 report on the use of vernacular[6] in education"

> It is axiomatic that the best medium for teaching a child is his mother tongue. Psychologically, it is the system of meaningful signs that in his mind works automatically for expression and understanding. Sociologically, it is a means of identification among the members of the community to which he belongs. Educationally, he learns more quickly through it than through an unfamiliar medium. (UNESCO 1954, 14)

From the process perspective one uses the language and culture of the child to teach new things including another

linguistic system. Thus, the process view of bilingual education involves using the indigenous language and culture of the child -- whether such a language and culture is of high or low prestige, or standard or non-standard -- within the formal educational setting. Since such a functional approach to bilingual education rests on a recognition of the linguistic and cultural reality of the child, concerns over the social status of that reality are, though very real for other purposes, pedagogically irrelevant.

The "product" orientation, on the other hand, looks primarily at the output rather than the input of the system and sees bilingual education as the production of a person competent in two standard languages, for employment in international (standard language) bilingual situations. It is this position which justifies bilingual education on the grounds that to not produce bilinguals is "a waste of a valuable natural resource." Because of this orientation to the product, such bilingual programs are usually unconcerned with the actual language the children speak. Although many of the programs make references to using the language of the children (e.g., Spanish) and might superficially appear to be process oriented, it frequently is the case that the children speak a variant of Spanish that is different from the standard and therefore the school is not in fact using their actual language system.[7]

Possible goals of bilingual education at the sociolinguistic level include permutations of the following:

1. children shall be able to read standard English and/or standard Spanish and/or vernacular
2. children shall be able to write standard English and/or standard Spanish and/or vernacular
3. children shall be able to speak standard English and/or standard Spanish and/or vernacular
4. children shall be able to understand standard English and/or standard Spanish and/or vernacular
5. children shall study all subjects in both languages
6. children shall study only language arts skills in both languages
7. children shall study some but not all subjects (other than language arts) in both languages.

Obviously the choice of language goals is very much related to primary goals and to the program's process or product orientation.

2.3 Program level

On a more concrete program level there are goals which relate to

1. teacher training, teacher competence, teacher attitude
2. curriculum development and choice
3. test development, evaluation measures
4. sociocultural survey

Clearly, the specific teacher training and curriculum development goals will be influenced by the priorities chosen on the societal and sociolinguistic levels. For example, if high priority on the societal level is given to the child's self-esteem and respect for his indigenous culture, and at the sociolinguistic level, priority is given to the child's native vernacular; then one of the goals of teacher training will be to appreciate, understand and use the vernacular in education. If, on the other hand, the primary societal goal is learning English and the sociolinguistic level is product oriented in regard to Spanish, there may be no teacher training goals relating to the vernacular. Our lists of "observables" for teachers and materials for the different models in section four can be considered goals for the program level.

Within the planned variation study, all programs have to be evaluated in terms of the goals of all the models. Obviously, some alternative models are more conducive to successful fulfillment of certain goals than are other models. One of the points of the study should be to try to link models with goals, i.e., to find out what does what best; so that, in the future, communities and school boards who want to institute bilingual education programs will have some data base on which to choose a program likely to meet their particular goal priorities.

3.0 Development of models

The OEO Phase I plan specifically requested models of bilingual/bicultural education that would

a) explicate appropriate theories of language and knowledge acquisition
b) provide models related to existing programs.

In subsequent discussion with OEO staff, the Education Study Center (ESC) learned that OEO staff member, Mr. Carbajal, was reviewing the OE projects and it was decided, therefore, that ESC would concentrate most heavily on model construction rather than existing programs.

ESC has attempted to specify the models of human learning and human behavior which underlie bilingual/bicultural programs and which deliberately or tacitly motivate choices of particular goals and strategies within them. We have also attempted in a broad fashion to deal with how these models of human learning are differentiated in models of bilingualism/biculturalism in particular. Finally we have attempted to indicate the realizations of these models within the context of educational frameworks (strategy and content). Thus our models have a societal level; a linguistic level deriving from the societal level; and an educational level deriving from the societal and linguistic level.

3.1 Anthropological and psychological models of human behavior

It is critical for our discussion to distinguish between anthropological and psychological models of human behavior and human development and the relationships of these to language and to education and schooling.[8] Anthropology views human behavior from a relativist position. It identifies universal behaviors -- for example, the production of language, the grouping together of individuals -- and then examines the range of possible expressions of that behavior within human societies. It does not presume that language variety A or kinship structure B is inherently superior as a system. It does presume that the diverse manifestations of a behavior are all normal, systematic and an integral part of the cultures that produce them.

Psychology on the other hand tends to be normativistic.

It defines human behavior in terms of idealized systems.[9] It tends to view language or family networks, for example, not as a structural concept that can have diverse realizations, but rather as an invariant system that individuals either master or fail to master, but perhaps approximate in some deviant fashion.

Because psychology has no model for dealing with differences it defines difference as deviance. Then psychology is faced with the necessity of explaining the source of the alleged deviant behavior. The concept of "cumulative deficit" is an artifact of a normative theory to explain variance. For example, psychologists define language development normatively in terms of development of standard English. They test minority group children, who are developing other varieties of English, and discover they are deficient in "language development."

By extension this normativistic model is superimposed by psychologists on the description of human development. Adult behavior is the norm against which the child is measured. Development is seen as a linear progression from birth to adulthood to deterioration.

Thus at any given moment in childhood a child is described in terms of how much nearer to, or further from, adulthood he is. Development is defined in terms of how much and how well a child has mastered adult skills. The psychological studies of language development (McCarthy 1954) are an example of just such a model.

On the other hand, the anthropological relativistic model of human development views socialization as a continuing process of the organism to learn the appropriate behaviors for being a person of a particular age in a particular culture. The process of arriving at adulthood is not linear. The acquisition of behaviors appropriate to being three years old are not necessarily linear to those of being ten years old. The culture can very readily have a model of a child of three that dictates that he be quiet, ask few questions, and interact with adults as little as possible, and have a model of a ten-year-old that expects him to be noisy, disruptive, and a full participant with adults.[10] The behavior of the child is not understood in terms of how it approximates adult behavior but rather in terms of what the behavioral rules of being three or ten are as a total system. The language studies of Brown and his students (1964) are instructive in this regard in that

the child's language is described not as a gross approximation of adult speech, but rather as a linguistic entity with a highly organized structure of its own.

3.I.1 Education from an anthropological perspective; Enculturation, acculturation, biculturation

Anthropologists have discussed the education of a child as a process of enculturation -- that is, the transmission of the culture of his community, including skills, knowledge, attitudes and values. In this sense, education represents learning how to be an adult within one's own community.

Part of a child's enculturation, especially in a highly complex and technological society, may include schooling. Malinowski (1943) succinctly stated the distinction between education (the entire enculturation process) and schooling (a particular segment of that process):

> I want to start from the axiom that education is something much wider and more comprehensive than schooling. By education I mean the integral process of transmission of culture. Schooling is that somewhat restricted part of it which is professionally given by teacher to pupil, by the professional educator to those who come under his tutelage in an organized institution of learning. (Malinowski 1943, 21)

Thus, schooling is primarily concerned with passing on to children those aspects of the elaborated supra-structure of their culture -- e.g., technical and social skills -- that are not usually taught at home. The infra-structure of the culture -- e.g., its world view, values, social roles -- are a part of the enculturation process that is learned at home and in the general community. In any homogeneous society, the formal schooling institution is a product of the larger society that generates it, and therefore, implicitly if not explicitly, shares the values, attitudes and expectations that are espressed in the culture's infra-structure. Thus, in a homogeneous society, schooling for the child is harmonious with, and an extension of, his education. Schooling in such a situation represents a normal part of the enculturation process.

The difficulty arises in a heterogeneous society when the culture of the child is different from the culture of the dominant society at the infra-structure level. If the child is placed in a formal schooling institution that is a product of a different culture, then such a child is no longer faced with a natural continuation of his enculturation process, but rather with the necessity of acculturating -- that is, acquiring a different culture. This process of acculturation involves the replacement of one culture with another.

When there are significant differences between the infra-structure of the child's native culture and that of the elaborated supra-structure culture of the school, the child usually experiences failure in the school setting. Generally, when acculturation has been successful for a child from a different culture than that of the school, it is because the supra-structure culture of the school fit relatively easily onto the infra-structure of the child's native culture. In such cases, the acculturation involves superficial aspects of culture at the elaborated supra-structure level rather than at the infra-structure, world view level.

For a child growing up in a minority group culture who attends the public schools that are a product of the dominant group culture, schooling is disjunctive with his normal enculturative process.

In seeing the importance of cultural continuity we can better appreciate that while language plays an important role as a manifestation of a culture it is not the language barrier alone which is the crucial factor in the child's difficulties at school. As the UNESCO committee on Vernacular in Education observed

> Every child is born into a cultural environment: the language [he learns] is both a part of, and an expression of, that environment. Thus the acquiring of this language (his 'mother tongue') is a part of the process by which a child absorbs the cultural environment: it can then, be said that this language plays an important part in moulding the child's early concepts. He will therefore, find it difficult to grasp any new concept which is so alien to his cultural environment that it cannot readily find expression in his mother tongue. If a foreign language belongs

> to a culture little different from his own (as for example French is to an English child) the child's chief difficulties will be only linguistic. But if the foreign language belongs to a culture very different from his own (as for example, English to a Nigerian child), then his learning difficulties are greatly increased: he comes into contact not only with a new language, but also with new concepts.
>
> (UNESCO 1954 as quoted in Fishman 1968, 690)

For the child whose infra-structure is different enough from that of the school and dominant society to impede the acculturation process, sometimes over several generations, biculturation may be an alternative. The biculturation process is one that sees the acquisition of another culture not so much as replacement, but rather as the simultaneous enculturation of the individual to two different cultures. In this instance the discontinuity between the two cultures may be lessened by presenting the infra-structure as well as the supra-structure of the two cultures to the child. In addition the content of the elaborated supra-structure culture may be presented within the learning style of the native culture so as to lessen the differences encountered in a disjunctive schooling situation.

3.1.2 Education from a psychological perspective

Psychology has had a great deal of influence in education. It has been concerned with creating images for teachers about who children are and how children learn. Content per se has not been its primary focus -- rather attention has been directed toward personality development and learning theory. While stressing the importance of individual differences (the normal curve phenomenon), psychology has created images of idealized "normal" children with whom teachers are likely to come into contact. Group differences have not been of concern except as these children represent the "exceptional child" -- (mentally retarded, gifted, autistic, etc.). Where marked variance in behavior of groups of children who are socio-culturally distinct is evident, these children have either been incorrectly perceived as mentally retarded[11] by psychologists and educators, or have been placed in a new category, "the culturally deprived".

"The culturally deprived" category relies heavily on sociological constructs derived from the culture of poverty model. Thus psychology has tended to view the problem of educating minority group children as one of preventing pathology[12] rather than presenting a second culture to adequate but different children. The concept of biculturation is absent in psychology which has a normative model, with room to accommodate individual but not group differences. As Baratz and Baratz (1969) have pointed out,

> 1. The ethnocentrism of psychologists that has led them to see their own culture as the definition of "normal behavior",
> 2. the normativism of the discipline which has no place for group differences and
> 3. the acceptance by many psychologists of the melting pot myth regarding America, and of a faulty egalitarian concept which has erroneously defined "equality" as sameness,

have led psychology in general to deny cultural differences and hence contribute little to a concept of biculturation in education.

Psychology has defined the problem of educating minority children as one of "fit". They have realized that to some extent the children of minority groups do not "fit" comfortably into the school system as it is presently constituted. These children do not behave in the school setting the way mainstream children do and they do not achieve. Rather than change the school to "fit" the child (an act that would involve granting legitimacy to the child's "strange, inadequate" -- from the mainstream teacher's perspective -- behaviors), psychologists have generally proposed changing the child before he reaches school. Thus they have gone back to the early childhood, "formative" years in an effort to produce minority group children who will fit into the school system when they encounter it.

The early childhood years are precisely the period when the child is being enculturated into the infra-structure of his native culture. Educators and child development psychologists (not sharing the anthropological model of viable but different cultures) generally do not think in terms of infra-structures. Therefore, they do not conceptualize the child's problems in terms of infra-structure difference, but concentrate entirely on supra-structure skills.

Many psychologists and educators have often failed to realize that many minority group children are, in fact, being socialized into a world view that treats time, social relations, definitions of success, status, work, freedom, etc. differently from their own dominant culture perceptions. Because many minority group children do not display the same behaviors as middle class children, educators tend to assume that these children have never, in fact, been socialized -- e.g., "developed" attitudes and values, acquired language, learned to think -- and thus they have not developed skills necessary for success in school. With such a view of the problem of "fit", it is not surprising to discover that the early childhood intervention programs display a preoccupation with the skills that are a part of the elaborated supra-structure culture (reading readiness, vocabulary development, number concepts, standard language use), and little recognition of values intrinsic to the child's native culture.

Thus, they propose programs that bring formal schooling to minority group children earlier, either in the form of pre-school programs, or in the form of "teachers" (mothers or outsiders) entering the child's home environment. While starting school earlier may allow for more time to be spent learning the skills that are a part of the supra-structure, these programs do not teach the child a different infra-structure culture. Therefore, early childhood programs may merely present the disjunctive problem of formal schooling to the minority group child at an earlier age.

In addition, since psychology has traditionally concerned itself with learning, defined as a modification of behavior which arises in response to a known stimulus, psychologists are interested primarily in experimentally producable visible (or recordable) change. Equating this definition of learning with education, as most educators do, it is much easier to concentrate on skill development than on the more elusive areas of the child's infra-structure.

The inherent ethnocentrism of most educators is thus compounded by the psychological perspective given them in teacher training courses which emphasize the objective goal (required response) and the stimulus required to produce that response while relegating to a position of very limited importance in the learning process the cultural input which the child brings with him. Defining the expected output behavior as appropriate, the psychological perspective sees the child as having either learned or not learned that be-

havior adequately before coming to school. If he has not mastered it, he must be trained to produce it. This psychological perspective generally creates a 'product" oriented education which takes a normativist view of what may in fact be culturally determined behavior.

Psychology has, nonetheless, developed several concepts of how children learn that have been important to educators and that may be useful to the construction of models of bilingual/bicultural education. The two models of learning that will be of concern to us here are the behaviorist and the cognitive models.

3.2 Sociolinguistics - on language acquisition and bilingualism

From assumptions about society, child development and education, we move now to theories of language acquisition and bilingualism. In this area, we define three models, the behaviorist, the nativist and the cognitive. These three positions relate to the teaching methodologies which are elaborated in section four and which are there called the behaviorist, the immersion and the discovery models.

3.2.1 The particularistic, behaviorist model, concerning language acquisition, and bilingualism

The most important characteristic of the behaviorist model is its rejection of the importance of any internal mechanisms as an explanation of behavior. As Sapon (1972) has stated regarding the behaviorist's approach

> The analysis of behavior is characterized by a strong committment to the OBSERVATION and DESCRIPTION of what it identifies as its subject of study -- what it <u>is</u> that people are <u>observed</u> to <u>do</u>. It avoids involvement in the traps of circular reasoning that are created by questions as to "why" a person does (or worse, does <u>not</u> do) something. . . notions of inferred "process" form no part of the [behaviorist] approach. Our only concerns are description, analysis, prediction and control of observable human behavior.
>
> (Sapon 1972)

Behaviorist theory argues that learning is the internalization of conditioned responses which are reinforced. Laws of learning are derived from the stimulus-response-reinforcement cycle. Thus the behaviorist viewpoint emphasizes strategy, operating out of the assumption that "anybody can be taught anything",

> . . . that the degree of success achieved in the teaching of any subject matter is proportional to the accuracy and detail of the description of the teaching objectives, and the directness of the relationship between the objectives and the means of measuring those objectives. Teachers in a number of areas are now being asked to write 'behavioral objectives" for their courses, and to develop tests which provide the occasion for the measurable display of target behaviors.
>
> (Sapon 1972)

Within this model, behaviorists define language as articulatory movements produced within particular settings. Bilingualism involves having two sets of articulatory movement that are elicited by different stimuli (situational or verbal). Language is a habit.

> . . . Verbal Behavior is no different from other behavior with regard to the Laws of Behavior. That is, the basic relationships between the Setting, the Movements and the Subsequence remain unchanged. A Strengthening Subsequence is still seen as a change in the environment that increases the probability of the display of a set of Movements within a given Setting. We are still very much concerned with the kinds of control exercised by the Setting over the nature of the Movements, and we are still concerned with observing how the nature of the Subsequence controls the probability of the re-occurrence of the preceding set of Movements. (Sapon 1972)

Language acquisition in such a mode can be seen as developing "in the same way as other instrumental acts."

> "Certain combinations of words and intonations of voice are strengthened through reward and are gradually made to occur in appropriate situations by the process of discrimination learning."
>
> (as quoted in Miller, 344)

Chomsky (1959) has presented a critique of the behaviorist position in his review of Skinner's (1957) Verbal Learning. Chomsky states that the application of the behaviorists' terminology from animal learning studies to verbal behavior necessitates a loosening of their original definitions such that, in fact, 'stimulus,' "response" and "reinforcement' merely become substitute words with no more precise meaning than the less scientific terms "motivation," "intent" and "desire."

In addition, Chomsky asserts that Skinner could not deal with many of the complexities of language -- such as the acquisition of grammar, and the production of novel sentences by the child -- within a behaviorist paradigm. A stimulus-response model would only be valid in such general terms as to be trivial and uninformative. Even at the stage of initial word formation (the first assignment of meaning to individual sound sequences such as 'mama' and "dada") it is impossible to establish a one-to-one correspondence between stimulus and response. When we get to the level of acquisition of grammatical structures, the complexity of language overwhelms the simple S-R schema.

Just as the normativist view of development sees the child in terms of how closely he approximates adult behavior, behaviorist linguistic theory envisages the child's language as an incomplete selection of the total set of an adult's language habits. This is sharply opposed to the Chomskian view that every individual at every stage of language acquisition has a grammar" that is a psychological unity. In Chomskian theory, the child's grammar cannot be described in terms of the inclusion and exclusion of adult features, but may (does) differ from the grammar the same child will have when he is an adult.

The behaviorist model, in regard to language learning and bilingualism, can be seen as fitting a product" paradigm.[13] Language is a compilation of individually learned behaviors. The whole is the sum of a set of discrete parts. As such, it is understandable that the particularistic model is popular in education where behavior, to a large extent, is reduced to correct and incorrect responses. Language teaching is reduced to strategy. Context, that is the complexity of language from a sociolinguistic perspective, is ignored. Language then becomes pattern drill and practice with heavy concentration on the mechanics and little concern for communication. The long-range goal (learning to communicate in a new language) is broken down into manageable (teachable) bits and pieces and usually lost in the progression of daily lessons.

3.2.2 The nativistic, relativistic model, concerning language acquisition, and bilingualism

Contrasting sharply with the behaviorist view of language is what, for want of a better term, is referred to as the "nativist" view. In this view, observable language performance (such as speech) is merely an external manifestation (or "output) of underlying (i.e., mental) linguistic competence. Pointing to the apparent fact that the use of language is universal among normal human beings, the nativists infer that linguistic competence (though not necessarily the skill in performing in terms of a particular language) must be essentially an inherited, rather than acquired trait. Indeed, it is the genetic preprogramming of the human for language production that allows him to assimilate the enormously varied and complex linguistic stimuli in his environment into a set of generalizable rules which constitute the basis of his verbal responses.

The nativist model focuses on the innate propensity of the human organism to intuit the rules of the language, his competence, concerning the structure of the linguistic system in his environment. His overt performance, speech behavior, represents a partial realization of that competence. Linguistic and cultural deprivation then is an alien concept to a nativist model in that the nativist model presupposes that every human society has a language system with rules of structural and cultural usage. Different societies may have different structures and cultural usages but all human societies, no matter how environmentally (from a technological sense) or ecologically deprived, have a highly developed, highly structured linguistic system.

It is within this relativistic perspective that the nativist model allows for a view of language acquisition that sees the child's performance not as an approximation of the adult linguistic system, but as evidence of a system with inherent structure in its own right. In discussing the weaknesses of an explanation of child language from a behaviorist as compared with a nativist position Miller (1965) has noted

> . . . we need to make the point that the kind of reinforcement schedule a child is on when he learns language is very different from what we have used in experiments on discrimination learning. No one needs to monitor a child's vocal output continually and to administer "good" and

> "bad" rewards and punishments. When a child says something intelligible, his reward is both improbable and indirect. In short, a child learns language by using it, not by a precise schedule of rewards for grammatical vocalizations "in appropriate situations." An experimenter who used such casual and unreliable procedures in a discrimination experiment would teach an animal nothing at all.
>
> The child's exposure to language should not be called "teaching". He learns the language, but no one, least of all an average mother, knows how to teach it to him. He learns the language because he is shaped by nature to pay attention to it, to notice and remember and use significant aspects of it. In suggesting that language can be taught "by the process of discrimination learning," therefore, [many behaviorists have] ignored my . . . admonition to remember the large innate capacity humans have for acquiring articulate speech. (Miller 1965, 345)

It is ironic to note that although behaviorist models appear to be inadequate concerning how language is acquired and used, language teaching is based almost exclusively on behavioral principles. On the other hand, nativist models have not been concerned with how language is formally taught since the nativists are primarily concerned with how language is acquired within a "natural" (cultural community) setting. One could construct a nativist educational setting for second language learning but it would, in its purest state, be outside of a schooling situation. It would therefore be education at the infra-structure level.

3.2.3 The cognitive psychology model, concerning language acquisition, and bilingualism

Cognitive psychologists have worked principally on establishing a sequence of stages of cognitive development which is thought to be applicable to all children regardless of culture or locale. Rates of maturation, specific substages and how far in the sequence one ever gets may depend on sociocultural factors (rural vs urban life, technological vs agricultural economy), but the cognitive abilities and the sequence of mastery are believed to be universal.

The pioneering work in cognitive psychology was that

of Jean Piaget first with his own children and then with others in Switzerland, but the attainment of specific cognitive skills has been tested by others in many cultures. (see especially Bruner, Olver and Greenfield 1966, Cole and Glick 1972)

Those who find cognitive psychology relevant to the education of minority children assume that at least part of these children's academic difficulties (whether due to the factor of poverty, rural life or traditional culture) is that they are usually presumed not to have reached the stage of development in the sequence that middle class urban Anglo children have at the same chronological age (e.g., on entering school). There are however two approaches to these findings. One is a "nativist" type position calling for research to find out at what age children in a specific culture generally attain a specific cognitive skill (e.g., conservation of liquids). These educators would then change the curriculum to match maturational differences found in different cultures. The second approach is a more "behaviorist" type position which assumes that cognitive skills (e.g., classification or conservation) can be taught and that the maturational sequence can be speeded up through training. This is the assumption on which many recent early childhood curricula have been written. (Lavatelli, Smock) These curricula state as goals the attainment of cognitive skills such as classification, seriation, conservation, hypothesizing, problem solving, etc. Some curriculum writers, while emphasizing the universality of the cognitive processes, are concerned with the cultural relevance of the specific curriculum materials. Others, either because of an unarticulated normativist bias or because the same materials also have a goal of teaching standard English and the specific classification system of middle class American culture, do not attempt to build on the mental framework of the child's own culture.

Piaget and cognitive psychology have recently become popular in teacher training courses and in-service workshops for teachers. Many concerned with developing a better educational system for all children (not specifically for minority group children) feel that all teachers would benefit from a greater awareness of the stages of cognitive development. If the attainment of specific cognitive skills (e.g., having achieved conservation of number) is necessary for academic success (e.g., solving of mathematical problems), then teachers should know how to tell if a specific child has reached a specific cognitive level. This is a culture-independent concern.

There is in addition an argument based on cognitive psychology for de-emphasizing cultural learning styles in favor of training for higher order cognitive processes and decontextualization of language use.[14] This position was presented in a report to the Bureau of Indian Affairs by Francis et al 1972a. Francis argues that

> There is a substantial ground for believing that children in every milieu show appropriate developmental response in terms of the acquisition of language and other skills to the problems and challenges of their environment -- that environment with which they in fact interact. (p. 59)
>
> If Indian education is seen as preparation of the child for roles filled by his parents and if it is meant to allow him to continue to address himself to the tasks and opportunities of his childhood environment, we can assume that the child will develop appropriate cognitive skills to function in that setting. (p. 59)

(i.e., Every culture educates its children to be successful adults within that culture.)

But we insist on formal schooling for these children although "the schoolroom seems particularly ill-suited to the development of the sorts of skills required for herding sheep and hunting caribou." (ibid, p. 60)

However, the goals of education from the perspective of the larger society may well be technological competence which involves formal schooling. The cognitive developmentalist argues that

> . . . to function successfully in a technical culture, certain forms of linguistic and cognitive development are called for. The characteristic of technical culture of interest to us is the increasing reliance on language and other symbolic systems. Language in a technical culture is used to represent, manage, and even determine events which occur outside the immediate context of the individual . . . [Indeed,] Schools exist because there is much to learn to be successful in a technical culture which cannot be learned, as in traditional cultures, through observation and action. Schooling requires and enforces the

abstract use of language to treat topics which have no physical point of reference in the immediate environment. As Bruner has noted

> School separates word and thing and destroys verbal realism by presenting for the first time a situation where words are systematically and continually "there" without their referents. (1971, pp. 48-49)
>
> (Francis 1972, p. 39-40)

In the universal sequence of cognitive development the child is thought to proceed from being action oriented to learning through perception (the ikonic mode) to learning through abstractions (the symbolic mode). While there has recently been some counter-argument (Labov 1970, Baratz and Baratz 1970), many cognitive psychologists believe that in traditional cultures most adults continue to operate primarily on the more concrete levels. Jerome Bruner has written

> . . . without special training in the symbolic representation of experience, the child grows to adulthood still depending in large measure on the enactive and ikonic modes of representing and organizing the world, no matter what languagge he speaks. (1966, p. 47)

While knowing a great deal about the child's learning style might be useful at an initial stage,

> . . . identifying culture specific styles of learning and relating these to educational techniques is a complex, difficult, and time-consuming task . . . We can speculate that if more were known about the ways in which the child within a particular culture organizes his experience, and about how to take into account the cognitive implications of his ethnic heritage, educational achievement might leap ahead. But these are problems which are not likely to yield readily or rapidly to research. (Francis, p. 57-58)

Therefore, cognitive psychologists tend to fall back into a normativist model that uses the familiar mainstream styles and the more complex, difficult and time-consuming task"

of identifying specific cultural learning styles once again gets shunted aside in the name of expediency.

Besides, one would have to guard against continuing to use the cultural based learning style to the exclusion of teaching the child to cope with the demands of technological society. Therefore, Francis argues, rather than rely on the supposedly cultural based learning style, it is necessary to emphasize training in technologically relevant higher order cognitive skills.

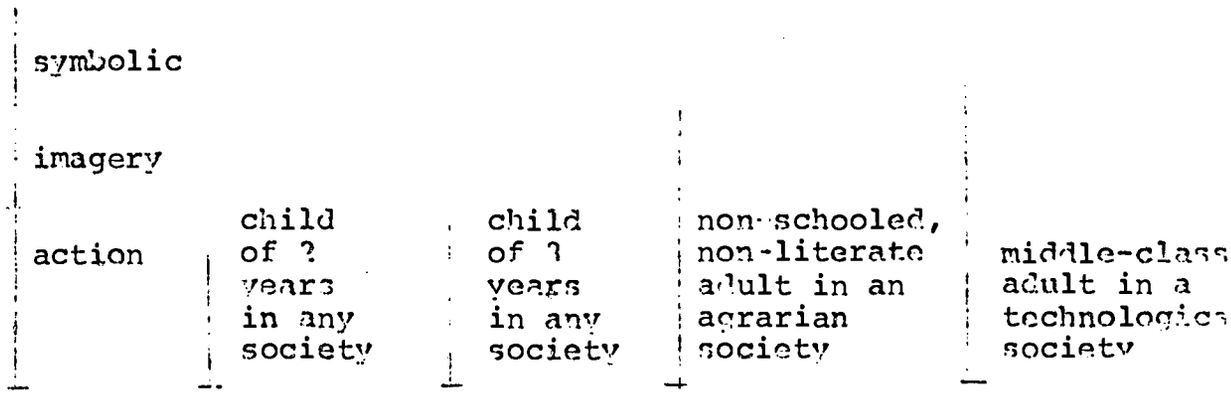
At certain fundamental points, both the cognitive-development model and the cultural-relativism model share assumptions and terminology, and are to this extent compatible. In part, this is because cognitive skills usually operate upon cultural content. But it is also because the development of cognitive skills is necessary for the handling of cultural content. To this extent, the situation is similar to the interaction of language development, as a universal phenomenon, and the relationship of different languages to each other. The development of certain basic (and quite complex) language competences are absolutely necessary for any individual to be able to handle any language successfully. But the actual design of different languages, and therefore the overt manifestations of the language competence developed by an individual, may differ considerably.

So, in a larger sense, the development of basic cognitive skills, while probably a part of the neurological "programming" of homo sapiens as a species, will eventually be channeled in different directions, and be manifest in different behaviors and propensities for behavior, by the exigencies of different human cultures. And the extent to which these exigencies may differ for different cultures can be considerable, since all human cultures are historically derived and socially shared "designs for living" which have evolved in response to sometimes quite different, and often unrelated, needs and inclinations.

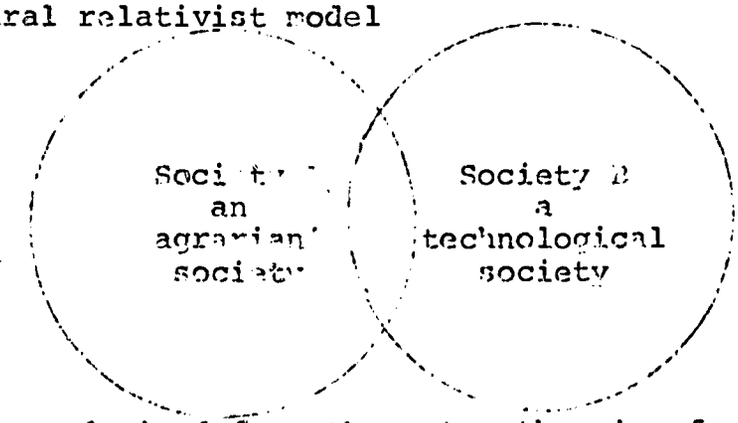
The cognitive psychologist on the one hand observes these different realizations of cognitive skills in members of different cultures and assumes that they represent different stages along some universal heirarchical continuum of cognitive development. On the other hand the cultural relativist sees these as equivalent but different realizations of full cognitive development. The cognitive psychologist may recognize, but usually diminishes, the importance of cultural differences and in so doing virtually ignores culture conflict as an essential factor in the problems of educating culturally distinct minority groups.

We can illustrate these two theories as

1. the cognitive psychological model



2. the cultural relativist model



The implications derived from these two theories for educating a person from one culture for life in another culture are quite different.

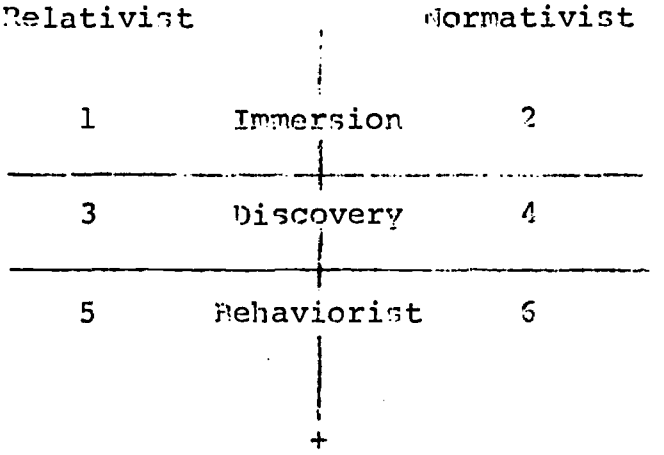
3.3 Conclusion

At the societal level, we have distinguished two representations which in some respects correspond to the definition of cultural difference and cultural deficit models previously described by Baratz and Baratz (1970). We will call these the relativist and normativist models. We have discussed how the anthropological and psychological views of language and culture are reflected in relativist and normativist perspectives of education. At the level of concern with a theory of language acquisition, we have delineated an opposition between a nativist and behaviorist positions.

In the next section of this report, we relate the perspectives developed here (relativist and normativist) to programmatic observables and to content and strategy realizations.

4.0 Program realizations: six models (plus one)

The two theoretical viewpoints outlined in the previous section can each be realized through three different methods: the immersion, the behaviorist and the discovery. This gives us six models (to which we will later add a community development model which is outside of this framework entirely). Graphically the models are:



The immersion approach within a bilingual/bicultural context involves enculturating a child into a second language and culture through total swamping in the second culture. Such an approach would define initial schooling as acquiring the infra-structure of the culture -- and would take place outside of a formal classroom setting. It would include language learned in natural settings, and after such acquisition would move to the elaborate cultural structure as represented in formal schooling.

A behaviorist program is what is most often found in formal schooling: a highly structured curriculum based on a stimulus-response mode.[15] In language teaching the behaviorist model is realized in such classroom strategies as programmed instruction, audio-lingual pattern practice and drill.

The discovery method is an attempt to counterbalance the behaviorist technique by placing more emphasis on what is to be learned than how it is to be learned. It is an attempt at creating a naturalistic environment where "learning" rather than "teaching" takes place. The discovery method tries to modify the school setting, which is frequently alien to children's previous experience, with a less controlled environment that more closely approximates the earlier learning of children. It does this within a classroom setting. The discovery model is realized in such programs as "open classrooms," "unstructured" curricula and teacher as guide. The irony of the discovery approach is that in accepting the reality of the classroom as a parameter it obviates the possibility of utilizing the immersion approach. The focus of what is to be learned in existing discovery programs is still the elaborated structure skills

To the extent that the stimuli presented to the student are selected by the teacher and certain responses to those stimuli are expected, discovery programs cannot get away from the behaviorist definition of teaching. While "communication activities" (as described in Appendix A) can raise the level of entropy and place some reality criteria on the language learner (and therefore approximate immersion settings) they remain artificial constructs. For example, Dykstra's language lessons, while emphasizing communication, include pattern practice for presentation of material and his games are highly structured and hardly natural cues to spontaneous language use.

4.1 Programmatic observables - the theoretical axis

A particular program will be assigned to a model on the basis of its observables, not its rhetoric. Thus a program which in its description states that it "respects the child's language and culture" but in its implementation uses a standard variety of the child's vernacular as the classroom representation of "the child's language" could not be classified as having components of a relativist model.

The three methods - behaviorist, discovery and immersion - can be incorporated in programs that derive from either relativist or normativist assumptions. It is possible to specify whether a program using any of the three methods derives from a normativist or relativist assumptive base by examining the training teachers are given and the curricula that are used. Through this examination it is possible to assign any given program to one of the six models.

Each model may be realized in many different programs. Not only essentially similar programs conducted at different sites but even programs which incorporate striking variations in matters such as scheduling or language mix may be instances of the same model. It is the presence or absence of the critical features described below which determines what model is being implemented through a particular program.

There are three basic components -- societal, developmental and linguistic -- that are observable in programs with a relativist or normativist assumptive base. Any program which reflects a relativist base would have to include

1. a recognition of and use of the infra-structure of the local culture
2. a recognition of and use of the role which the child has been socialized to see as appropriate for his age and sex in his culture -- this includes his notion of appropriate behavior with peers, with children of other ages and with adults
3. the vernacular language of the children as their native language.

A program would be assigned to a normativist base if at the classroom level it were found

1. to ignore differences between the infra-structure of the children's culture and that of the dominant culture
2. to ignore the child's concept of appropriate interaction behavior as defined by his native culture
3. to be using as the "native" language a standard norm which the children do not actually speak.

4.1.1 Teachers and teacher training -- the relativist base

It is, of course, required that teachers in any model be bilingual and be competent to teach the supra-structure skills at the appropriate level.[16] The relativist model focuses primarily on teacher attitudes rather than on technique. Training for this model emphasizes a sociolinguistic orientation and cross-cultural awareness. The ethnic origin of the teacher is not the critical factor; her attitudes and behaviors are. That she be sensitive to the child's perception of a situation is essential.

It is ironic but definitely a factor to be considered in staffing bilingual/bicultural programs that the teacher who comes originally from the community may not meet the attitudinal criteria we are stipulating here.

The person who has made it out of poverty to be a

teacher is often more 'transfer'[17] oriented, more acculturated than the children. Sarles (1972) has commented on the difficulties that ethnics (who have "made it" in relation to the dominant culture) often have in teaching less assimilated members of the same ethnic group.

> Teachers who have moved up from poverty have done so often in the image of the external (white) majority view of success. . . The net result is that [bilingual/bicultural] teachers, teaching among poor children of their own groups, often seem to confirm the negative view the children already have of themselves [vis a vis the school culture], rather than attempting to pull up the entire group. They are, in effect, splintering agents, selecting some children (e.g., those who already have partaken of the "whitening image" process) for potential success but confirming doom for most of them.
>
> (Sarles 1972)

Kjosleth (1972) insists that one of the important factors in a pluralistic model is that the teachers be of the local, ethnic origin and live in and be active in the local community. But he also realizes that there is in reality an impossible conflict here because the local ethnic person who has achieved professional status will usually be unwilling to remain in the lower class community. The teacher who has made his way up from this poverty group is likely to be very intolerant of manifestations of the vernacular language and local culture because he has probably rejected it in his own life style. It is therefore more likely that teachers who trace their origins to the community will fit the specifications Kjosleth lists under his assimilationist model, namely 'non-ethnic or ethnic but doesn't live in community' and "will think of bilingualism and biculturalism in terms of some standard or 'high' variety." If the people who would seem to fit the pluralistic model actually match the opposite one, perhaps teachers who at first glance would be assigned to Kjosleth's assimilationist model might fit the pluralistic one. Kjosleth's requirement of teachers and aides of local, ethnic origin should be redifined in attidunal terms as those . . . who can interact appropriately with the local, ethnic population." The actual origin or ethnic affiliation of the teacher need not be the critical factor.

Observables which would indicate that teachers (or teacher training programs) are operating from a relativist perspective include

1. teachers are aware of the existence of different cultures
2. teachers are aware of their own interaction styles and the cultural basis of them
3. teachers are aware of the interaction styles of the specific culture they are dealing with
4. teacher accepts as appropriate behavior from the child that which the child has been socialized to consider appropriate
5. teachers interact with the child within the style of the culture where there are appropriate possibilities (i.e., greater physical contact, or allowing the child a long observation period before expecting performance, etc.)
6. and perhaps most critically, teacher sees her role as expanding the child's repertoire of appropriate behavior rather than as either giving culture to a child who has no culture or replacing the child's culture with another.

Similarly on the subject of language, teacher training in the relativist model would emphasize what the generative theory of language tells us about children and their language abilities.[10] Training would involve such information as

1. all normal children learn a language
2. all languages including vernaculars are systematic entities, all equally self-consistent and logical
3. all people control several language registers
4. standard norms are historically local dialects that have become written languages.

Teacher training in this relativist model would, of course, include as much knowledge as possible about the specific language and culture of the children in that particular program. It may be that a good deal of basic cultural anthropological research and a sociolinguistic survey are needed in a given community in order to provide the teachers with the necessary facts about the children's language usage and community socialization practices.

4.1.2 Teachers and teacher training - the normativist model

On the other hand, a program would be assigned to the normativist model if the teacher (or teacher training program) is observed to be

1. unaware of cultural differences or

2. aware of the differences but still expects the child to act like a mainstream culture child while he is at school or

3. aware of differences but denigrates them, or tolerates the child as different but does not modify her behavior towards him (or modifies her behavior in a way which indicates that she considers him or his culture to be inferior) or

4. sees her function as giving the child culture or replacing his culture with another.

The overwhelming importance of a teacher training component in the implementation of any program using the relativist model rests squarely on the fact that most teachers now in our public schools have in fact been trained in the normativist framework. Correspondingly, if a planned variation study is to include programs which will be observable as relativist models, the difficulties in implementation (unless sufficient time and energy is devoted to teacher training) must be appreciated.

Since the normativist model is based on a perspective of human behavior, culture and language that tends to universalize behaviors, it does not require any particular training for work with different groups. Most teacher training programs in colleges and universities thus fit into the normativist base. The emphasis is on methodology, techniques for classroom management and teaching specific skills. Teacher training in the normativist framework as it pertains to language is most likely to emphasize the "problems" that children from ethnic backgrounds have. This may focus either on language structure or function. Beliefs such as these may be taught:

1. language the children use is ungrammatical
2. vocabulary is restricted
3. language is not used adequately for communication
4. language is not used for abstraction

4.1.3 Curriculum choices -- the relativist model

Bilingual/bicultural materials in a program based on a relativist model would be observed to

1. actually be in the vernacular
2. be relevant to the children with relevance defined so that not only do the pictures reflect the child's world but the people in the stories act as he would expect them to
3. possibly contain cultural content of a formal

social and historical nature (artifacts, holidays, heroes, etc.)

4. include discussion of cultural differences, institutions such as family life, role of the church, different interaction behaviors, perceptions, anticipations.

5. allow for distinct cultural learning styles.

4.1.4 Curriculum choices - the normativist model

We would assign to the normativist model a program which

1. does not use bilingual and bicultural materials or

2. which uses materials or language that are not relevant to the local community or

3. which includes the child's culture only as a content variable not as a process variable. We can, within 'culture as a content variable', define a hierarchy of what constitutes culture in the classroom.

a. artifacts of the culture are displayed in the classroom: e.g., sombrero, pottery, etc.

b. public aspects of the culture are presented: celebrate fiestas and cultural holidays, have individuals show off cultural crafts.

c. course content includes history and famous leaders of the group.

d. social studies lessons include the historical background of the group. There is a wide range here from a few historical dates and the tales of the conquistadors to a sophisticated anthropological history including description of institutions and their historical development.

Even if all of these are included in a bicultural program, it would still be considered normativist if there is no regard for distinct cultural learning styles in the presentation of this (or any other) material.

4.2 Programmatic observables - the methodological axis

The observables at the theoretical base level are realized in programs involving three basic methodological approaches. It is the contention of the authors that variation at this level of the model is less crucial than at the theoretical level.

4.2.1 The immersion methodology would be manifest as follows:

1. program takes place in natural settings
2. no formal teacher
3. occasion for considerable peer group interaction
4. inter-age contacts
5. language always used for communication - no formal teaching
6. child is 'swamped' by second culture

4.2.2 The behaviorist methodology would be manifest as follows:

1. structured classroom
2. programmed curriculum
3. teacher concentrates on behavioral objectives
4. teacher talks most of the time
5. limited peer group interaction
6. language is taught via pattern practice, drill and teacher cued responses
7. teacher initiates activities

4.2.3 The discovery model has features that move behaviorist methodology closer to the immersion

1. unstructured classroom
2. unstructured curricula
3. child initiates activity
4. language taught within constructed communication units as well as patterned drill
5. scheduling flexible
6. attitude more important than technique

4.3 The community development model.

The development of community awareness and organization has led to demands for control by the community over the education of their children, including decision making concerning goals, allocation of resources, hiring practices, curriculum, etc.

The model is one of power. The assumption is that the community's lack of power is to a great extent responsible for the failure of the children either because

1. those in power are deliberately unwilling (their real goal is to keep the community ignorant) or unable to educate the children (e.g., they do not allocate adequate resources, hire the right teachers, institute appropriate policies, etc.)

2. the lack of power has had an adverse effect on the children (e.g., no "role models", creates feelings of inadequacy vis a vis the "outsider" power structure) or
3. the community knows what is best for itself and will always act in its own best interest and implement successful policy

If we ask the community parents to delineate what they expect the school to do for their children, we will most likely get responses in terms of achievement goals in subject areas such as reading, mathematics and English. Goals such as enjoying school, positive self-image and maintenance of the ethnic language may also be expressed but not to the exclusion of the goal of educational achievement in skill areas. In general, the minority group parents' goal is not likely to differ so much from that of the mainstream parents, i.e., an education which allows the community's children to compete in mainstream society (a well-paying job, status and upward mobility).

The community development model may, however, define its goals not only in terms of educating children but also in terms of educating the entire community, especially concerning involvement in the schools and in other political arenas in order to effect social change in their community. To this end an evaluation of a community development model that only assessed its ability to educate children would be incomplete.[19]

We feel that this seventh model, the community development model, at the level of educational implementation, would probably make decisions in relation to the other models presented in this paper. The seventh model's uniqueness rests in its theoretical assumption that the problem of education is in who makes the decisions. It is only in giving communities total power over funds and policy that we will learn if educational models other than the ones suggested here are created by these groups.

4.4 Summary of models.

The following represents a brief and somewhat sketchy representation of possible examples of each model.

Shorthand Summary of Model I - Relativist Immersion

1. Strategy: child put in a home of second culture from 2-3, during which time he is swamped in language and culture
2. Content: middle-class Anglo (or Spanish-American) environment
3. Training: caretaker sensitized to cultural differences, problems of initial communication, etc.
4. Goal: impart infra-structure language and attitudes as initial step in acquisition of supra-structure skills
5. Examples: none

Shorthand Summary of Model II - Relativist Discovery

1. Strategy: child put in unstructured classroom that uses his vernacular learning styles and language to teach other language
2. Content: culturally relevant materials and traditional school materials
3. Training: teachers trained re cultural awareness, vernacular in education
4. Goal: teach second language and culture skills
5. Examples: The Cultural Linguistic Approach, Center for Inner City Studies, Northeastern Illinois University, as described in Follow Through Program Sponsors (1972).

Shorthand Summary of Model III - Relativist Behaviorist

Although this model might appear anomalous in light of previous descriptions concerning relativist assumptions, it is a possible model for those educators who embrace the nativist assumptions about language variety and initial language acquisition but who see second language learning as distinct from native language acquisition.

1. Strategy: child in structured classroom with stimulus-response technique
2. Content: audio-lingual, programmed instruction but with vernacular accepted
3. Training: teachers trained re relativist model, but also given instruction in behaviorist techniques
4. Goal: teach second language and culture skills
5. Example: none

Shorthand Summary of Model IV - Normativist Immersion

This too would appear to be an anomalous model. However, the educator who sees the child as having a defective culture that might be "overcome" by being placed in another environment would subscribe to this model.

1. Strategy: child put in home of second culture
2. Content: middle-class Anglo environment; middle-class

Spanish-American with standard Spanish
3. Training: Caretaker given sympathetic but normativistic perspective concerning child - "culture of poverty" model
4. Goal: give child a language and culture
5. Examples: Bettleheim's suggestion for educating minority group children in Kibbutz-type arrangement was an approximation of this model.

Shorthand Summary of Model V - Normativist Discovery

While discovery techniques seem more consonant with relativist assumptions, in actual fact discovery programs often have a normativist view that recognizes individual differences between children but not group differences derived from cultural difference.

1. Strategy: open classroom, child initiated activities
2. Content: many stimuli
3. Training: in getting teachers to change from 'teaching' role to that of 'guide'
4. Goal: impart skills
5. Example: Tucson Early Education Model

Shorthand Summary of Model VI - Normativist Behaviorist

This is the model most frequently found in schools.

1. Strategy: formal schooling in structured classroom with stimulus-response technique
2. Content: audio-lingual, programmed instruction, behavior modification, reward techniques based on standard language
3. Training: techniques of behaviorist methodology
4. Goal: impart skills
5. Examples: San Antonio Early Childhood Education Program

4.5 Check lists of observables for assigning programs to models

It is only by observation of materials and practice that a specific program can be assigned to a given model. The check lists which follow suggest some of the possible observable features which characterize programs. The first list refers to the assumptive axis on which we have established a binary opposition between relativist and normativist models. This list contains statements under five headings dealing with the program's assumptions about a) society b) child development, c) vernacular, d) language acquisition, and e) language use. Within each of the five sections

statements concerning three aspects of any program -- the teacher training materials, the curriculum materials, and what happens during implementation in the classroom -- are presented.

To use these lists, the observer checks off all the statements which are true of the materials or the classroom being examined. The clustering of elements which are found to exist should allow the program to be assigned to the relativist models (I-III) or the normativist ones (IV-VI), (or to indicate the extent to which the program's assumptions in one aspect are contradicted or are not maintained in another). Each observable has been labelled "R" (relativist), "N" (normativist) or "R/N" (consistent with either), indicating with which model it is most closely associated.

I. Observable features along the assumptive axis

A. Societal

1. Teacher training

a.	explains that each person's values, attitudes and behaviors are culturally determined	___ R
b.	explains that each person belongs to a (several) communitites with a coherent culture	___ R
c.	explains the associative view of biculturalism	___ R
d.	explains that culture consists of a set of values, attitudes, interactional patterns which establish appropriate behaviors for different members by age and sex, as well as the more visible cultural indicators (dress, food)	___ R
e.	shows teachers the cultural basis of their own values, attitudes and interactional patterns	___ R
f.	presents the culture of the local community, its values, attitudes, view of how children of certain ages should behave	___ R
g.	gives the teacher specific suggestions for attitudes and interactions for the classroom that will facilitate learning for the children of that specific culture	___ R
h.	appreciates cultural differences	___ R
i.	presents the child's culture as valuable	___ R
j.	explains the role culture conflict plays in the child's difficulties in school	___ R
k.	describes the importance of accepting the child's culturally determined self as the basis for beginning the school experience	___ R

l.	does not mention culture	___	N
m.	treats American society as monolithic	___	N
n.	views ethnic groups as important in the creation of modern America but does not give ethnicity an important place in current American society	___	N
o.	mentions culture but only in terms of externals such as food, dress	___	N
p.	presents a monolithic view of the specific ethnic sub-culture	___	N
q.	does not mention or minimizes the role of culture in learning	___	N
r.	adheres to the melting pot view of American culture	___	N
s.	presents normative mainstream behaviors as "correct"	___	N
t.	sees non-mainstream behaviors as bad	___	N
u.	sees non-mainstream behavior as the unfortunate result of poverty	___	N
v.	sees preservation of ethnic identity as a hindrance to getting ahead	___	N

2. Curriculum components

a.	people in the stories have ethnic names	___	P/N
b.	stories include objects familiar to students	___	P/N
c.	pictures reflect the children's familiar surroundings - defined locally not only as a broad ethnic norm	___	P/N
d.	people in the materials act in ways which the children deem appropriate	___	P/N
e.	materials in other subjects (social studies, science) reflect the infra-structure values of the child's culture	___	R
f.	materials in these subjects present other possible world views as alternatives or additions to the child's not as a superior truth	___	R
g.	syllabus allows for the cultural learning style of the local community (e.g., cooperation not competition, inter-age teaching if they are relevant)	___	P
h.	the syllabus indicates that someone has studied and knows the relevant features of the local culture that would suggest variations of traditional schooling that would be more in keeping with the local community's style	___	P
i.	includes discussions of culture, the specific cultures involved in the school and cultural differences re: values, attitudes and interactional patterns	___	P/N
j.	curriculum calls for artifacts of the culture to be displayed	___	P/N

k. syllabus includes public aspects of the culture ___ Y/N
l. curriculum covers history and famous leaders of the ethnic group ___ Y/N
m. subjects other than language arts use same texts as rest of school syster ___ Y
n. nationally distributed materials are used without modification (or with minor lexical changes) ___ Y
o. materials are imported from another country and used without modification (or with minor lexical changes) ___ Y
p. materials stress all people the same, omit discussions of culture ___ Y
q. characters in materials middle-class whites, or "tinted" but exhibit only middle-class behaviors - e.g., mom dad sister brother two-car garage and outdoor barbeque ___ Y

3. In practice

a. the teacher indicates to the child that he is stupid, lazy, incompetent when he is displaying behavior that is appropriate in his culture ___ Y
b. the teacher recognizes when the child is showing respect according to his cultural norms (even if it is not respectful in her culture) ___ Y
c. the teacher implements the materials in such a way as to allow for culturally based learning styles ___ Y
d. the children misinterpret teacher's cues for appropriate behavior ___ Y
e. the teacher misses children's behavior cues indicating their desires, needs or knowledge ___ Y
f. in discussions, the teacher expresses attitudes that denigrate the child's culture ___ Y
g. the teacher expands the child's repertoire of appropriate behavior ___ Y
h. the teacher puts down the child's action and tries to teach him a "better" way ___ Y
i. the teacher responds most frequently and positively to those children who are closest to her own cultural norms ___ Y

B. Child Development

1. Teacher training

a. presents strengths of minority group child ___ Y
b. presents idea that child's perception of a given interaction may differ from the adult's ___ Y

c. shows how the child has been socialized to his own cultural norms before he comes to school ___ R
d. suggests that the child's experiences prior to school will affect his perception of new experiences ___ R
e. presents idea that the child's culture may have different expectations for the child at a given age than the teacher's culture would ___ R
f. presents anthropological evidence for the local community's culture-specific ideal for children at various age levels ___ R
g. uses the adult as a standard of comparison for child behavior ___ N
H. assumes the child is unformed, waiting to be molded into educator's product ___ N
i. sees education primarily as preparation for adult employment ___ N
J. sees work with minority group children as a 'salvage operating' procedure ___ N
k. presents child as fragile, easily damaged ___ N
l. presents problem of minority group children as weak ego strength, lack of motivation ___ N
m. shows deficits of minority group child that must be overcome ___ N

2. Curriculum

a. in mode appropriate to cultural view of child of the specified age level ___ R
b. is concerned with child's views ___ R
c. concerned only with teaching skills for future use ___ N
d. has same behavioral expectations would have for an adult learner ___ N

3. Practice

a. teacher expects all children from all cultures to be the same ___ N
b. teacher allows for individual differences but not for group differences ___ N
c. teacher is aware of differences in children by cultural groups but denigrates one group ___ N
d. teacher's expectations for groups differ -- teacher 'writes off' one group ___ N
e. teacher can put herself in child's place ___ R
f. teacher accepts child's view of an interaction ___ R
g. teacher can treat groups differently while holding same long-range goals and expectations for them ___ R

C. Vernacular

1. Teacher training

a.	describes the nature and origin of standard languages and dialects	___ R
b.	includes a detailed grammatical description of the local vernacular	___ R
c.	indicates by contrastive analysis some of the more obvious errors the local children will make in learning English	___ R
d.	presents in some form a diglossia model, that all people speak a variety of language styles	___ R
e.	refers to the children's language only as Spanish	___ N
f.	presents a contrastive analysis of "Spanish" and "English"	___ N
g.	makes statements that the language these children speak is ungrammatical	___ N
h.	perceives vernacular as evidence of language deficit that teachers face	___ N
i.	defines teacher's job as eradicating vernacular	___ N

2. Curriculum

a.	introductory texts are in vernacular	___ R
b.	texts in "child's native language" are in standard Spanish	___ N

3. Practice

a.	teacher accepts vernacular as correct grammatical speech and as appropriate for all purposes except specific lessons in learning dialects other than vernacular (ESL or SSL)	___ R
b.	teacher corrects child's language using the standard dialect as model	___ N

D. Language acquisition

1. Teacher training

a.	presents linguistic and anthropological evidence that every normal child learns a language system	___ R
b.	the generative theory is presented as a model of how all children learn language	___ R
c.	makes statement that these children have not learned language	___ N
d.	suggests that the children's early environment is not conducive to development of language	___ N

e. describes language acquisition as acquiring habits, presents behaviorist model ___ M

f. indicates that children learn not only grammar but sociological aspects of language use; different styles for different occasions ___ R

2. Curriculum

a. teaches standard form of the language (e.g., Spanish) as a second language ___ R

b. does not teach standard form of the language ___ R

c. teaches Standard English through medium of vernacular ___ R

d. teaches grammatical structures, vocabulary, etc., (negation, prepositions, opposites) as if the child were non-verbal ___ M

e. teaches through games involving social setting ___ R

3. Practice

a. the teacher assumes the children can express themselves in a coherent, grammatical way in their native vernacular ___ R

b. the teacher considers the children to be non-verbal ___ M

c. the teacher corrects the children's vernacular ___ M

d. language is taught be rote memorization, pattern practice, drill, programmed instruction, or behavior modification ___ M

e. language is not taught as a subject but used as a medium of instruction only ___ R

f. language is taught in conversational modes; language lessons eliciting spontaneous language are used ___ R

E. Language Use

1. Teacher training and practice

a. states that the child has normal cognitive development ___ R

b. states that the child has concepts before he comes to school ___ R

c. states that the child has categories but they may be different from those of the teacher ___ R

d. states that the child has language but that his language cannot express abstractions ___ M

e. states that the child's language can express abstractions but that due to his restricted environ- ___ M

ment he does not use language abstractly

f. states that the child's language is inadequate for concept formation ___ I

2. Curriculum and practice

a. the children are tested for knowledge of e.g., basic shapes, size comparison, negation, spatial relations in their vernacular ___ D

b. the children are so tested in Standard Spanish or in English ___ B

c. the child is taught concepts such as basic shapes size comparison, negation, spatial relations on the assumption that the child does not know them ___ B

d. cognitive content lessons are not given until vocabulary and structure either in Standard Spanish or in English have been taught ___ D

e. the vernacular is used for teaching new cognitive materials after the child's knowledge level of these concepts has been accurately assessed ___ D

II. Observable features along the methodological axis

The second check list refers to the methodological axis where we have set up a three-way distinction between immersion (I), discovery (D), and behaviorist (B) models. This list includes observables under the headings 1) classroom set-up, 2) scheduling, 3) teacher role, 4) curriculum, and 5) language learning techniques. The assigning of a program to a model on the methodological axis should only be done on the basis of actual classroom practice.

1. classroom set-up

a. traditional classroom - children remain in same seats all day although may have some separate groups, e.g., for reading ___ B

b. learning centers -- children rotate in groups ___ D/D

c. flexibly open -- children move at will or are grouped for certain lessons and free to move around at other times ___ D/B

d. no classroom ___ I

2. scheduling

a. each subject taught in defined time block ___ B

b. each child has different schedule, these schedules change from day to day ___ D

c. no schedule ___ I/D

3. teacher role

a. teacher initiates and directs activity ___ D
b. mostly teacher-pupil interaction but often pupil-initiated ___ D/I
c. teaching relies heavily on peer group or inter-age interaction
d. no formal teacher (machine counts as a teacher) ___ I/D

4. curriculum

a. each subject taught separately ___ D
b. all subjects used as lessons for all skills - integrated curriculum ___ I
c. the hidden curriculum of the middle-class home ___ I

5. language learning techniques

a. teacher talks most of the time, students respond, memorize, drill, correct and predictable answers ___ D
b. programmed instruction, student interacts with a machine or a workbook ___ D
c. spontaneous language use is stimulated whether by communication activities, by unplanned conversation, or by not having formal language teaching ___ D/I

4.6 Other variables

The observables we have listed in the previous sections are the independent variables which we suggest are crucial to the models we have defined. It is recognized that within a controlled variation study certain features must be held constant across models. These include

1. age
2. ethnic mix, including
   a. language dominance
   b. proficiency in each language
   c. degree of acculturation
3. socio-economic status
4. previous school experience
5. rural/urban

In addition there are variables which will not be controllable, especially in discovery models, such as

1. schedule of time devoted to each skill area
2. mix of languages within schedule (e.g., 50/50 or Spanish only in language arts, all else in English or Spanish for all but ESL, etc.)
3. staff experience, etc.

If the characteristic of the discovery models is that the curriculum is unstructured, then the time spent in each subject and each language will vary from one child in the class to another and even for each child from one day to another.

The question of whether a program is two-way (Anglos learning Spanish as well as Spanish speakers learning English) or only one-way need not be considered a critical variable, since the essential problem being addressed by the government in its planned variation study appears to be the educational achievement of Spanish speaking children. Indeed, the solution to the problem of underachievement as proposed by the Bilingual Education Act was that by using the child's native language, the educational system would produce greater success in terms of its same goals (achievement in skill areas, ability to compete in mainstream English speaking society) than it had previously achieved for these non-English speaking children.

The argument for a two-way program appears to rest

mainly on the notion that the Spanish-American child's self esteem will suffer if only he (and not the Anglo child) has to learn another language. In addition, learning another language may reduce the Anglo's ethnocentrism, but it may be a false hope at best to try to deny within the school setting the obvious fact of which the Spanish-American child will sooner or later become aware, namely that he belongs to a minority language group within this country and that the national language is English. He will need English for college and jobs in the mainstream society; the Anglo child will not necessarily need Spanish.

While the product perspective, which points to the value of having bilingual speakers available for jobs, justifies the teaching of Spanish to Anglo children, this position is tempered in some of our models by the argument that a bilingual program must consider the local vernacular as the appropriate form of Spanish -- and that vernacular may have little value for the Anglo children as concerns their future education or employment.

It is however, not essential that educational procedure be justified functionally. There are valid arguments aside from practicality in favor of majority children learning minority group languages. A two-way program may be beneficial for the goals of increasing cross-cultural awareness, to sensitize the Anglo children to the culture of the Spanish children, but it may be completely irrelevant to the goal of higher achievement levels and lower drop-out rates for Spanish speaking children.

5.0 Implementing the models: problems and possibilities

It is obvious that some of the seven models described in the previous section will be easier to implement than others and yet, if we restrict the planned variation study to models that fit readily into the existing school framework, we will be offering few new solutions and can expect few new results from the study. Furthermore, if we rush to set up programs which are meant to exemplify the models which require extensive retraining of teachers and for which there is currently no appropriate curricula, we can be sure that the evaluations will show that the implementation does not match the description of the model. Declaring a program to be an example of a certain model does not mean that it is. Evaluation has to be based only on the observables of the program as it is carried out, not on the model to which the program was assigned.

Implementing a community development model has as its first difficulty defining "community" (and what constitutes a community) and perhaps more difficult, who represents that community.

Implementing the immersion method in either the relativist or normativist framework requires a concept of education outside of the school system. While this might be organized at a pre-kindergarten level, the currently projected study is for grades K-3. Immersion programs for this age group are not likely to be considered feasible by either the community or educators.

Difficulties in implementing discovery methods in already established classrooms are documented in reports of Follow Through sponsors of open classroom programs such as the Education Development Center (EDC) and the Tucson Early Education Model. EDC focuses on retraining teachers and finds that the teachers with whom they must work are not always receptive to their ideas.

The teacher's ambivalent position in an experiment such as the proposed study may become an obstacle to the implementation of an innovative model. If the school administrators are not entirely enthusiastic about the program, they may give the teachers conflicting messages about their expected participation in the program. As long as the program remains experimental (i.e., will terminate after a certain number of years), the teacher will see her future in

terms of the impression she makes on the local school authorities and not on the director of the special program.

The problems in implementation will be much greater for programs based on relativist assumptions than on normativist ones. As Baratz (1971) has previously pointed out, major difficulties which may be encountered include:

1. a lack of trained personnel to teach culturally different children
2. few teacher training programs set up to train teachers of the culturally different
3. a lack of materials and curricula
4. a lack of knowledge about the vernacular dialects and diverse cultural groups in this country, especially as regards microbehaviors that may be very important within the framework of cross-cultural communication.
5. a rejection of the cultural relativity thesis, which states that the minority group culture is valid and should be used in the teaching process, by majority group members who are ethnocentric and see only their culture as valuable, real and good.
6. a rejection of the vernacular culture by minority group ethnic members, particularly among the middle class.
7. a fear that the recognition of distinct cultural groups in the United States will necessarily be justification for re-segregation.
8. because the issue of culturally related education is bound to generate controversy, and because at the moment failure of minority group children is a problem, but in itself not controvertible (no school administrator is being called racist merely for stating that these children are not performing near national norms), school administrators, one of whose jobs it is to keep controversy at a minimum, may very well opt to do nothing -- or do something that is acceptable even if it is demonstrably ineffective -- rather than risk their jobs for a program that has educational promise but is so controversial.

Aside from the problems inherent in attempting to implement particular models, there are problems related to planned variation studies that raise general questions as to the overall feasibility of such a study, especially as concerns the cost relative to probable outcome. The situation is reminiscent of earlier experiences with planned variation studies in educational settings, most notably the current Follow-Through project, which have raised more questions than they have

provided answers. Here, the research designs and educational theories of academicians have run headlong into the politics and bureaucracy of the educational systems, where reading scores, academic achievement and feelings of self esteem and satisfaction are not necessarily relevant criteria for operating those systems. Indeed, the educational systems in this country appear to have a unique capacity for coming into contact with fresh ideas, organizations, and insights, ingesting them, excreting them undigested, and continuing on unnourished by the experience.

The school superintendent, for example, may be much more concerned with money matters than with reading scores. He is dealing with a large system where management problems, not methods of reading instruction, are the issue. Indeed, poor reading scores are not inherently a problem and only become so when someone else (the press, the Congress, employers) make them so. In addition, once the furor over poor reading scores dies down, they become an accepted fact (naturally to be deplored) but nonetheless a fact rather than a controversial issue. Indeed, a proposed solution to poor reading scores -- e.g., use of dialect texts -- may easily become more controversial than the fact of poor reading performance itself.

As was indicated earlier, programs cannot be 'sent in' from the government or the university and imposed upon the system. A teacher's allegiance to a two-year "research project" is going to depend more on how the system in which she functions likes it than how prestigious the university is that offers it. Her rewards come from her employers and peers, not from outside experts. And here too, her rewards are not merely Johnny reading. Her acceptance by her fellow teachers may be as important if not more so than her success with her charges. This is not said to malign teachers, but merely to emphasize that they must be understood in relation to the complexity of their role as they perceive it, which is not merely imparting ABC's to kiddies. And so on for supervisors, principals, etc., up and down the line.

Discussions of the difficulties encountered in Follow-Through planned variation often return to the problems of teacher training, of meeting the multiple goals of school systems, of detailing delivery systems, of inadequate measurement tools, of the pressures for immediate action even when the system is not ready, of demand for immediate 'pay off". Inferred in these discussions is that planned variation studies should project a bit longer time frame so that they can solve these problems and then be able to conduct a planned

variation study. Since the problems referred to are endemic to the educational system, it would appear to this writer that at best the cart is being put before the horse, that applied research is being called for before the basic research has been done. Indeed if the endemic problems discussed under problems of planned variation studies could actually be solved, there might be no need for a planned variation study.

The state of the art (or science) as regards education generally and bilingual education particularly is not in a position to call for a large applied research study in a "naturalistic" setting. Indeed, time may clearly demonstrate the naivete of planned variation studies in that the constraints of an experiment become, in the final analysis, inimical allies with the exigencies of a school system.

NOTES

1. According to the USEA Title VII summary, by ethnic group, FY '72, the 211 projects were funded for a total of $33.212,759. This breaks down as follows:

Mexican-American	$16,032,733.
Puerto Rican	5,610,080.
Cuban	337,500.
multi-ethnic, all Spanish	3,004,346.
total, Spanish only	25,974,749.
Portuguese	600,707.
French	203,651.
American Indian and Eskimo	2,474,307.
Other	553,000.
multi-ethnic, includes Spanish if other language is not Spanish	2,700,295.
total, non-Spanish and multi-ethnic	7,238,010.
total Title VII funding	$33,212,759.

2. The RFP from OEO and the publicity releases concerning the grants state that implementation of the models will be with Spanish-American populations. The present report therefore concentrates its examples on the languages and cultures of Spanish speaking groups, but the discussion of bilingual/bicultural education and the models developed are generalizable to the other languages and ethnic groups for which Title VII funds programs.

3. Preliminary reports on the Follow Through Planned Variation Study have not been particularly promising. There have been considerable difficulties with the Follow Through Project in finding discrete forms to vary, in implementing the projects and in evaluating the data -- especially surrounding the issue as to what constitutes control data.

4. Jencks, et al (1972) summarized the educational policy of the war on poverty model of the 60's as follows

> The best mechanism for breaking this vicious circle [poor don't acquire cognitive skills, therefore don't get jobs, therefore remain poor . . .] is educational reform. Since children born into poor homes do not acquire the skills they need from their parents, they must be taught these skills in school. This can be done by making sure they attend the same schools as middle-class children, by giving them extra compensatory programs in school, by giving their parents a voice in running their schools, or by some combination of all three approaches. (p. 7)

5. A fuller description, with examples, is given in the paper which was commissioned as part of the present report.

6. The UNESCO report defines vernacular language as follows:

> A language which is the mother tongue of a group which is socially or politically dominated by another group speaking a different language. We do not consider the language of a minority in one country as a vernacular if it is an official language in another country. (p. 46)

Stewart has pointed out concerning vernaculars:

> Due to their lack of formalized grammars and lexicons (at least ones accepted as authoritative by the languages' users) vernacular languages are almost always ranked lower in prestige than standard and classical languages.

7. It should be realized that product oriented bilingual programs whether they recognize the child's dialect (as in the French Title VII program at Breaux Bridge, Louisiana) or do not utilize the child's vernacular (as in the Cucamonga, California Follow Through program) are in fact posing an added burden on the child who is already having difficulty in school. These programs have goals which relate to proficiency in language

arts in standard Spanish (French) and standard English, both of which are foreign languages for the child, and goals relating to skills learned through the medium of two languages neither of which the child speaks natively.

3. Although education has been a concern of anthropologists over the years (Hewett 1904, Johnson 1943, Spindler 1955), the overall influence of anthropologists has been greatly overshadowed by that of psychologists. The psychological literature on bilingualism seems mainly to have addressed itself to the issue of the relationship between IQ and bilingualism.

The anthropologists have, however, with their interest in the issues of language and culture contact devoted much time to descriptions of multi-cultured societies. They have developed models concerning the relationship of cultural systems to educational systems.

9. In the past maturation has been viewed by psychologists largely in terms of supposedly innate stagings of development with some influence from the environment. The problem here is that environment has been so defined as to largely exclude cultural norms, a flaw somewhat masked by the willingness of psychologists to look at social interaction at the interpersonal level. However, it is now becoming clear that maturation is strongly shaped by the cultural norms of the society in which a child is developing. Thus, for example, behavior such as walking can be very much influenced by the culture. Anthropological research has indicated that children in a nomadic African society learn to walk earlier because of the mobility needs (Konner 1973) whereas children in a Nepalese society that lives on extremely steep terrain are carried more and thus learn to walk at a much later age.

10. That some psychologists are beginning to realize this was recently exemplified by Jerome Kagan's speech at the 1972 meetings of the AAAS. In studying Guatemalan children in a small rural village, Kagan found that the infants were extremely passive, seldom held by the mother and rarely taken out of the home. Their level of maturation at ten months was therefore very different from that of American middle-class children at that age.

The eleven-year-olds in the same village, however, were alert, active and comparable in maturation and skills to their American counterparts. Both the infant and the eleven-year-old in Guatemala were being normal children within their culture but the cultural expectation of the infant's behavior was not the same as that of children of the same age Kagan had previously studied. As Margaret Mead pointed out to Kagan, anthropologists have long been aware of the non-linearity of development but psychologists have not up to now included that concept in their paradigm.

11. The recent court case in California (Dianne vs. Rafferty and the State of California) is a dramatic example of just such an incorrect classification. The State of California had been assigning Mexican-American children to classes for the mentally retarded on the basis of IQ scores obtained from intelligence tests that had been administered in English. When the Mexican-American children were retested in Spanish the scores of over 80% of the children indicated their intelligence levels were average or above.

12. An excellent example of this position can be found in the writings of J. McV. Hunt, see especially "Towards the prevention of incompetence." In J. M. Carter (Ed.) Research Contributions from Psychology to Community Health. New York: Behavioral Publications, 1968.

13. It is recognized by the authors that the descriptions here are necessarily oversimplified. There is considerable verbal learning literature devoted to interference (retro-active inhibition, etc.) which is germaine to second language learning within a behaviorist paradigm.

14. The work of Basil Bernstein is a case in point. He attempted to illustrate that the cultural learning style of lower-class British youth tended to rely heavily on what he described as a "restricted code" (appeal to authority, unspecified or vague descriptions, etc.) whereas the middle-class child learns a cultural style that relies heavily on an "elaborated code" (analytic, specific, etc.). Unfortunately many researchers in the

U.S. have tended to simplify and over extend Bernstein's concepts so as to imply that because of socialization, lower-class children are incapable of using an elaborate code. There has been a cry by many to ignore the indigenous code in favor of teaching other codes necessary for making it in the mainstream.

Of course the issue of language code use is confounded by the fact that in any group, no matter how abstract the topic, the language of the 'in-group' tends to be 'restricted'. (See for example Halberstam's description in The Best and the Brightest of the Kennedy inner circle responding to Chester Bowles' lack of use of their restricted code.)

15. Interaction analysis studies such as that by Bellack, A. A. et al, The Language of the Classroom, show that almost all of the teaching time consists of repeated cycles of teacher question followed by student response, followed by teacher reaction.

16. The term "bilingual" requires that a person be able to understand, speak, read and write a standard and/or non-standard version of the two languages in the program. "Competent to teach" means that the teacher is able to teach those subjects for which he/she has been prepared. This would necessarily involve meeting state requirements for teachers.

17. See section two for further elaboration of this concept.

18. We have seen teacher training programs which concentrate on generative grammar techniques of language description -- trees and transformations -- which the teachers have difficulty finding relevant to their problems. The more relevant importance of generative theory it seems to us is its insights into the nature of language systems and language acquisition.

BIBLIOGRAPHY

Alire, M. Private communication, October 18, 1972.

Andersson, T. and Boyer, M. Bilingual Schooling in the United States, Vol. II. Austin, Texas: Southwest Educational Development Laboratory, 1970.

Baratz, Joan. "A Culturally-Based Education System for the Disadvantaged." Final Report Contract #OEC-TPSU-3636-02, Washington, Education Study Center, 1971.

Baratz, Joan and Baratz, Stephen. "Black culture on black terms: a rejection of the social pathology model." APA, 1969, In Kochman, Thomas (Ed.), Rappin' and Stylin' out: Communication in Urban Black America. Urbana: University of Illinois Press, 1972.

Baratz, Stephen. Applying the behavioral sciences to the needs of public policy making. Paper presented at AAAS, 1970, 1-22.

Baratz, Stephen and Baratz, Joan. "Early childhood intervention: the social science base of institutional racism." Harvard Educational Review, 40 (1970), 29-47.

Bellack, A. A. The Language of the Classroom. New York: Teachers College Press, 1966.

Brown, R., Bellugi, U. and Fraser, C. "Explorations in grammar evaluation," 1964, In Cognitive Development: Five Monographs of the Society for Research in Child Development. Chicago: The University of Chicago Press, 1970.

Bruner, J. S. The Relevance of Education. New York: W. W. Norton & Co., Inc, 1971.

Bruner, J. S., Olver, Rose, Greenfield, Patricia M., et al. Studies in Cognitive Growth. New York: Wiley, 1966.

Chomsky, N. Review of Skinner's Verbal Behavior. In DeCecco, J., (Ed.), The Psychology of Language, Thought, and Instruction. New York: Holt, Rinehart and Winston, 1967.

Cole, Michael, Glick, Joseph A., et al. The Cultural Context of Learning and Thinking, New York: Basic Books, Inc., 1971.

Coleman, James S. et al. Equality of Educational Opportunity. United States Government Printing Office, 1966.

Dykstra, G. Teaching English as a Second Language Materials Development Center - an Investigation of New Concepts in Language Learning. 1967, ED018676.

Ferguson, C., Houghton, K. and Wells, R. Bilingual education: an international perspective. Unpublished paper, 1972.

Ferguson, C. "Diglossia". Word, 15 (1959), 325-340.

Fishman, J., (Ed.). Readings in the Sociology of Language. The Hague: Mouton and Co., 1968.

"Follow Through Program Sponsors." Stanford Research Institute, September 1972.

Francis, J. et al. Language Policy in the Bureau of Indian Affairs a preliminary projection of plans and programs. Washington, D.C.: Center for Applied Linguistics, 1972a.

Francis, J. A report of recommendations for the re-design of the instructor training programs of the Defense Language Institute English Language Branch. Washington, D.C.: Center for Applied Linguistics, 1972b.

Harvey, J. A report on the communicative curriculum. Washington, D.C.: Center for Applied Linguistics, 1972.

Hewett, Edgar. "Anthropology and Education." American Anthropologist, vi (1904), 574-575.

Jencks, C. et al. The Inequality of Education" A Reassessment of the Effect of Family and Schooling in America. New York: Basic Books, Inc., 1972.

Johnson, C. S., (Ed.). "Education and the cultural process." American Journal of Sociology, XLVIII, 1-136, 1943.

Kagan, J. Invited Lecture, AAAS meetings, 1972.

Kjosleth, R. "Bilingual education programs in the United States: for assimilation or pluralism?" In Spolsky, B., (Ed.), The Language Education of Minority Children. Massachusetts: Newbury House, 1972.

Konner, M. J. "Newborn walking: additional data." Science, January, 1973, 307.

Labov, William. "The Logic of Nonstandard English," In Williams, Fredrick, (Ed.), Language and Poverty. Chicago: Markham, 1970.

Malinowski, B. "The pan-African problem of culture contact." In Johnson, C. (Ed.), Education and the Cultural Process. reprinted from the American Journal of Sociology, 1943.

McCarthy, D. "Language development in children." In Carmichael, L. (Ed.), Manual of Child Psychology, 2nd edition, New York: Wiley, 1954, 492-630.

Miller, G.A. "Some preliminaries to psycholinguistics". American Psychologist, 1965.

Pena, A. Report on the bilingual education program. October 15, 1970.

Sarason, S. The Culture of the School and the Problem of Change. Boston: Allyn and Bacon, 1971.

Sapon, S. The descriptive analysis, establishment and measurement of "bilingual' behavior. Unpublished paper, 1972.

Sarles, H. On biculturalism-bidialectalism and education. Unpublished paper, 1972.

Skinner, B. F. Verbal Behavior. New York: Appleton-Century-Crofts, Inc., 1957.

Spindler, George (Ed.). Education and Anthropology. Palo Alto: Stanford University Press, 1955.

Spolsky, B. (Ed.). The Language Education of Minority Children. Massachusetts: Newbury House, 1972.

Stewart, W. A. "A sociolinguistic typology for describing national multilingualism. In Fishman, J. (Ed.), The Sociology of Language, the Hague: Mouton and Co., 1968, 531-546.

UNESCO, The use of vernacular languages in education. Monographs on fundamental education, VIII. Paris, 1954.

APPENDIX A

A Brief Survey of Selected Bilingual Programs and Curricula

Judith Perez de Heredia

Introduction

No one writes out of a vacuum. Whether or not one is conscious of borrowing ideas from currently popular trends, that is most often the case. Every curriculum writer has a philosophy which shapes the outcome of his work. We have attempted to examine as much of the curriculum for bilingual programs as was available to us in order to determine the relationship of the author's underlying assumptions to the models proposed earlier in this report.

Due to restrictions on time and location, resources were limited. Most of the materials available were commercially produced or written by people whose names are well known in the field of ESL or in bilingual education. Locally produced materials which may contain innovations for bilingual education programs were scarce.

The following institutions in the Washington, D.C. area were useful resources for examination of curricula: the Center for Applied Linguistics, the Educational Materials Center at Federal City College, the National Education Association, reports from the Office of Title VII Bilingual Programs, and the Library at the Office of Education, and the Washington, D.C. Bilingual Program.

Materials fall into two categories: 1) curriculum guides, texts, and materials to be used in the various bilingual programs throughout the country and 2) specific bilingual sites or programs which may or may not have developed a unique curriculum, i.e., The New Nursery School. Sources of information include curriculum guides, program descriptions or reports on projects.

Thirty-eight curriculum guides were seen, of which three were descriptions and 35 were actual curriculum guides or texts.

Of the seven specific sites/programs accounted for, three were program descriptions, one a report on a project, two summaries of curriculum guides, and one actual curriculum guide.

Relevance of Bilingual Curricula

Almost without exception, the curricula available were not suitable for a culturally based model of bilingual education. The influence of traditional audio-lingual or what is more commonly known as ESL methodology was very much in evidence. This would reflect the lag in progressing from ESL classes, which have been in existence much longer than bilingual education programs, to bilingual/bicultural programs.

Many of the names first associated with ESL curricula now appear in connection with bilingual curricula. It is apparent that these people have not changed their basic assumptions on language teaching in writing curricula for bilingual programs. The new curricula may be more sophisticated in some cases but the underlying beliefs are the same. For example, Robert Wilson of UCLA was responsible for Teaching English Early, an audio-lingual second language learning course which is not aimed at any specific group. Wilson's materials have since been used as the basis of the Oral Language Program and the CITE materials (two of the most widespread curricula in use in the Southwest). As another example, Ralph Robinett's name appears in connection with the FLICS Bilingual Curriculum Development: ESOL-SFSD, Michigan Migrant Primary Interdisciplinary Program, the Miami Linguistic Readers and the Spanish Curriculum Development Center materials, all of which have wide dissemination.

Furthermore, many other programs are adaptations of one or another of these already mentioned curricula. For example, the New York State Department of Education, Albany, has recently developed an adaptation of the FLICS curriculum - Conceptual and Oral Language Development - Bilingual Series Guide II, Pre-Kindergarten. The San Diego City schools have adapted English lessons from Teaching English Early by Robert Wilson.

The result is that many bilingual programs are buried in and by traditional audio-lingual materials which stress pattern practice as the way to achieve fluency in the language. There were a few programs which may fit our definition of a discovery mode., but no examples of programs with an immersion base.

Evaluations

Evaluation can be categorized as 1) internal, i.e., testing of the children to see if objectives have been met and 2) external, i.e., field testing of the program itself.

Of the forty-five curricula seen, nine listed some type of external evaluation. The descriptions ranged from simply "field tested" to a more specific description of where, when and how many sites.

Internal evaluation was accounted for in nine different programs, five of which were developed by the individual programs, three used standardized tests or translations thereof, and one utilized a combination of standardized tests and original measurements. Only two programs mentioned both internal and external evaluations.

Many of the producers as well as users of the materials we have examined did not consider evaluation to be important enough as a component to even mention it.

Teacher Training

Teacher training is a critical feature in developing bilingual education programs. However, as in the case of evaluations, many curriculum guides did not mention teacher training. Of the seven specific programs only three mentioned specific teacher training components. Of the thirty-eight curriculum guides, only six addressed themselves to teacher training. (Five of the nine programs which did specify teacher training fall into the discovery category.)

Summary

It becomes obvious from a consideration of the curricula seen that the focal point for the curriculum developer is the teaching method employed and not the content taught. We therefore have used a scheme in which teaching methods are defined as 1) traditional audio-lingual, 2) concept formation, 3) programmed instruction and 4) discovery.

One finds that concept development is frequently linked with traditional audio-lingual methodology. In many cases, Spanish is taught to native Spanish speakers with the stated object of the lesson being concept development while English in the same program is taught by audio-lingual methodology. In the vast majority of cases, the audio-lingual methodology alone or in combination with concept formation appears as the teaching method.

Curriculum Materials

1. Title: Reinforced Readiness Requisites Program
Author:
Producer: Southwestern Cooperative Educational Laboratory (SWCEL)

An extremely behavioristic approach to reading readiness. The stated purpose of this program is to "instill motivation in culturally divergent children." Material rewards are given to the children initially for satisfactory performance in class and then gradually eliminated. After one year, the children allegedly need no outside motivation.

2. Title: A Programmed Course in Introductory Spanish
Author: M. W. Sullivan
Producer: Encyclopedia Britannica Films
Consultants: Dee Buchanan, Adelaide Johnston, Ongeborg Liebert, Neil Sullivan

A programmed instruction behaviorist language program. A series of tapes gives the stimulus for the oral phase of the program.

3. Title: ELS (an Audio-Lingual Programmed Course in Spoken Spanish)
Author: F. Rand Morton
Producers: English Language Services, Inc.

A "do-it-yourself" course in Spanish which guarantees fluency to the student.

4. Title: English 900
Author:
Producer: English Language Services

This program is so named because the series consists of six books containing 900 "base" sentences. Provided that the students memorize these sentences, they are to achieve fluency in the language. Programmed instruction workbooks accompany the textbooks.

5. Title: Programmed Reading (Books 1-7)
Author: M. W. Sullivan
Producer: Webster Division, McGraw Hill Book Co.

Behavioristic programmed instruction for kindergarten, first grade and remedial classes.

6. Title: TMI-Grolier Programmed Textbook
Author:
Producer: Teaching Materials Corp., 575 Lexington Ave., N.Y.

A programmed instruction ESL text.

7. Title: Alaskan Readers
Author: Virginia Jones
Producer: Northwest Regional Educational Laboratory
Consultants: Dr. William Loyens, Dr. Patrick J. Groff, James Henry, Laurie Steinman, Carolyn Locke, Winifred D. Lande, Frank Darnell, Dr. Robert Rath and Dr. Michael Geammateo

The statement of purpose suggests an interventionist approach to language development.

9. Title: Oral Language Program
Author: Robert Feeback (adapted by)
Producer: SWCEL
Consultant: Dr. Robert Wilson

A traditional audio-lingual approach to language teaching.

3. Title: Vamos a Aprender El Ingles
Author: Faye L. Bumpass
Producer: Empresa Grafica, San Marti, S.A., Lima, Peru (Ministry of Education)

This was a very early attempt at audio-lingual methodology for the teaching of reading. Behavioristic.

10. Title: The Adventures of Miguelito
Author: Charles H. Herbert, Jr.
Producer: Encyclopedia Britannica Films, Inc.

Aimed at students of Spanish as a Second Language. Traditional audio-lingual techniques are abundant.

11. Title: Dan and His Pets (Books 1-5)
Author:
Producer: Shiprock Independent School District #22, New Mexico
Consultants: Claude Aragon, Wallace Cathey

The illustrations in the book depict a Navajo reservation. The oral preparation for reading is based on audio-lingual methodology and the readers themselves are basal readers. The program is a more audio-lingual than discovery oriented program.

12. Title: Curriculum Guide for Child Development Centers - Five-Year-Old Program
Author: Eleanor Burke et al.
Producer: Gallup-McKinley County Schools, Gallup, New Mexico

The subject matter of this curriculum guide includes art, social studies, numbers, physical education and health, science and music. The teaching method in the content areas is concept development and in the language arts, audio-lingual. There are suggestions for adaptation of American nursery rhymes, and bulletin boards for recognizing American holidays.

13. Title: Bilingual Curriculum Development: ESOL-SESD
Author: Alma Petrini, Elizabeth Brickman, Elaine Melamed
Producer: Foreign Language Innovative Curriculum Studies (FLICS)
Consultants: Ralph Robinett

Traditional audio-lingual methodology. Examples of games and nursery rhymes suggested are Jack Be Nimble, Thumbkin, Hokey-Pokey and Old MacDonald.

14. Title: Bilingual Curriculum Development: Spanish Guide
Author: Jesse M. Soriano
Producer: FLICS

Another audio-lingual based program. The sentence patterns are presented through controlled but play-type activities. Standard Spanish is presented for emulation.

15. Title: Michigan Migrant Primary Interdisciplinary Program
Author:
Producer: FLICS
Consultants: Ralph Robinett

Similar to the other materials produced by FLICS. Audio-lingual methodology with materials from mainstream American culture, e.g., Kleenex, Band-Aids, paper towels, as well as standard classroom items, e.g., balls, books, boxes. The use of puppets is important, they serve as the stimulus for the children's responses.

16. Title: Michigan Migrant Education Program: A Bilingual Oral Language and Conceptual Development Program for Spanish Speaking Pre-School Children
Author: Consuelo Miranda et al.
Producer: FLICS

A structured audio-lingual approach. A play period entitled "inside structured play," sounds very stilted. Children are directed toward standard Spanish.

17. Title: Conceptual and Oral Language Development - Bilingual Series Guide II Pre-Kindergarten
Author: Blanca Ortiz and Tomasa Hidalgo
Producer: University of the State of New York, State Education Department, Albany, N.Y.
Consultant: Leonor J. Watson

Adapted from FLICS and consequently very drill oriented and behavioristic.

18. Title: Bilingual Lessons for Spanish-Speaking Pre-School Children
Author: Velia Schneider

Producer: San Diego City Schools
Consultants: Herb Ibarra - Project Director
The English lessons have been adapted from Teaching English Early by Robert Wilson. Traditional audio-lingual.

19. Title: Spanish Curriculum Development Center materials
Author:
Producer: SCDC, Dade County Public Schools
Consultants: CAMBE (Curriculum Adaptation Network Bilingual Bicultural Education)
The four editions of these materials are superficially different, i.e., certain lexical changes, but do not reflect the more profound differences that exist in the Spanish Southwest and other areas.

20. Title: Alborada 1
Author: Rosa Massot and Leonor Ortega
Producer: TEIDE (Editorial) S.A. Viladomat 291, Barcelona
A Standard Castillian Spanish approach to language development with many references to Piaget.

21. Title: A Curriculum for English as a Second Language
Author:
Producer: American Book Co. International Division, N.Y.
The curriculum guide is a list of texts commercially produced, i.e., Bumpass, We Speak English, etc., which are recommended for each grade. Traditional audio lingual methodology is obvious from the books chosen.

22. Title: Guide for Teaching English as a Second Language to Elementary School Pupils, Level I Teaching English Early
Author: Robert Wilson
Producer: UCLA State Department of Education
An early audio-lingual approach to language teaching in which conversations are very mechanical.

23. Title: Spanish for Spanish Speaking Students
Author:
Producer: Bureau of Curriculum Development, Board of Education, N.Y.
Consultants: Lillian M. Gillers
Traditional audio-lingual methodology is described in the foreword and a chapter entitled 'Common Errors and Anglicisms' contains a detailed description of the vernacular Puerto Rican language.

24. Title: Redondel
Author: Santillana, S.A. de Ediciones, Madrid
Producer:
Consultant: Gloria Roldan

A preschool program meant for Spanish speaking children in Spain. It is very Piaget-influenced and the teacher's guide is immense with more than ample suggestions to the teacher. The class would be teacher-directed.

25. Title: Navajo-English Curriculum Guide (K level)
Author: Muriel R. Saville
Producer: BIA Navajo Area Office

Pattern drill, choral and individual repetition, form the basis of the English language component of the program.

26. Title: SAETA
Author:
Procuder: Santillana, S.A. de Ediciones Madrid
Consultants: Fernando Alonso, Antonio Ramos, Gloria Roldan M. A. Soler

A beginning reading series for Spanish speaking children. The class is very teacher directed.

27. Title: English as a Second Language for Navajo Beginners
Author: Dr. Mary Jane Cook and staff (Univeristy of Arizona)
Producer: Division of Education, Navajo Area, Window Rock, Arizona

This curriculum as one would imagine from the title is again audio-lingual oriented. It has been adapted from Fries, American English Series, Books 1 and 2.

28. Title: Active Spanish for Beginners (Voces y Vistas)
Author: Robert H. Osborn, Solomon Tilles, Carlos Perez
Producer: Harper and Row

Behavioristic presentation of language learning. The statement of purpose declares the aim of the book to be "active communication . . . to this end the drills in the text are contrived to stimulate a personal response and, at the same time, reinforce a fixed pattern of grammar structure." The author states that he is looking toward communication rather than mechanical exercises yet the drills in the book are far from reaching that goal.

29. Title: Let's Speak Spanish
Author: Conrad J. Schmitt
Producer: McGraw Hill, Webster Division

An elementary level Spanish as a Second Language text. Audio-lingual methodology for teaching Spanish.

30. Title: CITE Materials
Author: Robert D. Wilson
Producer: Consultants in Total Education, Inc. (CITE)
A recent and more sophisticated audio-lingual course for Navajo and Spanish speaking children (K-3).

31. Title: Conversational English for the Non-English Speaking Child
Author: Nina Phillips
Producer: Teachers College Press, N.Y.
An audio-lingual manual aimed at the "disadvantaged child." It was originally intended for training volunteers in the New York City School Volunteer Program. Behaviorist oriented.

32. Title: Introducing English - An Oral Pre-Reading Program for Spanish-Speaking Primary Pupils
Author: Louise Lancaster
Producer: Houghton Mifflin Co., Boston
One of the objectives of this program is to "broaden the experience of Spanish-speaking children, some of whom may be disadvantaged in their native culture as well as in English-speaking culture." Methodology is behavioristic.

33. Title: Experiential Development Program
Author: Muriel Stanek
Producer: Benefic Press, Chicago
A pre-reading program for the English or Spanish-speaking child. The bilingual enrichment books are the only part of the series which was meant for "deprived" children. These bilingual Spanish and English books have been translated from English to Spanish but the illustrations have not. They depict mainstream American culture.

34. Title: Early Childhood Discovery Materials (In the Park Set)
Author: Irma Black, Carl Perling
Producer: The Macmillan Company, School Division (Bank Street College of Education) N.Y.
Consultants: Head Start Program, Stamford, Conn.
A discovery curriculum which describes its teaching methods as "neither materials-oriented, teacher-oriented nor child-oriented but a dynamic interaction of all three." Teaching procedures include the teacher taking her cues from the child, interacting with the child and encouraging the use of language. The classroom situation should help the child develop the skills of organization and integration. The child's world is to be expanded, rather than corrected.

35. Title: I Can Read -- Puedo Leer
Author: Charles H. Herbert, Jr., Anthony R. Sancho
Producer: Regional Project Office, San Bernardino County Schools, San Bernardino, California
Consultant. Elizabeth Keesee

A teacher training manual for the teaching of the initial stages of reading in Spanish. The methodology is based on observations of the teaching of reading in Mexico. Rather than a specific text, this is more a sequence of curriculum with suggestions for activities. The emphasis in the guidelines was on adaptation of materials to specific situations. This is one discovery program that is worth further investigation.

36. Title: We Learn Together
Author: Jean Baker, Joy Foss, Barbara Walters
Producer: Regional Project Office, San Bernardino County Schools, San Bernardino, California
Consultant: Sam Feldman

An adaptation of Each One Learning. This manual is concerned with developing the small group process approach and applying it to bilingual education at the junior and senior high grade levels. The emphasis is on the students actively learning as opposed to being taught. Students have many opportunities to model and do peer teaching. Materials were not mapped out but suggestions for activities were of a general nature. The key to the program was the teacher acceptance of a new role, i.e., that of a 'facilitator of learning' rather than an 'imparter of information.' A discovery approach.

37. Title: Miami Linguistic Readers
Author: Ralph E. Robinett, Paul V. Bell, Pauline V. Rojas
Producer: D. C. Heath and Company (Raytheon Education Co., Lexington, Mass.)

Basal readers with an audio-lingual preparation for reading. The class is very teacher directed and the guide presents the teacher with step-by-step instructions.

38. Title: A Handbook of Bilingual Education
Author: Muriel R. Saville and Rudolph C. Troike
Producer: TESOL

This is a general guide for bilingual programs and does not present specific curriculum ideas. The emphasis is on language development although science, math and social studies are mentioned as components of bilingual programs. Concept development is the overall teaching method in all but language arts segment of the program. Traditional pattern practice is the method in the language arts section.

The Communicative Curriculum

In addition to the aforementioned materials, it is worthwhile to highlight the work which has been done on communicative curricula. As Dykstra has stated:

> . . . communication means that the individual speaker is to have multiple choices of linguistic content; that he is to participate in a situation in which he has a purpose superordinate to that of language practice; and that only by the use of recently presented or newly learned language forms will he be able to accomplish his superordinate purpose. His hearers are not able to predict his linguistic choices, but are nevertheless required to respond overtly to his linguistic signals by selecting one of a range of potential responses. When the speaker repeatedly and consistently accomplishes his purpose without the necessity of repetition or use of extraneous signals like translation, communication is to be assumed. (Dykstra 1967, 1)

The idea of communication as the goal of a language class is so self-evident that it is banal to state it. Communication is advocated, promised, but unfortunately seldom accomplished in most ESL and bilingual curricula.

Traditional audio-lingual methodology advocates choral repetition, individual repetition, substitution drills, chain drills and the like (all mechanical exercises) as a means of achieving the goal of communication. We see a contradiction here in that these mechanical exercises do not match or even come near communication.

Unfortunately, the student seldom if ever has the opportunity to produce a non-predictable, purposeful utterance in an audio-lingual classroom. At best, students on advanced levels are allowed more freedom in choosing their mode of expression but beginning students are stiffly controlled as to the utterances they are allowed to produce. The constant complaint of ESL teachers that students capable of producing an utterance in a drill situation are at a loss in a more contextual setting when that utterance may serve a communicative purpose attests to the fact that audio-lingual methodology is not achieving its stated goal — communication.

A curriculum which uses an alternative methodology to achieve the goal of communication is An Investigation of New Concepts in Language Learning (Dykstra 1967) produced by the TESL materials center. The underlying assumption for the development of the materials was that "non-predictable, purposeful communication can be incorporated into the early stages of second or foreign language learning." (Dykstra, 1) Since the materials were to be used in various countries throughout the world, the emphasis on universals in language took precedence over the much used contrastive analysis. The materials were tightly structured so that a teacher with little or no formal training could pick them up without much difficulty.

Field testing of these materials was widespread -- a Navajo boarding school in Crown Point, New Mexico, Lima, Peru, the U.N. International School in New York City, Addis Ababa, Saipan, Papua, Tokyo, Poland, Puerto Rico and Negeria were among the sites.

Dykstra does not completely abandon pattern practice in the materials but the function of the drill changes. He contrasts his methodology with that of other pattern practicioners in stating that for him pattern practice is "part of the preparation for practice of the new unit of language rather than the paractice itself." (Dykstra, 212)

Each unit consists of a pattern practice session which introduces the structure or words to be later used meaningfully in the follow up communication activity.

The communication activity takes the form of a game. Included in each lesson plan for the teacher are the following

1) listing of materials needed for each group
2) aim of the group
3) starting position at the beginning of the game
4) description of the operation of the game

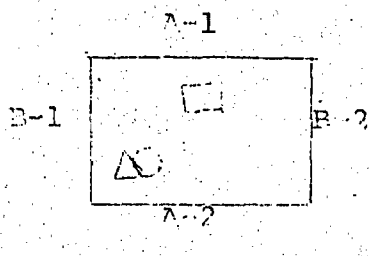
Example: Communication Activity #1

1) Materials:

a) SHAPES pieces used in the presentation (shapees are a commercially produced box of abstract plastic shapes used by the pupils to construct representations of the content vocabulary). In this case, the students need shapees of the following objects: house, bird, hat.

b) Picture cards of a bird, house, hat, mixed and

placed face down on the table. (two each)
2) Aim of the game: To make each object requested in two rounds of activity
3) Starting position:



4) Description of the play: Player A-1 takes a card (a bird). He says, "Make a bird." Players A-2, B-1 and B-2 make shapee birds. A-1 shows the card. Providing that all the objects made match the picture card, A-1 puts the card under the pack and the other players take the objects apart and put them on the table. Teams A and B would be given credit for correct completion of the task. Players B-1, A-2 and B-2 proceed in the same way. Mistakes are apparent when a player's shapee representation does not match that of the picture. (Dykstra, Appendix A, Unit I).

A later theoretical work on the communicative curriculum is John Francis' A Report of Recommendations for the Redesign of the Instructor Training Programs of the Defense Language Institute - English Language Branch. Francis establishes four criteria for judging whether communication is taking place in the classroom: 1) thematic richness of materials or "multiplicity of characterizations of a few, critical components and the potency of the relations which obtain among them" 2) sustained transmission of information, i.e., information is new, not merely the repetition of previously known material 3) external reality criteria or the amount of reference to reality present and 4) an independent role for the learner, i.e., learner is responsible for sentence construction and interpretation without the help of props. (Francis 1971, 204-207)

Dykstra's curriculum would not meet the second condition -- that of sustained transmission of information -- due to the amount of repetition of structures in the pattern practice session which precedes the communication activity. However, Dykstra's work is of considerable value as an initial attempt at creating an extensive communicative curriculum, especially since it is the only such curriculum readily available.

Another advocate of the communicative curriculum is John Harvey who has written a report on Francis' earlier work and developed a course in Korean for English speaking Peace Corps Volunteers. Harvey would recommend a form of presentation based on that of Implementing Voix et Images de France where a tape and accompanying film strip present a contextual situation enabling the student to isolate individual linguistic items and functions. Rather than following the extensive exercises suggested by the text at this point, Harvey recommends proceding to a communication activity in the form of a game.

Harvey finds that the game-like communication activities satisfy the four criteria set up in Francis' paper. He states,

> The independence condition establishes goals and choice; hence strategy and tactics. The entropy condition introduces secrecy and surprise. The thematic richness condition lays the groundwork for rule governed complexity, and hence problem solving. And the reference condition suggests scoring in general and such evaluation procedures as calling an opponent's bluff in particular.
> (Harvey 1972, 19)

One of Harvey's main assumptions is that an extensive knowledge of the language is not necessary for the student to participate in a relatively complex and interesting situation. A unit entitled "You Can't Get There From Here" is described in this way:

> One player of a pair, the Traveller, is given a railroad map and told where he is, what time it is, where he is going, when he must get there by, and how much money he has.
>
> The other player, the Ticket Seller, is given a train schedule and a ticket price list. (The schedule and prices are such that it is not obvious from the railroad map which of alternate routes is the fastest or cheapest.) He is too stupid to answer questions that call for more than reading off information from the schedule and list, and too jealous of his position to show them to the traveller.
>
> The Traveller must find the best itinerary with the help of the Ticket Seller, such as it is. (Harvey 1972, 20)

In this activity we have a situation which is humorous and complex yet the essential language would include numbers, times, How much is, How far is, How much does ___ cost? -- questions that could be taught in the early stages of a language curriculum.

The work of Dykstra, Francis and Harvey points the way to a possible alternative to audio-lingual drill as a methodology for language teaching. A communicative curriculum differs from audio-lingual programs in that it focuses directly on the actual goal of the language learner -- the ability to spontaneously communicate in the target language. Because it utilizes activities rather than pattern practice, it provides more natural settings for the learning of language and thus comes closer to the discovery than to the behaviorist models described in the body of this report.

Conclusion

Most existing curricula for bilingual education programs would fit into a normativist and behaviorist model. Many programs obviously lack a clear understanding of the purpose of bilingual education.

The equation of bilingual education with ESL programs is indicative of this problem. Bilingual/bicultural education programs by definition must include two languages and cultures at some point in the classroom but ESL programs usually do not mention the native language or may even forbid it.

Audio-lingual methodology was originally a reaction to the grammar translation method of foreign language teaching. The goals and purpose of the audio-lingual method were not fundamentally different from those of the grammar translation method. They were originally meant for adult (teenage) speakers who were usually academically successful. On the other hand, the problems which engendered the call for bilingual education require more than a simple change in methodology. They call for a radical rehauling of one's thinking about why and how we are educating minority group children.

In a random sample of bilingual programs, we have found the following to be true:

1. Programs most easily categorized are those which fall into the normativist-behaviorist model. They appear to

be the most consistent, i.e., Clovis, New Mexico, an early intervention program which uses the Responsive Environment Program for Spanish American Children, follows its clearly stated goals.

The McAllen Program is another example of this model. One of the goals of the program is

> to initiate and implement a program of bilingual education to meet the needs of children who experience learning difficulties because of inadequately developed ability to understand, speak and use language - particularly native Spanish speakers who are not able to function effectively in either standard Spanish or in English.

Consonant with this goal is the choice of teaching strategy, "audio-lingual methods and techniques to improve the child's ability to understand, speak and use two languages - English and Spanish. (We assume here that "Spanish" refers to standard Spanish.) In both of these statements, there is a non-recognition, non-acceptance and/or non-awareness of the child's vernacular. When the child cannot function in standard Spanish he is presumed to have no language. The assertion "children hear, pronounce and become familiar with the language patterns of both English and Spanish encountered in school, home and community" is quite compatible with previous statements - non-awareness that the language of home and probably community will differ considerably from the standard Spanish the child is likely to encounter at school. The proponent of the normativist-behaviorist view, because he does not recognize the vernacular, is actually proposing that the child learn and function in two new languages.

Additional features of these programs such as materials and teacher training are in agreement with the normativist behaviorist model. "Materials and methodology are audio-lingual and teacher training is a matter of instruction in the use of the specific materials chosen.

2. Other programs are more difficult to assign to a model because a) they contain contradictory elements, i.e., characteristics of more than one model, or b) they contain goal statements which are inconsistent with the materials used or actual practice or c) further investigation reveals that even classes within the same school may be so different as to warrant assignment to different models.

An example of the first is the bilingual English-French program in Breaux Bridge, Louisiana, where one finds a mixture of normativist and relativist characteristics. First, we find statements such as 'children come to school speaking 'substandard' French (which we term dialect) and substandard English' and 'the ultimate goal is fluency in English and the development of standard French' which are characteristic of a normativist view of language learning. Yet in the same paper we also read that "the transition from dialect to standard French must be subtle because many of the children if stripped of their dialect to communicate will withdraw and lose the sense of confidence and positive self-image program planners are striving so sincerely to achieve. Furthermore, we learn that one of the requirements for teachers is that they be knowledgeable in the dialect. These last assertions would lead us to label the program relativist if we did not have the previous information.

At least some teaching methods in this program appear to be within the relativist framework. "Friendship groups" where children learn from each other as well as from aides and teachers are set up in the classrooms. Van Allen's Language Experience method of teaching reading is influential. Team teaching is mentioned. But then the addition 'many songs, games of the early Acadian era or Cajun oriented will be introduced to children in standard French and dialect.' It is therefore impossible to assign this program to a specific model because of its many contradictions.

One of the programs in which the goal statements are contradicted by the observable facts is the Bilingual Program for Mexican-Americans at Greeley, Colorado. The proposal states that 'the staff examined commercial materials and found them inadequate' -- consequently, one of the intentions of the program is to develop materials unique to the local, rural child.' Several paragraphs later, we discover that the materials chosen by the project were Hablan Los Niños, published by the National Textbook Company and DISTAR, a commercially prepared curriculum not originally prepared for Spanish-American children.

An example of a model varying from classroom to classroom is the Albuquerque program. In spite of a fairly consistent program description, it would be impossible to assign the Albuquerque program to one model or another due to reported findings that the teachers were using divergent teaching styles which ranged from a child-centered approach to a highly structured teacher-centered strategy.

Bilingual Programs

1. Title: The Tucson Early Education Model
Author: Marie Hughes et al.
Producer: National Laboratory on Early Childhood Education
A discovery program for Mexican-American children grades 1-3. An integrated curriculum is the basis of the program.

2. Title: McAllen Program (Early Childhood)
Author:
Producer: Southwest Educational Development Laboratory (SEDL)
From the information available, this program appears to be an audio-lingual program.

3. Title: The New Nursery School
Author: Glen Nimnicht, Oralie McAfee, John Meier
Producer: General Learning Corporation, New York
Discovery characteristics are apparent but the statement of purpose belies an interventionist approach to early childhood education.

4. Title: Bilingual Readiness in Primary Grades: An Early Childhood Demonstration Project
Author: Paul B. King
Producer: Hunter College, New York
Consultants: Mary Finocchario, Eva King
A relatively open program although it retains a behaviorist framework of pattern practice for a portion of the program. Varied responses from the children are accepted and encouraged and cues from the teacher may occur in either target language.

5. Title: Franco-American Bicultural Resources Innovative Center (FABRIC)
Author: Bob L. Ouelette
Producer: FABRIC, Wisdom High School, St. Agatha, Maine
Appears to be open classroom.

6. Title: Oral English at Rough Rock
Author: Virginia Hoffman
Producer: Navajo Curriculum Center, Rough Rock Demonstration Center
Consultant: Dr. Robert D. Wilson
The English program consists of "core" and "transfer" lessons. The core lessons are behaviorist, i.e., pattern practice, but the transfer lessons which follow are discovery. The program appears to be more discovery oriented than behaviorist.

7. Title: San Antonio Early Childhood Education Program
Author:
Producer: SMDL

A behaviorist audio-lingual approach to bilingual education.

APPENDIX B

THE DESCRIPTIVE ANALYSIS, MANIPULATION AND MEASUREMENT OF 'BILINGUAL' VERBAL BEHAVIOR

STANLEY M. SAPON

Issues of bilingualism have been extensively dealt with in the context of studies in anthropology, language, linguistics, race, culture, sociolinguistics and psychological studies of attitude and emotion. Indeed, the subject may well be one of those fields whose capacity to generate visceral responses permits one to say that bilingualism is a subject of such interest that publication has far outstripped research, and strong feelings have outshouted careful analysis. One of the few disciplines that has not been deeply involved with issues of bilingualism is that of behavior analysis, and I am pleased to be able to share my impressions of a number of problems in the area. The title of my paper does not completely reveal the vantage point from which I view the issues. It is clear that I have a behavioral orientation, but it is not clear that, although Skinner's early work gave sharp new directions to my development as a behavioral scientist, I am not a "Skinnerian." Although my present work is centrally concerned with verbal behavior, it is with a formulation of verbal behavior that draws on a long history as a speaker of languages other than that of my birthplace; as a teacher of foreign languages; as a student in the area of articulatory and acoustic phonetics; as an investigator in the areas of dialect field methods, dialect geography and social dialectology; as a writer of programmed instructional materials in Spanish; [as a director of a Head Start experimental pre-school whose central research thrust was the development of materials and procedures for the modification of verbal behavior in inner-city children aged two to four] and as a director of a research and teaching program concerned with establishing verbal behavior in non-talking children. This kind of professional history is coupled with my personal experiences in bilingual, bicultural living in Mexico and living in Barcelona where my wife and my children and I participated fully in the bilingual life of people who spoke Castilian and Catalan. All of these experiences have provided a kind of 'combat experience' that has sharpened my interest in, and broadened my view of bilingual verbal behavior.

If my contribution is to be maximally effective, the reader must come to share not only the technical terminology of my work, but a clear view of the philosophy of science

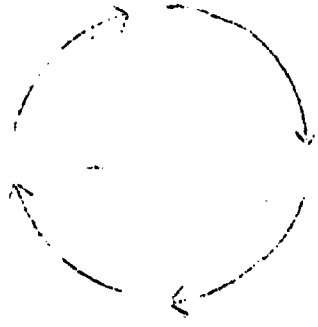
that disciplines and characterizes its approach. I hope the reader will bear with the systematically didactic approach that my concern with clarity makes necessary.

If we are to talk meaningfully about "bilingual education" in the terms offered in the title, we must begin with "behavior," then go on to "verbal behavior" and finally consider how we can deal with "bilingual verbal behavior." From there we will proceed to examine issues of strategy and tactics that are relevant to problems of "bilingual education," and issues of program design, measurement and evaluation of educational objectives.

Rationale and Basic Principles

The analysis of behavior is characterized by a strong commitment to the OBSERVATION and DESCRIPTION of what it identifies as its subject of study -- what it is that people are observed to do. It avoids involvement in the traps of circular reasoning that are created by questions as to "why" a person does (or worse, does not so) something. It is worth a moment here to stop and look at how "explanations" of "why" people behave as they do can lead to the calling into being of a host of invisible, unmeasurable, "logical" entities to account for what we observe. Attempts to "explain" the "causes" of behavior lead directly into an endless circularity. At some point in the circle we are obliged to touch reality and make reference to a bit of observed fact -- data -- but we touch it only briefly as we run along the circular track. We can see it in the following annotated dialogue: "I see that this child is stuttering." (observed fact) "Why is he stuttering?" (invitation to the circle) "He is stuttering because he is 'anxious'." (explanation) "How do you know that he is 'anxious'? What evidence do you have to support your explanation?" (reasonable question) "I see that this child is stuttering." (observed fact).

I see that this child is stuttering.



How do you know he is anxious?

Why is this child stuttering?

Because he is anxious.

Many areas in the fields of psychology, linguistics and psycholinguistics commit extended efforts in the direction of speculation about "internal process." At this time it should suffice to say that notions of inferred "processes" form no part of the present approach. Our only concerns are with description, analysis, prediction and control of observable human behavior.

I would like to undertake a concise, yet lucid and understandable presentation of the basic principles, approaches and procedures that characterize the science of behavior analysis, and then, to explore more complex and elaborate issues of verbal behavior that must be considered requisite antecedents to a meaningful discussion of bilingualism and bilingual education viewed within a behavioral framework. [1]

For our work we define behavior as "the movements of an organism that are followed by a change in the environment." This definition makes explicit the kinds of observations we make -- what we will look at and describe, and identifies the kinds of things we are concerned with predicting and controlling. We are concerned with the ENVIRONMENT in which an organism MOVES, that is, the ENVIRONMENT in which he displays muscle MOVEMENTS. We are actually interested in two environments -- the environment immediately before the Movements are displayed, and the environment immediately after the Movements. The environment immediately before the observed muscle Movements we call the SETTING, and the environment immediately after (subsequent to) the muscle Movements we call the SUBSEQUENCE. Thus far, we have defined the three terms with which we talk about behavior -- SETTING, MOVEMENT, SUBSEQUENCE. These also identify what it is we observe and what it is we are concerned with predicting and controlling. A summary of the relationships between these terms is specified in the "Basic Principle for the Description of Behavior," that is

IN SOME ENVIRONMENT (SETTING)
A MOVEMENT IS DISPLAYED WHICH IS FOLLOWED BY
A CHANGE IN THE ENVIRONMENT (SUBSEQUENCE).

This Basic Principle permits us to examine empirically the relationships between each of the terms, and provides the foundation for describing every behavior in terms of these three elements. This examination takes place in the form of actually writing down what we see, that is, a description of the Setting, a description of the Movements of the organism, and a description of the changes in the environment that follow upon the Movements, the Subsequence. We call this a Line of Behavior and it looks like this:

SETTING	MOVEMENT	SUBSEQUENCE
Mr. A in proximity to closed door	movements of hand & arm, extending arm & then, pushing	door is displaced; door is open

Any single Line of Behavior (a set of Movements in a specified Setting which is followed by a given Subsequence) that is displayed by an organism is said to be part of the organism's Repertoire. If we say that Mr. A. displayed a Repertoire of "Door-opening Behavior" we mean that in a given Setting (see above) we have observed the specific Movements (see above) that are followed by specified changes in the subsequent environment (see above).

What concerns us, specifically, is the set of relationships between each of these three terms. I have found it useful to formulate these relationships as a set of Behavioral Laws. And it would be useful to look at two of these laws:

THE LAW OF SUBSEQUENCE states that
the SUBSEQUENCE that follows a bit of Movement changes, that is controls, the probabilities of the re-occurrence of that set of Movements.

There are two kinds of Subsequences:

1. There are those Subsequences that increase the probability of the re-occurrence of a bit of Movement in a given Setting. These are called STRENGTHENING SUBSEQUENCES.
2. There are those Subsequences that decrease the probability of the re-occurrence of a bit of Movement in a given Setting. These are called WEAKENING SUBSEQUENCES.

We have seen examples of Strengthening Subsequences many times. For instance, if we see a little girl walk into the kitchen and procede to pull open one drawer after another, and she gets to the third drawer and pulls it open and we see that there is now a lollipop in the drawer, which she takes out and eats, we can describe this event in the three terms we've talked about. We can say that

In the Setting of the kitchen with the drawer fronts and knobs being present and the little girl,
The Movements of pulling open the drawer are followed by
The change in the environment of the appearance of the lollipop.

We must empirically determine whether the appearance of the lollipop is a Subsequence following upon those drawer-opening Movements that increases the liklihood of this little girl pulling open the drawer the next time she is in the Setting that contains kitchen drawers. If indeed, we watch the next time this child enters the kitchen, and she makes a beeline for the third drawer down from the top, and pulls it open, we can conclude that the Subsequence that followed upon this set of Movements the last time the child was in this Setting, was indeed, a Strengthening Subsequence.

Examples of Weakening Subsequences, are readily at hand. A child has been seen crawling across the living room floor. He holds a bobby pin which he has been poking into all sorts of nooks and crannies. Our description shows:

In the Setting that contains a bobby pin in the hand, and a couple of oddly-shaped holes in the wall, we see
The Movements of poking the bobby pin into the hole in the wall, and
The change in the environment that is subsequent to these Movements is roughly written as "electric shock".

The next time we see the child in the living room with a bobby pin in his hand, he approaches the wall with the oddly-shaped holes in it, and we see that he turns sharply and moves away from the holes. We can now conclude, on the basis of our observation that the Subsequence which followed the Movements of poking the bobby pin into the hole in the wall in the Setting that included being on the living room floor with a bobby pin in the hand and the hole in the wall was, indeed, a Weakening Subsequence, that is, the Subsequence that followed the Movements decreased the probability of the re-occurrence of these Movements.

The second Law of Behavior, the LAW OF SETTING, examines the same three terms but concentrates attention on another relationship:

THE LAW OF SETTING states that:
the nature of the SETTING controls the

probability of the display of a set of movements.

This law is demonstrated in two ways which we have already seen:

> When a set of Movements displayed in a given Setting has been followed by a Strengthening Subsequence, the re-appearance of that Setting increases the probabilities of the display of the Movements.
>
> or,
>
> When a set of Movements in a given Setting has been followed by a Weakening Subsequence, the re-appearance of that Setting decreases the probability of the display of those Movements.

That is, given the history of Subsequences in our example, the kitchen and the kitchen drawers are the Setting, the occasion for, the Movements of pulling open the drawers. The drawers are not the "cause" of the hand and arm Movements, nor do the drawers "elicit" or "evoke" those Movements. The presence of the kitchen drawers increases the probability of, or controls, the Movements of pulling open kitchen drawers.

Conversely, in the case of the youngster with the bobby pin, and the living room and the wall socket, we see that when the youngster comes into the Setting, the probability of putting the bobby pin in the hole is seen to be extremely low.

A term that is extremely important in contexts of behavior modification, or TEACHING, is "CONTROL." When we use the term control we mean that some property of either the Setting or the Subsequence has acted to bring about a change in the probability of occurrence of some set of Movements. When we talk about Strengthening Subsequences we mean those Subsequences that act to increase the probability of occurrence of some bit of Movement. This is called "Subsequence Control". This means nothing more or less than the change in the probability of the display of some set of Movements that is brought about by the nature of the Subsequence that followed that set of Movements the last time it was observed to occur. When we talk about "Setting Control" we refer to the fact that the nature of the Setting acts to either increase or decrease the probability of occurrence of a given set of muscle Movements.

The notion of "control" goes beyond describing the changes in probability that are brought about by special properties of either Setting or Subsequnece. For educators and teachers, the term takes on especial value when it is used in the context of undertaking to manage or arrange Settings or Subsequences in such a way as to change the probabilities of the display of some behavior.

Whenever it becomes possible for us to predict that certain properties of the environment make it highly likely that some set of Movements will be displayed, we are close to being able to arrange the environment so that the behavior in question is more likely to be displayed. We can therefore describe a teacher as a person who "undertakes the responsibility of managing and arranging the environment in such a way that his pupil comes to display new and desirable forms of behavior."

We have had a rapid, but complete and accurate, run-through of the principles that direct the analysis and modification of behavior. We have done more than identfy what it is that we consider as our data, and what it is that we are interested in both predicting and controlling. We have also provided the basis for effective strategies and tactics of teaching.

In our analyses up to this point we have been describing, using three terms, the Setting, the Movements and the subsequent changes in the environment that represent the behavior of one individual. Another way of saying this is that we have been observing how the muscle Movements of one individual act directly upon the environment in which the muscle Movements are displayed. If we take another look at the CHAIN OF BEHAVIORS that were part of the "door-opening" example, we can see the following:

	SETTING	MOVEMENT	SUBSEQUENCE
1.	Mr. A in proximity to closed door	movements of hand & arm (so that... until)	palm of hand touching push plate of door
2.	palm of hand touching push plate of door	extending arm, pushing	door is displaced door is open
3.	Mr. A in proximity to door; door is open	XXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXX

A careful examination of line 2 reveals that the key elements in what we have just reviewed are:

> one individual; acting directly upon the physical environment --- and described by a Line of Behavior containing three terms.

At this point we can turn to our consideration of Verbal Behavior.

Verbal Behavior

Since we have prepared for a contrast, we can approach it at once. All we have to say as preface is that Verbal Behavior is no different from other behavior with regard to the Laws of Behavior. That is, the basic relationships between the Setting, the Movements and the Subsequence remain unchanged. A Strengthening Subsequence is still seen as a change in the environment that increases the probability of the display of a set of Movements within a given Setting. We are still very much concerned with the kinds of control exercised by the Setting over the nature of the Movements, and we are still concerned with observing how the nature of the Subsequence controls the probability of the re-occurrence of the preceding set of Movements.

The terms Setting Control and Subsequence Control continue to be elements of crucial importance.

What then is different, or special, about Verbal Behavior? The special elements are these:

> We are now concerned with the behavior of more than one individual;
> The muscle Movements of interest do not act directly on the physical environment; we need a more elaborate form of analysis called Compound Analysis -- that requires six terms.

If we look at an example of what we can call a Verbal Episode, we have all the material we need to describe the basic distinctions of Verbal Behavior. We can turn again to the Setting that contains Mr. A in the presence of the door. We can imagine him standing with his arms full of packages in front of the door, and Mr. B, who has been walking down the street, comes within several feet of Mr. A. We can look at our Six-Term Analysis:

B.1.c

VERBAL EPISODE I

	Setting$_A$	Mr. A Movement$_A$	Subsequence$_A$	Setting$_B$	Mr. B Movement$_B$	Subsequence$_B$
1	Mr. A in proximity to closed door; arms full; Mr. B in proximity to Mr. A; Mr. A is facing Mr. B, etc.	Muscle movement of articulators [Would you be kind enough to open the door for me?]	All of Setting + the sounds: /Would you be kind enough to open the door for me?/	All of Setting + the sounds: /Would you be kind enough to open the door for me?/	chain of movements of arm & hand in contact with and pushing on plate, etc.	door is open
2	Mr. A & B; Door is open					

What we have just seen is a gross analysis of what we will call a VERBAL EPISODE. The defining properties of a Verbal Episode will become clear as we go through the analysis and point out crucial facts and relationships.

What is singularly important is that the analysis reveals that what is written as the Subsequence of Mr. A's Movements also appears as the Setting for Mr. B's Movements. Another way of putting this would be to say that Mr. B's muscle Movements relative to the door are under the control of the sounds that appear as the Subsequence of Mr. A's articulatory muscle Movements.

Second, the environmental change seen in Subsequence 1B also represents a change in the environment of Mr. A -- the door is open now, and this open door is a property of the environment of both Mr. A and Mr. B. We can therefore view Subsequence 1B as one of the Subsequences that serve to strengthen the articulatory muscle Movements described in Movement 1A.

Third, we have observed a Compound Line of Behavior in which the Movements of Mr. B's muscles acted directly upon the physically tangible environment -- the door -- while Mr. A's muscle Movements changed the acoustic properties of the environment. These new acoustic properties do not, by themselves, alter the position of the door, which brings us back, of course, to saying again that in Setting 1A, the Movements of Mr. A's muscles were followed by a subsequent change in the environment that appeared as the Setting (the occasion) for the Movement of Mr. B's muscles in direct contact with the door.

We have just identified three distinguishing properties of a Verbal Episode, but there are other elements of extreme importance to issues of "language" and "language education." The most important of these elements has been a part of all we have said to this point, but it has not yet been underscored. I refer to the fact that the description and analysis of a Verbal Episode begins with the behavior of two organisms.

If we are to be really accurate, we must say that the description and analysis of a VERBAL EPISODE begins with, and presents the VERBAL BEHAVIOR of two organisms.

A re-examination of Verbal Episode I may lead a reader to say, "I can see where there is a description of the verbal behavior of Mr. A, but where is the verbal behavior of

Mr. B? He hasn't said a word." This question leads to the identification of two discrete verbal repertoires -- a receptive verbal repertoire, and a productive verbal repertoire.

An organism is said to display a repertoire of receptive verbal behavior when it can be demonstrated that his muscle Movements are specifically and predictably under the control of specified properties of the Setting. Now these are specified properties of the Setting that do not directly relate to the particular Movements in question. For example, the sounds of /Open the door/ and the sounds of /Close the door/ bear no physical relationship to the Movements of the muscles of pulling or pushing. But these pushing or pulling Movements now predictably and specifically occur when that organism has a special behavioral history -- in the presence of certain sound combinations. It requires no special behavioral history to duck when an object approaches your eye. But it certainly requires special behavioral history to duck when the sounds of "Fore!" or "Heads up!" appear as properties of the Setting.

It can be seen now that for an elaborate display of a receptive verbal repertoire it is not necessary to "make speech sounds" or to "talk." It is necessary to display a set of Movements that are demonstrably under the control of the new properties of the environment that are subsequent to the verbal behavior of another human being. The muscles involved in these Movements are not limited, but may involve any parts of the body.

If we take the example offered in the attached reprint[2], we can see that if Organism A's muscle Movements were followed by the sounds of /Bring me the third book from the left on the top shelf/ and Organism B displays the set of complex muscle Movements of walking to the bookshelf, reaching up, scanning the top shelf, removing the third book from the left and carrying it over to A, there was nothing in the complex behavior of B that would be describable in terms of linguistic units, notions of grammatical engrams, or levels of structure. What we have seen, and do describe, are a set of complex Movements whose precise nature has been CONTROLLED by the acoustic resultants of another organism's Movements.

Our most appropriate way of describing this kind of a situation is to say that "A set of muscle Movements previously observed to be displayed by Mr. B in other Settings,

is now observed to be displayed in the presence of a special set of acoustic properties that are the resultant of the set of muscle Movements of Mr. A; we now observe that Mr. B's muscle Movements are under the control of Mr. A's muscle Movements or under the control of the sounds that accompany Mr. A's muscle Movements. We can say that Mr. B then, displays a repertoire of verbally controlled behavior, and Mr. A displays a repertoire of verbally controlling behavior. We have already identified Mr. B's verbally controlled behavior as RECEPTIVE verbal behavior. It now remains for us to label Mr. A's verbally controlling behavior as PRODUCTIVE verbal behavior.

We have established the framework within which Verbal Behavior is observed, described and analyzed. This means we indicated not only the procedure for predicting the phenomena we observe, but also for controlling, or bringing about the behavior of concern. There is a third element contained, but not apparent, in the procedures we have outlined -- the fact that we have also specified a set of procedures for measuring, or evaluating the nature and extent of the changes that follow our intervention.

Bilingualism

What we turn to now, after the lengthy, but essential introduction to the principles and terminology of the Analysis of Verbal Behavior, are the special kinds of analysis that we can now do in the general area of "bilingualism" and "bilingual education." The first thing we can do is to describe and define what it is we are interested in. We can clear the air rapidly, for example, by emphasizing at the beginning that we are not going to be talking about "relative degrees of mastery of two grammatical systems," or about people who "can express themselves equally well in two languages." What we are going to be concerned with is the observation and analysis of the verbal behavior of people who engage in verbal episodes with members of more than one linguistically and culturally defined group. In this regard, it is necessary to make it emphatically clear that a linguistic description is almost always a description of some detail of only one of the three terms that form part of an analysis of behavior. If the linguistic description reflects the concerns of articulatory phonetics, we will have detailed descriptions of the muscle Movements -- the second term. Other special interests will yield varied emphasis, so that we may find detailed descriptions of the

formal properties of the acoustic resultants of the lengthy chains of movements called sentences, for example. But linguistic descriptions do not concern themselves with what happens to the speaker after his "utterance" is recorded, transcribed and made ready for linguistic analysis.

Since we are talking about verbal behavior, we may begin by becoming descriptively rigorous and identifying the subject matter as the analysis and establishment of multiple verbal repertoires and their subsequent maintenance and expansion in educational Settings.

Let us look now at some typical cases of the display of multiple verbal repertoires.

Multiple Verbal Repertoires

Throughout the discussion of verbal behavior, it was made emphatically clear that the essential distinction of VERBAL behavior was that it dealt with the changes in the environment that acted upon the REPERTOIRE of a human being. We further emphasized that a verbal episode represented the interaction of TWO REPERTOIRES -- the productive repertoire of one and the receptive repertoire of the other. We made a number of unstated assumptions in our descriptions of those exemplary individuals, Messers A and B. We assumed that there was a full CORRESPONDENCE between Mr. A's productive repertoire and Mr. B's receptive repertoire, that is to say, we assumed that all of the acoustic Subsequences of Mr. A's articulatory Movements served as a Setting that controlled, in specified fashion, a set of Mr. B's Movements. That is another way of saying that the appearance of a verbal episode really depends upon a crucial interface between what is the Subsequence of A's Movement becomes the Setting for B's Movement. When this special kind of interface exists, we can say that there is a CORRESPONDENCE between the repertoires of the two individuals. A correspondence at one point does not make other correspondences inevitable or "natural." From what we have seen of the described verbal episode of A and B and the door, we can say that there was a correspondence between A's productive articulatory repertoire and B's acoustic receptive repertoire. We have noevidence yet of a correspondence between B's articulatory productive repertoire and A's acoustic receptive repertoire. Indeed, we have no evidence of B's articulatory productive repertoire, and there is no reason to routinely assume such a repretoire.

We can see from the episode that the sounds that were the Subsequence to A's Movements were of the sort we call "English," but we cannot assume that the episode could be rewritten with B on the left and A on the right. That would represent a correspondence of repertoires that we have not yet observed.

There is another set of productive and receptive verbal repertoires that we have not yet mentioned. We need to deal with issues of "reading and writing," and we can do this simply by establishing another Line of Compound Analysis.

SEE VERBAL EPISODE II

This line shows us another set of Movements -- "marking Movements" -- that have as Subsequence a change in the optical properties of the environment. These new optical properties, in the form of, let us say, "marks on paper," also serve as the Setting that controls, in specified fashion, the muscle Movements of another individual.

We now have two possible Lines of verbal behavior. One of these Lines is characterized by acoustic control, and the other Line is characterized by graphic control.

The diagram will show the kinds of Movements that serve as the individual's Productive verbal behavior, and the kinds of properties of the Setting that serve to control the individual's receptive verbal behavior. Such a diagram should also show for which languages these repertoires have been established. If Mr. A is an adult American, and a successful college graduate, we might describe him thus:

	PRODUCTIVE		RECEPTIVE	
	movements whose Subsequence is:		The Setting Control is:	
	Acoustic	Graphic	Acoustic	Graphic
English	X	X	X	X
Spanish	0	0	0	X

We could say that Mr. A displays a complete, symmetrical repertoire of English verbal behavior. He displays a partial, asymmetrical repertoire of Spanish verbal behavior.

B-14a

VERBAL EPISODE II

Setting$_A$	Productive Movement$_A$	Subsequence$_A$	Setting$_B$	Receptive Movement$_B$	Subsequence$_B$
Mr. A with pencil in hand; paper & bottle on table	moves pencil marking paper, puts paper in bottle & bottle on doorstep	Paper is marked "Leave one quart of milk, please." bottle on doorstep	Paper marked "Leave one quart of milk, please."; bottle on doorstep; Mr. B on doorstep	lifts & moves one quart bottle of milk	One quart bottle of milk on doorstep

An examination of this profile of verbal repertoires tells us some of what we need to know about Mr. A. We can see that with another individual who displays a complete, symmetrical repertoire of English verbal behavior, there will be four areas of Correspondence. Given this complete and symmetrical repertoire we need not specify beyond this. Mr. A would never be mentioned in a discussion of "bilingualism," but we have identified here a repertoire of behaviors under the control of Spanish-graphic Settings. If we abbreviate the headings of our diagram we can identify the Productive headings as Pa (productive-acoustic) and Pg (productive graphic) and the Receptive headings as Ra and Rg. Seeing the entry in Mr. A's profile under Spanish Rg identifies a point of correspondence with any person who displays the corresponding Spanish Pg repertoire.

Could Mr. A meet some minimal standards for earning a living in Spain? If we charitably overlook a number of practical "details," we can see that his verbal repertoires are adequate for working as a milkman -- reading notes and leaving bottles on doorsteps.

It is clear that the person who engaged in Verbal Episode II, displaying Movements under the control of English graphic properties of the Setting need not have displayed any English <u>productive</u> repertoires.

Indeed, it turns out that the milkman in Verbal Episode II is none other than our Mr. B, whose complete profile follows:

Mr. B

	Productive		Receptive	
	A	G	A	G
English	0	0	X	X
Spanish	X	X	X	X

If we can summarize Mr. B's profile by saying he displays the following verbal repertoires: Spanish complete symmetrical, English asymmetrical Pa and Rg, we can see how it was that Mr. B participated so effectively in two Verbal Episodes. In fact, so perfect was his receptive verbal behavior that he is usually "taken for a native." His door-

opening Movements were perfectly normal, by community standards, as were his milk-delivery Movements.

This last paragraph raises some interesting notions about "native-like language skills," in that it highlights the fact that although Mr. B's verbally controlled behavior is eminently acceptable, he is likely to be ignored or crossed out of any linguistic investigation of bilingualism because of the absence of productive English repertoires.

He would be left out of a study of "bilingualism," but he would be most usefully reported in a study of Multiple Verbal Repertoires.

The last example raises still another important concern with regard to the description and measurement of verbal repertoires. Our three- and six-term analytical procedures make it possible for us to consider in unmuddied ways several sets of useful relationships. I am referring to the ways in which a fragment of verbal behavior can be evaluated. There are three that are most important, although the order in which I present them implies no personal hierarchy.

1. FUNCTION can be defined as a set of predictable and specifiable relationships between the specific muscle Movements and the Subsequent change in the environment. We most frequently examine and evaluate function from the standpoint of the Subsequence. A set of manual and digital muscle Movements around a pencil and a pencil sharpener is functionally acceptable if the Subsequence is a sharpened pencil. What this means is that it is not the set of Movements that is evaluated on a scale of "standard movements," but the relationship between the Movements and the Subsequences. "Non-standard movements" that are followed by a snuggly-tied shoelace equal "functional shoelace-tying behavior." This definition has important implications for the measurement and evaluation of Verbal Behavior. It can be seen that function is determined by examining the relationship between the Second and Third Terms of analysis. Foreign language teachers and speech therapists regularly evaluate, against some "standard scale of accuracy" only the Second Term -- the precise nature of the Movements. Although there are occasions where evaluations of the Second Term correlate closely with a Functional Analysis, function is best measured as it is defined, rather than as it might be inferred.

If one seeks to find out "whether the student can make himself understood," it is a more reliable scientific pro-

cedure to define the question in terms of observable, describable behavior, than to evaluate a speaker's "pronunciation" on a scale of "native standards," and "predict" on this basis the functional effectiveness of the individual's productive verbal behavior.

2. "DESCRIPTIONS OF THE MOVEMENTS are extremely important for purposes other than inferring functional effectiveness. If we wish to establish a set of very specific Movements under the control of specific properties of the Setting, we must be able to describe, in fine detail, the precise nature of the Movements. If, as it often happens in the field of language instruction, that we must bring about changes in the nature of the articulatory muscle Movements, we need detailed descriptions of the muscle Movements displayed as entering behavior, and equally detailed descriptions of the muscle Movements to be seen as terminal behavior. The more closely the muscle Movements have been observed and the greater the care with which they have been described, the more effective will be efforts at bringing about the desired changes. In terms of larger units of muscle Movement than "the speech sound," or "the word," such lengthy chains of muscle Movement as "the phrase" or "the sentence" still need to be described in terms of the precise set of Movements observed. Such observations of Movement offer visible targets for teaching, and equally visible signs of "bull's eyes" or "misses." Describing the muscle Movements of the Second Term as "incorporation of the principle of plurality as manifested by the phonetic realizations of the phonemes of plurality in English" still leave the teacher with nothing to measure but whether the student said "mans" or "men," "books" or "book-es."

Issues of the "secondary effects" on natives of alien, non-standard speech sounds need to be considered as a separate set of questions -- such issues need to be put as "What behaviors other than those specified by the acoustic properties of the Setting appear to be controlled by the acoustic Subsequences of the speaker's Movements?" Answers to "attitude questionnaires" regarding people with "foreign accents" must be considered to be under the additional control of the printed form, the nature of the questions, etc. Here too, as with issues of measuring FUNCTION, questions about what people do in special Settings are best answered by observing what they do, rather than by asking them to talk or write about themselves.

3. "APPROPRIATENESS" or "CORRECTNESS" are terms that can acquire meaning in the measurement and evaluation of Verbal Repertoires if they are considered to represent a set of predictable and specifiable relationships between Setting and Movements, i.e., a special relationship between the First and the Second Terms of Analysis. Conventional systems for evaluating "language skills" almost always concentrate on descriptions of the formal properties of the Second Term. Talking about "language skills" avoids issues of behavior to be examined in terms of its appropriateness with regard to a given Setting. The muscle movements represented by the Standard Native Speech sounds of "cuatro" are evaluated in a language class. If in such a class the question were asked, "Cuantos son dos y tres?" and the student replied, "Cuatro," he would be graded "A" for pronunciation if the acoustic Subsequences of his muscle Movements matched native standards, and the teacher would have to conclude that "he pronounces well, but he certainly does not know arithmetic." Since the language teacher might not wish to grade his pupil's "arithmetic skills," he might come to suspect that "the pupil did not understand the question." On these grounds the pupil might still be evaluated as to his "language skills."

What is particularly interesting about this last point is that it highlights a serious problem that derives from concerns with "language" as a set of "skills" independent of "content." Which is, of course, another way of viewing "language" detached from Setting and Subsequence, that, once "acquired," can be "put to use" in all sorts of different places and ways.

Teaching someone to say "four" with perfect "phonetic accuracy" does nothing about increasing the probability of saying "four" in the Setting "How much are two and two?"

There may very well be "language skills" without content if all we are interested in is disjointed evaluation of "pronunciation" and "grammaticality." Our central concerns with people in society, however, is with their behavior -- what they do, seen in terms of its appropriateness to the Setting and with regard to the Subsequences that represent in turn, the Setting for other people's behavior.

A central theme in the guidelines for this paper is "Bilingual Education," but in spite of its centrality it is not yet clear what is meant by "Bilingual Education."

Does it mean:

1. Given a "bilingual", how shall we educate him?

or

2. Given a "monolingual," how shall we educate him so that he becomes a "bilingual?" And once we have made him a "bilingual," how shall we proceed to educate him?

Since we are rarely "given" a "bilingual", it may be assumed that addressing myself to question 2 will prove useful.

The first part of the question about "how to make a bilingual" raises the issue about what differences, if any, there are between Foreign Language instruction, and the problems of teaching a person to be a "bilingual." To those with extensive experience with the levels of achievement reached in foreign language instruction in the USA, this can be an embarassing question. Or at least I think it should be. It may become less embarassing if it is acknowledged that it has rarely been the stated objective of instruction to produce a person who displayed complete, symmetrical verbal repertoires in the foreign language that were in correspondence with the verbal repertoires of the student's native language. It continues to be embarassing, however, when one considers the low frequency with which people trained in foreign language classes are seen to engage in Verbal Episodes of even the most limited nature.

It might be hoped that the prominent objectives of the current interest in "Bilingual education" are functional, rather than academic, that is, a concern with establishing multiple verbal repertoires in other languages, rather than establishing repertoires of talking about the forms of another language, and the rules for their assembly. Rather than following the model of American foreign language classroom teaching, with its committment to "language skills," and the dependence upon such notions as "integration of the rules" and "internalization of grammatical structure" and similar invisible, non-measureable, inferred processes that must "mature" from "genetically pre-determined, in-born linguistic knowledge," we would do better to put some effort into the descriptive analysis of the behaviors we wish to establish in our student population.

We can begin, at this point, to build on our introduction to the basic principles of the analysis of verbal behavior, and examine a number of applications to specific problems.

To begin with, we can say almost as an axiom, that the degree of success achieved in the teaching of any subject matter is proportional to the accuracy and detail of the description of the teaching objectives, and the directness of the relationship between the objectives and the means of measuring those objectives. Teachers in a number of areas are now being asked to write "behavioral objectives" for their courses, and to develop tests which provide the occasion for the measurable display of target behaviors. The teaching of languages, however, appears to have been relatively untouched by this trend.

Our formulation of Verbal Behavior that requires the Line-by-Line description of Setting, Movement and Subsequence offers a set of guidelines aimed at the preparation of "bilinguals."

Let us consider for a moment how we might build a set of "behavioral objectives" for such a program.

We could characterize our building guides in terms of the kinds of things we would specify. Our initial concern is with what and how we specify, and our ultimate concern is with how these specifications relate to our measures of achievement.

In the broadest terms, we must:

1. Specify Lines of Behavior. This obliges us to indicate every term of the Line. Under this set of specifications we establish what our criteria are for "appropriateness," i.e., what Movements we will accept under the control of specific properties of the Setting, and for "function," i.e., what relationship exists between the precise form of the Movements and the nature of the Subsequences.
2. Specify the repertoires we intend to establish, i.e., Receptive or Productive, Acoustic or Graphic.
3. Specify the "audience" whose already established receptive repertoires are to come under the control of newly established productive repertoires of our student.

4. Specify the population of "speakers and writers" whose already established productive repertoires are to correspond with, i.e., control, the newly established receptive repertoires of our student.

We can now proceed to a more detailed and concrete set of explorations within the context of these "specifications."

Our concern with complete Lines of Behavior obliges us from the outset to reject the artificial segmentation of "independent" "separable" "skills." Two common examples of such "skills" are "pronunciation" and "vocabulary," and we can demonstrate the issues by a close look at one -- "pronunciation."

"Pronunciation" treats as a separate "skill" what we have identified as the acoustic subsequences of a set of muscle movements; that is, it treats as a separate target of instruction and evaluation what is only one term of a Line of Behavior. We hear with some frequency in foreign language circles such behavioral absurdities as "his grammar is poor, but his pronunciation is excellent," or even more absurdly, "His grammar is excellent, but his pronunciation is poor." What this means is that a transcription of the sounds that follow his articulatory movements, when corrected and translated into standard orthography, can further be examined on the basis of a set of formal relationships and are found to be "acceptable." What this means in a crucial way, is that the sounds of the student act upon the teacher's receptive repertoire of transcribing behavior. It tells us nothing about how these sounds function to control the receptive repertoires of people who is an experienced machinist says in English Class, (in rough phonetic transcription)

[dju mǫs put tri bols in it͡ʃ xǫl]

the teacher's evaluation of "correct grammar, but poor pronunciation" will tell us nothing about what will happen when this same fellow gives this same utterance as a set of instructions to a U.S. apprentice in a ball-bearing factory.

There is not much to be appreciated in an utterance that can be deciphered by a trained specialist in "foreign accents" to yield differential ratings of "grammar," "vocabulary," and "pronunciation," if that utterance in a non-school Setting is described as "unintelligible noises." I cannot stress too heavily the critical importance, nor can

I exaggerate the long list of undesirable consequences that follow from teaching and testing programs that derive from segmental analyses of form, largely divorced from considerations of function. As a Spanish teacher I have seen teachers beam with pride as their students emit lengthy chains of sounds that bear no physical or functional relationship to the sounds heard in a Spanish-speaking community. Students at a Spanish Club meeting are sometimes observed to engage in lengthy verbal episodes with each other and their teacher, but a bona fide native, who does not share Corresponding Repertoires with this special community could only conclude that "American High School Spanish was a dialect of Spanish he understood only slightly." There is no doubt but that within a short period of time, if the native were privileged to follow along in the text as these students read aloud, he would establish a receptive acoustic repertoire to correspond with these singular sounds produced by a set of muscle movements surprisingly like those observed in speakers of English.

We can explore, through our examination of the single notion of "pronunciation, independently considered," not only what happens to students, but how the "non-native" performance of the students is taken as evidence of inherent limiting factors in the students themselves. I refer to such explanations as sex differences, age factors, inborn differentials in foreign language aptitude, kinds of "nervous system," etc. The admission of such factors justifies the lowering of expectations, and the consequent setting of compromised objectives that are considered to be "reasonable" given the nature of our students."

One of the results of such arbitrary "fractionating" of "language skills" is that it permits one to say that "X speaks Spanish correctly and fluently, but his pronunciation is very poor." What is at issue here is the application of the phrase "speaks Spanish." A student in archery class who could repeat all the rules of safety, name all the parts of the bow and the arrows and the target, draw the bow and let fly arrows at a great rate, but who rarely if ever hit the target, much less the bullseye, would not be described as being "a competent archer, but his aim is poor."

This business of esteeming fragments of performance in terms of their approximation to some "formal standard" permits one to give grades -- even high grades -- to students whose performance would be considered disastrous if judged on some functional scale. Perhaps it is more than coincidence that many of the teachers of such students may also

be described as "speaking Spanish quite well, but with a pronunciation that is certainly not native."

It is at this point that we can ask these important questions: "Who teaches in a bilingual program? Two monolinguals or one bilingual? And if it shall be the latter, what kind of bilingual?" What that last question calls for, of course, is a specification of the verbal repertoires of the teacher/s.

And to meaningfully answer that last question we need to define, in advance, what are the expectations -- the objectives -- with regard to verbal repertoires of the students. When we talk about "bilingual education" there is a clear promise implied that we intend to shape individuals whose verbal behaviors function in more than one social/language community.

What follows now may appear to be a diversion from the line of interest we initiated above, but it will, on close examination, be seen as integral to our reasoning.

I choose to talk at this point about the kinds of verbal repertoires that we see in and on the fringes of ghettoized minority language communities.

Linguists have correctly insisted that the language of the Black community is not a "dialect" of English that represents a degeneration of the Standard language, but is rather a discrete language. In similar way I want to insist that the formal properties of the special verbal behavior that often functions at the interface between members of two different language communities is not a "degenerated, heavily accented" variety of the verbal behavior of one or both of the language communities, but is rather a discretely describable set of behaviors that display properties of appropriateness and function characteristic of, and limited to, a specific verbal community.

There are humorous references to "Spanglish" and "franglais," but the humor is more apparent than real. The reality is depressing when one observes a language teacher presenting behavioral models to his students that correspond only minimally with the behavior of the "natives" of that language. We have become very tolerant of "non-Spanish" teachers, or "Semi-Spanish" teachers primarily, I suspect, because there is no real flavor of functional urgency to the behaviors they are charged with establishing in their students.

It doesn't really matter very much whether a "real Spaniard" would understand" the student, or vice-versa, since there is very little likelihood of the student's confronting such a need. This divorce from the pressures of reality is equally apparent in English classes in many countries, and we often laugh when foreign students arrive here with "certificates" from an institute attesting to their proficiency in English that turns out to be scarcely intelligible. Such a lack of verbal function, however, is not really funny if we expect these people to become useful, productive, and hence contented, citizens of our community.

What I am reaching for here is the very sober rationale for rejecting the levels of achievement that we have been willing to accept in "foreign language" instruction when the consequences of those levels and their associated teaching procedures are part of our daily social and economic environment.

Too much has been made of the "psychiatric contributions" of being taught by a member of the "same minority group" that populates the class. "Hispanic pride," "sense of identification," and the like, can in no way change the ultimate tragedy that I observe in some of our local "bilingual" programs where a teacher whose speech sounds like the comic Jose Jimenez, is teaching a room full of Hispano youngsters to sound just like him. The teacher inevitably serves as model and manager of the Setting and Subsequences, and ultimately shapes students' verbal behavior that replicates his behavior.

Two prominent conclusions may be drawn from these observations:

1. The functional standards we set in our objectives are likely to represent the "ceiling" observed in our students' performance. In simplest terms, we are not likely to get more than we ask for, and will get exactly what we "settle for."
2. The standards of "bilingual verbal behavior" are affected in two ways by the nature of the teachers we choose. First, the performance of the teacher defines for the student what our society will call a "bilingual." Second, the performance of the teacher predetermines the best performance of the students. In many cases we are flirting with a kind of "trilingual" situation described by the way Miamians talk to one another, the way Cubans talk to Cubans, and the way Cubans talk to Miamians (those Miamians, that is, who have corresponding receptive repertoires!)

The resolution of these problems calls for appropriate use of monolingual "natives," or "bilinguals" who display repertoires of verbal behavior that are both complete and symmetrical. When we select a teacher who displays other configurations of verbal repertoires, we can now do so on the basis of the educational requirements of specific situations, and the specific repertoires that are called upon.

Reference to specific repertoires brings us back to the need to appropriately esteem and exploit the ranges of receptive verbal repertoires. Inasmuch as there are tasks, or "job descriptions' that differentially call upon the display of different repertoires, it is important to assess our broad educational objectives in terms of those verbal repertoires and correspondences that are necessary for the achievement of these objectives.

There are many cases where our primary interest is in bringing a repertoire of behaviors that are already under the control of Spanish Verbal Settings, under the control of the productive verbal behavior of a member of the English verbal community. People who display the appropriate muscle movements under the control of "Arregla los frenos." may need to have these complex set of movements brought under the control of "Fix the brakes." This is a different task from that of teaching a student how to repair automobile brakes, and the strategy for that task, and the verbal controls under which it is to be established will be determined on a host of other, not primarily verbal considerations. The point here, however, is that we should be able to keep issues of verbal behavior in a clear perspective with regard to other objectives of the educational program.

Finally, we need to touch on the issue of relevant measures of the student's performance. I have insisted throughout this paper that our objectives be stated as behaviors described in terms of Setting, Movement and Subsequence. This kind of description yields one kind of objective that might be written:

> In the presence of the teacher and the question, "How much are two and two?"
>
> A set of muscle movements [four]
>
> The subsequent environment characterized by the sounds of /four/ and /Right!/

and another that might be written:

Teacher and the sounds /Simon says touch your nose/

A set of muscle movements such that

The Subsequent environment is characterized by the contact of the pupil's finger with his nose.

or:

SETTING a	MOVEMENT b	SUBSEQUENCE c
1. Teacher + /come to the board, Helen/	rising & walking	Helen stands in front of the blackboard
2. Tc + /Today is Monday. Can you write that on the board/	grasping chalk & moving it on the blackboard so that	MONDAY is on the blackboard

These descriptions also specify a variety of direct measures of achievement. To begin with, we can see that if our teaching established a given set of movements in a given Setting, our most meaningful measure of the effectiveness of our teaching would be the presentation of that Setting and observing the display of the Movements. This is not a simple-minded restatement of the obvious, but an extremely important point that is often lost in conventional approaches to language testing. It has somehow happened that to measure the display of behavior exactly as it was established is "too easy," or "insufficiently challenging." As a result, it is not uncommon to find our exemplary Helen above being "tested as to whether or not she had learned to write 'Monday'" by being instructed to: "Write the name of the second day of the week."

There is further concern with regard to presenting the Settings and observing the display of movements, and that is the special concern with appropriateness of movements to that Setting. In this regard we can comment on the fact that not only is the systematic establishment of receptive verbal repertoires an infrequent part of language training programs, but it is an equally infrequent part of language testing programs. The only provisions one sees for the evaluation of a student's receptive verbal behavior is via a procedure that calls for the display of a line of pro-

ductive verbal behavior as evidence of receptive behavior. We do not see a test administrator saying to a student, "Touch your nose," that is a call for a display of a set of muscle movements under the control of the examiner's productive verbal behavior. What we do see is a question like: "In what part of the body is the sense of smell located? which calls for a display of acoustic or graphic productive verbal behavior under the control of the examiner's verbal behavior. Direct measurement of behavior is sometimes more costly than indirect, paper-and-pencil derived measures that correlate statistically with the actual performance, but direct measures provide the only empirically verifiable and truly reliable evidence of performance. We would not be satisfied that an airline pilot displayed fully appropriate "landing behavior" on the basis of high scores on a written examination that had shown high correlations with the cockpit performance of pilots: we would want to see him display the behavior in the setting, even though the test was expensive to administer. We do however settle for correlationally derived estimates of the "phonetic accuracy" of foreign language students on the basis of machine-scored written tests because individually administered tests of "oral performance" are too expensive.

In the area of testing as well as in teaching, we get exactly what we settle for, and insofar as we depart from the correspondence between what is taught and what is tested, we weaken both the evaluation and the teaching programs.

The kinds of analysis of verbal behavior that we have briefly looked at in this paper give clear indications of utility in the design and development of both of these critical objectives.

It has been suggested that the educational strategies of behaviorists are based on the assumption that anybody can be taught anything, thereby making teaching strategy all important, and program content merely incidental. This is probably an accurate summary of the general behaviorist position, and I think it is important for this behavioral scientist and practicing educational technologist to disagree. The statement is untrue because it is incomplete. The behavioral technologist is likely to say that he can manage his classroom in such a way that every student completes every work-sheet assigned to him and returns it completed. He can further assure us that he can see that the work-sheet is done as many times as necessary until it reaches some pre-determined criterion of correctness. But this kind of management tells us nothing about what to put

on the work-sheets if we are to establish some behavior beyond "doing the work-sheet!" I have watched with dismay the activities of elementary school "language arts" classes that are organized according to the soundest principles of behavior management, but whose "program" consisted of having the children complete tasks that were not organized according to a behavioral analysis of the terminal objectives. No amount of behaviorally engineered practice of vocabulary lists derived from a crude paired- associate model will "establish fluency!"

We need to seriously explore the program content, down to its smallest elements, in terms of the descriptive analysis of the target behaviors, and empirically evaluate the effectiveness of each strategy that the analysis suggests!

The preceding sentences make for a meaningful conclusion of this paper, for it's underscored words pull together what I hope appears as the principle theme of what I have had to say. I did not set out to answer questions, but rather to contribute what I could to the more effective asking of questions. The kinds of questions scientists ask of nature determine more than anything else the validity and the utility of the conclusions they reach. I hope that the presentation of the principles and procedures of my approach will contribute to asking questions about "bilingual education" that will provide answers that are both relevant and empirically verifiable.

NOTES

1. Liberal quotations will be taken from several published and in progress works, primarily:
   An Introduction to the Science of Behavior, Sapon, Stanley M., Monopress: P.O. Box 3341, Rochester, New York 14618, 1972
   "Problems in the Modification of Verbal Behavior," Sapon, Stanley M., An Address given in Flint, Michigan on June 22, 1972, and to appear in the Proceedings (in press) of the Annual Meetings of the National Society for Autistic Children.
   The Establishment and Modification of Verbal Behavior, Sapon, Stanley M., (in progress).

2. "On defining a response: a crucial problem in the analysis of verbal behavior," Sapon, Stanley M., The Psychology of Second Language Learning, edited by Pimsleur & Quinn, Cambridge University Press: 1971

BILINGUAL EDUCATION: AN INTERNATIONAL PERSPECTIVE

Charles A. Ferguson, Catherine Houghton, Marie F. Wells

1. Bilingual education -- in the sense of explicit recognition of the use of two or more languages in the formal educational system of a society -- is very widespread in space and time.

2. Bilingual education -- in the sense of the use of a different variety of language in the classroom from that used in ordinary conversation (in more extreme cases a different language altogether) -- is universal.

3. Bilingual education may have many possible implicit goals, and these goals may overlap or be in conflict.

4. The success of bilingual education depends primarily on the attitudes and expectations of people, not on such language factors as the degree of difference between languages or language varieties or the nature of the pedagogical methods.

BILINGUAL EDUCATION: AN INTERNATIONAL PERSPECTIVE

1. No one knows how many languages exist in the world. Some estimate there may be four to seven thousand. The majority have no written form and only a small proportion of those that do are used in formal education. Yet most of the nations of the world are multilingual, and millions of children have their schooling in two or more languages.

From the earliest days of civilization bilingual education has been important in the development of society and culture. There has hardly been a time in recorded history when a nation could flourish as a monolingual entity with a completely monolingual educational system. Soldiers and statesmen, poets and kings have always needed more than one language in which to communicate.

In ancient Mesopotamia, military and political expansion and the subsequent administration of new territories necessitated that rulers and their subordinates learn languages other than their mother tongues. Men of commerce needed more than one language for trade and business. Changes in population required mutual intelligibility and more language diversity for teaching and study. And bilingualism was essential to artistic and intellectual creativity.

The first evidence of children studying with two languages in their schoolwork comes from cuneiform tablets from Mesopotamia between 3000 B.C. and 2000 B.C. Inscriptions on these tablets not only describe a full-fledged Sumerian-speaking civilization, but also show that Akkadian, a Semitic language, was in prevalent use by the end of the third millenium. As oral traditions were inscribed in written form, both Sumerian and Akkadian became languages of record and affected one another's written development.

By the second millenium B.C. there were Sumerian texts (many thousands of lines have been preserved), and the beginnings of an Akkadian literature. Textbooks for the teaching of Sumerian to speakers of Akkadian came to contain dictionaries and Sumerian texts with line-by-line Akkadian translations.

The Mesopotamians' technique of writing with a stylus on soft clay was widely accepted by neighboring civilizations. Their method of training scribes and their bilingual tradi-

tion were prevalent throughout the Near East during the second millenium B.C. From Elam and the Bahrain Islands in the Persian Gulf, to the Hittite Kingdom in Central Asia Minor, to the western area between the Euphrates and the Mediterranean Coast, and to Cyprus and Egypt, scribes communicated in Akkadian (Oppenheim 1967).

The tradition of bilingual education continued. In the third century B.C. the 'glory that was Rome' was adapted from knowledge of the glory that was Greece. Again it was not just the intellectual elite who had a working knowledge of two languages. Both upper and lower classes of Roman society enjoyed the comic poet, Plautus, who often created his humor with a play on Greek words. The earliest Roman historians, Fabius Pictor and Cincius Alimentus, wrote in Greek, indicating not only their own fluency in the language but also that at least some of their countrymen could read it.

The Romans based their education on the study of literature in a foreign language. Their training in Greek set the precedent which higher education has followed down to the present time. 'What Greek was to the Romans, Latin become to the nations of Western Europe, and 'there has never been a time when much of the best training of the mind did not consist in the study of the thoughts of the past recorded in a language not the student's own.' (Wilkins 1905, 19-20)

Today much of the world is bilingual and often multilingual. To cite a familiar example, in India over 15[illegible] different languages are spoken. Fourteen are officially recognized as regional languages and are used as the medium of instruction in public schools. In Calcutta, for example, a child can choose Bengali-, Urdu-, or English-medium instruction within the walls of a single primary school. In the Punjab, the writing system used in the schools depends on the religion of the pupils.

There are approximately 500 languages in South America. Spanish is the school language for many who speak Indian languages natively. In the Caribbean, French and English are used in school although creoles are the spoken languages. In China, there are a number of separate spoken Chinese languages with a single written language.

Africa has at least 1000 languages and some 100 different Bantu languages in the Congo alone. Languages of wider

communication, such as the trade language Swahili spoken by at least seven million people in East Africa, or the colonial language French in West Africa, are used from the earliest years of school.

Nor are multilingualism and bilingual education limited to the so-called Third World. Europe, excluding Russia, has some 50 major languages. Norway has two closely-related literary standard languages, and local school boards have the option of choosing which to use in the schools, although there is now a single textbook norm. Switzerland's four official languages, French, German, Italian and Romansch, are used in the schools, and Swiss German has two distinct varieties, a formal one and a dialectal one.

In Great Britain, where English has been used for centuries, there are still pockets of Welsh bilingualism and functioning Welsh bilingual schools in Wales.

The Soviet Union lists 120 languages within its boundaries. A number of written languages with large bodies of literature are used in addition to Russian in the educational system.

Even in countries that are monolingual, such as Sub-Saharan Madagascar, Lesotho, and Somalia, there is multilingualism and bilingual education. In Somalia, for example, everyone speaks Somali, which has its own oral poetic tradition but is not written, while Arabic is used for writing and formal purposes, with Italian and English as important languages of wider communication with the rest of the world. Bilingual education is available in all of these.

2. In some sense all formal education is bilingual since the forms and ways of expression of written language never reflect the spoken language exactly. Words, ways of speaking, and forms of discourse are used in the school setting which are not used in ordinary conversation and in other non-school settings. The first aim of formal education since its beginnings in the third millenium B.C. has always been to teach the pupils a written form of language. Other goals may be added and even the simple goal of literacy may become very complex and have sub-goals which at some stage in the educational process may take precedence. The fact remains that the familiar culture complex of "school", with its features of teacher, pupils, instruments of writing, and patterns of recitation, questions and answers, and reward for attainment, was developed in response to the need

for transmission of skills in the use of written language. The school has persisted for some 4,000 years with its essential traits unchanged. In spite of superficial differences such as stylus and clay tablet vs. ballpoint pen and spiral notebook, or outdoor setting and a sunny climate vs. central heating, one feels that the modern American teacher or the ancient Akkadian teacher would essentially feel at home in the other's school in terms of expected behavior, goals, and social values. Presumably the school has survived the changes in culture, political organization, and technology largely because it has succeeded to a sufficient degree in meeting its fundamental aims. Although it may be true that the social conditions today and in the near future are bringing fundamental changes in the aims of education, it is certainly profitable to examine carefully some of the features of the traditional school before attempting major changes either in aims or methods.

When the child first comes to school he brings with him an incredibly extensive and sophisticated competence in the use of language. He not only has mastered intricate details of pronunciation and grammar in his conversational language but he knows how and when to shout and whisper, to wheedle and instruct, and to put his language to use in a fairly wide range of situations and occasions. In school he must learn a whole new set of language uses appropriate for the situations and occasions of school life which he has not known before. There will be some features of pronunciation and grammar which he must add to his repertoire; he must learn when to speak and when to be silent in a new range of contexts. In short, he must learn a whole new "register" of his language.

The child may have become familiar with some elements of the school register before actually coming to school. Some parents act out school behaviors with their young children, some features of the school register may occur in other settings (the village story teller or the TV screen), and children in many societies play "school" even before they regularly attend. It is instructive to note how the details of language structure and language use are altered from normal conversational practice in these play situations in which to some degree the school register is being attempted.

The differences between the language registers the child already has command of and the written language and classroom register which he must acquire may be relatively

slight or staggeringly large. Sometimes the pronunciation and grammar of the school register is very close to that of the child's conversational language and the differences of register consist of features like full forms for contractions, new vocabulary, subordinating constructions, operational forms of discourse and the like (Ellis and Ure 1969). Often the conversational language which the child has is in a local dialect while the classroom requires use of a national or international "standard" form of language. A German child in Munich, for example, must learn to use new vowels and new verb forms which differentiate his own dialect from the more standard language of school. Very often the standard language of the classroom register is closer to the language of books and writing than the local dialect and the child must gradually learn that ordinary conversation can be held in something very like the book language in appropriate situations, such as talking with people from another town, talking with educated people on more formal occasions, and so on. In other cases where the language of books is very different from the child's conversational language and the classroom register is in-between, the child must learn that no one uses the book language for conversation but that various intermediate forms must be used in talking with other people on various occasions. Thus the child who goes to school in Cairo, for example, must acquire the language of books and formal speech, and learn to use intermediate varieties in the classroom or in talking with Arabs from other countries.

Surprisingly often the language of writing and the school register are a totally different language from the one the child knows at home. For centuries in Europe the language of the school was Latin, regardless of the language spoken by the children. Today a child whose primary language is Breton finds the school conducted completely in French, and the monolingual Navajo child may find the school conducted in English and be forbidden to use his own language even in the playground. In many communities the language difference may be resented: it may be seen as an unnecessary psychological obstacle or even as an act of oppression.

3. Often attitudes toward language differences reflect implicit goals of the educational system itself. Although education has the larger universal function of storing and transmitting knowledge, it also has specific functions which differ from one society to the next. A cursory examination of language policies around the world reveals both practical

and idealistic goals implicit in much bilingual education. The following list of implicit goals, which is obviously not all-inclusive, is offered as a starting point for serious consideration of the implications of bilingual education. If implicit goals can be identified and examined, perhaps they can be made explicit and realistically incorporated into or eliminated from the American educational system.

Some Implicit Goals of Bilingual Education

The objectives of bilingual education may be clearly practical:

1. TO ASSIMILATE INDIVIDUALS OR GROUPS INTO THE MAINSTREAM OF SOCIETY

The aim is to socialize people for full participation in the community.

Americans have assumed -- and this has been more tacit than explicit -- that immigrant and indigenous groups will be rapidly assimilated into American core society until they are culturally indistinguishable. De-ethnization and acculturation are central to American history and American national awareness. Writing in the mid-1950's, Einer Haugen noted that "Americans have tended to take it for granted that 'foreigners' should acquire English and that a failure to do so was evidence by implication of a kind of disloyalty to the basic principles of American life . . .'(Fishman 1966, 19). In most cases in the United States, bilingual education of any kind has had the implicit aim of assimilating the individuals into mainstream American life.

Assimilation has also been a major goal in Alsace and Brittany in France, where young speakers of the provincial vernaculars Alsacian and Breton have been constrained by the educational system to learn standard French for absorption into mainstream French society. There has been periodic resistance to this national goal, sometimes provoked by unpopular language requirements, in these and other provincial areas of Europe.

It is interesting to note that in Europe language deviations are often at the periphery of a nation's frontiers, as in Alsace, Brittany, the Basque areas of France and Spain, along the Pyrenees, the Südtirol in northern Italy, Catalan in Spain, Upper Selesia in Prussian Germany, and

Schleswig in Germany near the Danish border. Paradoxically, deviations at the borders of a country which defy assimilation at the same time reinforce the widespread notion of nations based on a common linguistic core (Petersen 1972, Hinot 1970).

2. TO UNIFY A MULTILINGUAL SOCIETY.

The aim is to bring unity to a multi-ethnic, multi-tribal, or multi-national linguistically diverse society.

Two examples of multilingual nations in which education has been used to promote national unity are Ghana and the USSR.

In Ghana there are estimated to be between 47 and 62 languages spoken. The major ones are the Akan dialects, particularly Fanti and Twi, and Dagbani. These operate to a limited extent as lingua franche in the regions where they are used. Other important languages are Ewe, Ga Adangbe, and Kasem. The official language of the country is English, but nine indigenous languages have been given the status of national languages, their selection having been based on their use in other neighboring countries as well as in Ghana. In the schools, the policy has been to use local vernaculars for the first few years of primary education, shifting to a lingua franca of African origin in the middle years of schooling, at least in areas of linguistic differentiation, and then using English at the upper levels and university education.

There are textbooks in Fanti and Twi and Fanti, Twi, Ewe, and Ga are all specified as curriculum and examination subjects. The use of vernaculars at the lower levels to assist the school child in cultural adaptation was part of British colonial policy.

Policy in post-independence Ghana stressed linguistic unification, with even more time devoted to English. The political and economic needs of the country took precedence over the psychological needs of the child (Spencer 1963, Armstrong 1960, Foster 1965, Graham 1971, Lewis 1962).

In the Soviet Union, non-Russian peoples comprise nearly half of the country's entire population and are steadily increasing in numbers. A Soviet aim has been to unify all groups into one with a predominantly Russian language and tradition through an educational policy designed to foster unity in diversity.

Of 109 nationalities, 59 are national ethnic groups having more than 20,000 members, with strong feelings of national consciousness expressed in a native language and native literature. There are 14 non-Russian republics, each of which represents a large ethnic group, and several autonomous republics, and in many of these there have been recurrent nationalist stirrings.

Russian is the official language of the Soviet Union and the medium of communciation between federal and state governments, and between Soviet citizens. But fully one-third of the population of the USSR, according to official records, speaks an indigenous language other than Russian as its mother tongue. Thirty-five percent of the pupils in the schools are taught in a language other than Russian. Fifty-nine languages are used as media of instruction throughout the USSR. (The Baltic languages use the Latin script, the Georgian and Armenian languages have their own alphabets, and the language of other minorities use the Cyrillic alphabet which Russian uses.) The policy of the government is to educate the Soviet child in his mother tongue during the early years of his schooling.

The pattern of bilingualism in the Soviet Union results in a complex pattern of bilingual education. Forty-one percent of the schools use the major language of the republic in which a school is located as the language of instruction. However, the Russian Republic, not only is the major language Russian used in the schools, but 44 additional languages also serve as media for teaching, although pupils from the small minorities in that Republic who do not speak Russian as their mother tongue represent only 6% of the population. Smaller ethnic groups in other republics also enjoy political and cultural autonomy and their languages are used in schools and in local government and other institutions.

As a result of school reforms in 1958, Soviet parents have the choice of placing their children in schools conducted in their native tongue, or in Russian-medium schools. The other (non-medium) language is then supposedly elective, but, in fact, Russian is required as a second language.

In contrast to Tsarist Russia, the Soviet government set out to stimulate the growth of national cultures, seeking to preserve the national languages of the republics and, where crucial to education, the minority languages as well. Mother tongues were seen as vehicles to communicate

Soviet ideology. Colleges and universities used the language of the republic as well as Russian in Belorussia, Uzbekistan, Armenia, Tadzhekistan, Kazakhstan, Turkmenia, Kirghizia. The idea seems to have been that if Russian was studied and accepted as a second language it would not be resented nor become an issue to fuel nationalist sentiments.

At the same time, by requiring Russian as a subject in the schools and pushing its increased use for official and public purposes in the republics, the government has tried to encourage expansion of Russian culture and the uniting of Soviet peoples as a single people. Today, Russian is usually the language of instruction for the children of officials and army officers transferred around the country. Russian medium schools seem to be preferred over 'native' schools in urban areas. Books written in Russian get published more rapidly than those written in other languages. Most higher education is now in the Russian language, except for some universities in the Ukraine, Georgia, and Armenia. Russian is a prerequisite for entrance into institutions of higher learning, and a Soviet citizen has to use Russian to get ahead in the party apparatus (Wohl 1973, Kreisler 1960 and 1961, Kolarz 1952, and Barghoorn 1956).

3. TO ENABLE PEOPLE TO COMMUNICATE WITH THE OUTSIDE WORLD.

> The aim is to introduce languages of wider communication in addition to the unifying national language so as to make it possible for nationals to interact with foreigners.

To cite just two of the many examples, in Nigeria English was adopted as the national language, after its long pre-independence use, first as a European trade language and then as a colonial language. Other non-indigenous languages of wider communication, such as French and German, are also offered as foreign languages at the higher levels of education with the aim of training some Nigerians for professional, commerical and diplomatic contact with industrialized countries where those languages are spoken.

And in the Soviet Union the teaching of foreign languages has been a major concern of policy makers, particularly because of the need of scientists to profit from achievements in other countries, and the urgency for the government to expand its international trade and extend its participation in international affairs. In all of the five types of Soviet schools, a choice of languages is offered. Foreign

language instruction is included in the schooling of pupils with speech difficulties. There are special foreign language medium high schools in which certain subjects are taught through the medium of a single foreign language. These schools are highly selective and prestigious, but foreign languages are also used as the media of instruction for certain subjects in many of the "all-age or general education" schools.

4. TO GAIN AN ECONOMIC ADVANTAGE FOR INDIVIDUALS OR GROUPS

The aim is to provide language skills which are salable in the job market and can put a person ahead on jobs and status.

Thailand and Japan are two examples of countries which need large numbers of trained personnel who have some proficiency in English or in other internationally useful languages. Thai and Japanese are fully modernized languages serving the complex requirements of economic and scientific activities within their countries, but their usefulness falls off (abruptly in the case of Thai, to a lesser but critical degree in the case of Japanese) when this activity is carried on with other countries. Therefore pupils who will be going on to jobs in business, government, or technology need bilingual schooling. The economic premium placed on language skills in both countries is reflected not only in the variety of bilingual education used in government and private schools, but in the large numbers of commercial language schools, and in the demand for, and good pay offered to, native-speaking English tutors.

The goals of bilingual education may be more idealistic than practical:

5. TO PRESERVE ETHNIC OR RELIGIOUS TIES.

a. The preservation of ethnic or religious identity in an individual or group may or may not go against general national goals.

In the United States more than 2000 ethnic-group schools offer language instruction, and often religious or other classes, after school hours or on weekends, for the purpose of maintaining ethnic identity. Although the implicit national goal of assimilating immigrant ethnic groups into the mainstream is not served by these schools, they do not greatly threaten the goal, since they have little

affect on the speed with which their pupils acquire English and are ultimately absorbed into American life. However, these schools are the most active language maintenance institutions in immigrant communities and they survive longer in the face of the formidable odds against them than other ethnic-group institutions which seek to promote linguistic continuity (Fishman 1966).

In Ethiopia, on the other hand, national goals of education for economic development are closely served by two traditional patterns of literacy acquisition: the Ethiopian Orthodox church-school, and the Muslim Quranic school. Both have long provided church education and basic competence for religious observances to the young in those communities. The child who learns to read and write Geez, the classical liturgical language of the Ethiopian church, will then also be able to read and write Amharic, the national language of Ethiopia, and Tigrinya, another major language, since these use the same alphabet. Moreover, the child is taught Geez in Amharic, so that if it is not his mother tongue he learns it in the process of his religious training.

The child who learns to read aloud, to recite from memory, and to write sections of the Koran in Arabic (ordinarily with little or no understanding of what he is reading or reciting) may be picking up skills in a language which is of limited use in broader Ethiopian society; but his training, like that of the child in the Orthodox church-school, prepares him to enter a government school or other institution, and thus serves as his basic primary education.

An increasing number of pupils are becoming literate in these two traditional systems, and the systems themselves are being modernized to incorporate new methods, materials, and subject matter. The Ethiopian government is allying itself more purposefully with the traditional schools and providing sponsorship, financing, and curriculum guidelines. At the same time, the traditional religious schools are feeding fewer graduates into traditional religious higher schools and more of them into government higher institutions (Ferguson 1971).

b. Preserving a child's ethnic heritage by arbitrarily tying him to it in school may be counter-productive if this policy has a retarding effect on his learning progress.

In the Republic of Ireland children live in an overwhelmingly English-speaking environment and are exposed to

the Irish language only in the schools, under the government's policy of promoting the restoration of Irish as the national language. Studies of the impact of using Irish instead of English as the medium of instruction in the schools suggest that Irish children will be educationally handicapped, at least for the period of time it will take Ireland to evolve its policy of national bilingualism in a monolingual environment.

More specifically, the findings show that English-speaking Irish children who are learning arithmetic in the Irish medium do poorly in problem-solving and are almost a year behind those who are learning arithmetic in the English medium (although their performance in mechanical arithmetic operations is not affected). The children's Irish language ability is not improved in the process, nor is their English language ability in any way weakened.

The facts indicate that incentive is a key to the success of education in other than the mother tongue. Contrast, for example, the immigrant youngster in the United States with the native Irish child. The immigrant youngster has enormous incentive to learn English because it is all he hears around him and he is rewarded with acceptance when he learns it. The Irish school child has little incentive to learn Irish; his environment is English-speaking and he can only acquire this second language from his teachers. The motives for learning Irish are abstractly cultural and political, not urgently practical (Macnamara 1966).

> c. A child may have the incentive to learn through the medium of the language associated with his ethnic heritage (which may even be his mother tongue) and yet be hindered by the linguistic limitations of the particular language for teaching certain subjects.

For example, Yoruba, the language spoken widely in Nigeria, is not well-suited for teaching standard decimal arithmetic because of the Yoruba number system. On the other hand, Kpelle, a language and people in Liberia, does have a decimal number system which is essentially like ours, and objects are counted. Although there is also a well-developed system of terminology for placing objects into sets, the classification system implied by this is not normally used in every-day language. Moreover there are no abstract arithmetical operations; the Kpelle do not work with pure numerals nor can they speak of them. All arithmetic is tied to concrete situations and multiplication and

division exist only as repetitions of addition and subtraction. Operations are generally carried out on numbers up to 30 or 40. The fraction system is rudimentary: the term "half" is either used as a general term for any part of a whole (1/10, 9/10, etc.) or treated as a meaningless symbol in arithmetic operations. Kpelle terms for relations of equality, inequality, and comparison between objects and sets of objects are in graded series according to degree of sameness or similarity.

Mathematics education for the Kpelle must be adapted to the linguistic facts of the Kpelle language if it is to be carried out in Kpelle. If it is carried out in English, it must be adapted to the very real differences between the Liberian pidgin English spoken by many pupils and teachers, and the standard English used in mathematics textbooks (Gay and Cole 1967).

6. TO PROMOTE UNDERSTANDING BETWEEN PRIVILEGED AND DEPRIVED GROUPS.

The implication may be that the more fortunate have a responsibility to the less fortunate which can be fulfilled partially by learning their language to communicate with them.

A notable example of this goal is the French-English project in St. Lambert, Quebec, which has been reported extensively by J. E. Lambert and R. C. Gardner (Lambert and Gardner 1959, Gardner 1960, Lambert, Gardner, Olton and Tunstall 1962). Briefly, parents of English-speaking children volunteered to enrol their children in French medium schools where the youngsters received no formal education in English. At the end of the first year, a battery of psychological, language, reading, and personality tests showed that the children were all within the norms for their age and grade level. Four years later, they were doing as well as their peers in both French and English.

A similar project has been attempted in Culver City, California, where English-speaking children (primarily from well-to-do homes) are sent to a Spanish-medium school, in an effort to enhance communication between the Anglo and Chicano communities in this suburb of Los Angeles.

7. TO HELP MEET THE INDIVIDUAL'S SPIRITUAL OR EMOTIONAL NEEDS

Language can be used in education as a distinctive channel for thought and perception within a culture. Or it can be a medium in the educational process for the transmission and maintenance of cultural forms and social habits.

8. TO INTRODUCE STUDENTS TO FOREIGN CULTURES VIA LANGUAGE.

a. Language may be learned along with the culture it belongs to, with the primary aim of making the student more aware of other lands and peoples.

Many FLES (Foreign Language in Elementary Schools) programs in the United States have this aim, and, in some cases, more culture than language is learned when this is the main goal.

b. The learning of language does not necessarily imply the learning of culture.

A language may be formally acquired independent of its culture of origin. Ceylonese children, for example, learn English as it is used in Ceylon, not as it is used within the context of British culture. This is true in many countries where English has become a national or international language.

9. TO USE THE LEARNING OF LANGUAGE FOR ITS OWN SAKE.

A language is considered worth learning for its own intrinsic value, not as a vehicle of culture or for any other end, but because it is the key that unlocks new views of reality and multiplies cognitive experience.

This goal may underlie the learning of a classical language, such as Old Icelandic or Persian, for its literature, or the learning of a living language in order to speak and use the language with those who speak it natively.

The goals in bilingual education may be imposed by a dominant group on the society as a whole

11. TO SPREAD AND MAINTAIN THE USE OF A COLONIAL LANGUAGE.

This goal, which is similar to the mainstream goal, is to socialize an entire population to a colonial existence and a colonial language.

India is an obvious example. The English language is a pervasive and dominant feature of Indian national life today because it played a central role in pre-Independence India as the language of the colonial British government, and before that as the language of traders. In 1600, the East India Company was awarded a charter to develop trading interests on the subcontinent. The British Parliament assumed more control after 1757, and, one hundred years later, it took over from the East India Company and governed India as a colony until 1947.

For approximately the first 80 years of India's colonial existence, English was the de facto language of administration. In 1835, English was deliberately chosen, over the Indian vernaculars, and Sanskrit and Arabic, as the language of government and education, as a result of a recommendation made by Thomas B. Macaulay to the British Governor-General.

In his recommendation, Macauley argued for the English language on the grounds that it had the lexical resources needed to educate a class of Indians for modern government, that it provided direct access to bodies of scientific and other knowledge, and that it was an ideal medium for educating the elite class of Indians who would be the link between the British rulers and the masses of uneducated Indians. Thus English became the medium for primary and secondary education.

Vernaculars began to replace English in the lower grades after 1921 and at the secondary level after 1937, and there were post-independence campaigns to replace English entirely with one of the indigenous languages. Nevertheless, English has remained the language of science and technology, big business, the courts, the legislative bodies, most state government transactions, and university instruction. It is widely used in the print and broadcast media, as a language of publication, and for communications and transportation. A command of English is a pre-requisite for the better jobs everywhere in India.

Part of the reason for the maintenance of English as a unifying national language after its spread under colonial rule is that India's language situation is so complex. The

most suitable alternative to English as a national language would be Hindi/Urdu and its Hindustani varieties, since it is the indigenous language spoken by the greatest number of people (over 150 million), but its use is almost exclusively limited to the northern states of India. Hence the stipulation in 1963 by India's Parliament that English might continue to be used for official purposes as long as was necessary, although Hindi had been constitutionally established as India's official language (Chatterji 1954, Le Page 1964, Ohannessian 1966a and 1966b, Spencer 1963).

The spread and maintenance of a colonial language was also a primary goal of bilingual education in Algeria under the French. Arabic and French were used as media of instruction in the schools, with the aim of socializing an Arabic-speaking Algerian population to the increasing use of French, and to support the French colonial economic and administrative system.

Still another example is the Ivory Coast, which to this day strikingly reflects the features of its French colonial past. Though the major vernacular languages have a place at the lower levels of trade, and in broadcasting, French is the language of government, communications, and commerce, and French is used as the medium of instruction from the child's first year of school. There is no provision for teaching indigenous languages as school subjects (Rumford and Orde Brown 1935).

11. TO HELLENIZE OR SUPERCHARGE THE EDUCATION OF ELITES.

> Much of bilingual education in the world is primarily for elites, and much of that which is now generally available to all began as education for elites.

The case of India, cited above, also applies to this goal. In addition, Mexico is one of many countries in which there are alternative schools providing bilingual education to elites as well as government schools serving the majority. For example, a German language medium school in Mexico City serves not only the sons and daughters of German diplomats and businessmen living in Mexico, but also the children of any Mexican or foreign families who are able to pay for it.

In Europe, there are six multi-language international schools conducted under the jurisdiction of the European Economic Community (the Common Market). These schools,

located in Karlsruhe, Germany; Luxembourg; Bergen, Norway; Varese, Italy; Brussels; and Mol-Geel, Belgium, are open to the children of EEC officials and employees, as well as to the children of parents unconnected with the organization, if there is room and they can pay the high tuition.

First graders are taught in their mother tongues in all subjects. In the second year, another language is added. In the third year, all children regularly attend "European classes" in which the four official EEC languages -- French, German, Italian, and Dutch -- are used interchangeably. By the secondary education level, many subjects, including biology and history, are taught in a language other than the pupil's native tongue. After he decides whether he will emphasize sciences or arts, the student is taught his chemistry or philosophy in one of the other languages. He also may elect to learn English, and Greek or Latin. By the time he graduates, the pupil can speak five languages and has learned in three or more of them.

The Common Market schools have been flooded with increasing numbers of applicants each year. School authorities express concern about attracting students for prestige reasons alone, but the schools undeniably fill an elitist function, and are an ambitious bilingual education experiment for a select group.

The European Atomic Energy Community (Euratom) has a similar international multilingual school in Italy, and the United Nations International School in New York City, for the children of UN officials as well as others not connected with the UN, offers bilingual instruction to the offspring of the elite.

Attempts have been made to spread the idea of European integration through schooling which would be pan-European in design and approach, and would be multilingual in practice. The Council of Europe and the European Coal and Steel Community have contributed to this aim. The College of Europe at Bruges, Belgium, founded in 1950, offers bilingual instruction in French and English; an applicant must use both languages to be admitted, and for his examinations, although he may do his thesis in just one language (Eicholz 1968).

12. TO GIVE TWO LANGUAGES ALREADY UNEQUALLY PRESENT IN THE SOCIETY EQUAL PROMINENCE.

Finland has been bilingual Finnish-Swedish since prehistoric times, although only 9% of a present-day population of 4 million have Swedish as their mother tongue. For a period of 600 years, Finland was a part of Sweden and, historically, Swedish cultural and linguistic influences have been strong everywhere in Finland. Until the end of the 19th century, the upper class in Finland was almost exclusively Swedish. There is a particularly Finnish pronunciation of the Swedish language spoken in Finland, and there is also considerable word borrowing from Finnish into the Swedish spoken in Finland.

Unlike many other countries with two or more languages, the Finnish- and Swedish-speaking segments of Finland's population have always been integrated parts of the society. The native Swedish-speakers, however, represent less than one-tenth of the population, and, consequently, an enormous effort has been required to insure that Finland's educational system makes use of the Swedish language, in rough balance with the dominant Finnish language. The attitude of Finnish speakers toward the requirement of learning Swedish in school seems to be that learning "the other national language" is a drudgery, mainly because it is unrelated linguistically to Finnish and therefore harder to learn. This attitude does not seem to be tainted with any resentment toward the Swedish-speaking people. (Runeberg 1971)

The implicit goals of bilingual education vary from society to society, often overlap within a given society, and may or may not reflect the aims of the society as a whole. Nevertheless, such goals exist and are always laden with value judgements which can lead to controversy between educational agencies.

In 1951 a UNESCO study asserted that every child has the right to begin his formal education in his mother tongue and to continue in it as long as the language itself and the supply of books in the language permitted.

"We take it as axiomatic," the study said, "that the best medium for teaching is the mother tongue of the pupil." (UNESCO 1953, Bull 1954)

Since that statement was made, arguments and counter-arguments have been presented in a steady stream around the world.

In some bilingual countries language policy is established and implemented by language planning agencies. If a particular vernacular language does not have adequate vocabulary resources for higher education but can nevertheless be used as a bridge at lower levels of education, these agencies decide how many years the language will be used in elementary school before the switchover is made to a more adequate language. Such agencies may also arrange for vocabulary expansion of the vernacular language to respond to the needs of modernization.

4. Much of the controversy over bilingual education is due to the fact that the implicit goals have little to do with language per se but rather to the attitudes and expectations of people within the society.

For example, if a youngster's parents, teachers, neighbors, and, above all, peers place a high value on a language or language variety and use it around him, the youngster will learn it. The schools can help, but they cannot do the whole job of adding a language or replacing one with another.

In the United States the immigrant child is under steady pressure from all sides in his new environment to learn English and to lose his immigrant language, although there may be counter influences at home to retain the language (Fishman 1966).

In Ethiopia, the memorization of the Koran by Muslim children, and of the Psalms of David by Ethiopian Orthodox Christian children, is accomplished without recourse to systematic learning methods or even, in the case of Quranic training, to understanding what is being memorized. Yet the high value placed on a youth's having completed one of these tasks, and the status he thereby achieves, motivate him to accomplish it (Ferguson 1971).

In Schwaben, a state in southwestern Germany, the child's German dialect at home is very different from the standard German he encounters when he first enters school, yet he learns the standard language quickly. Schwabisch children simply come to school expecting to learn school German -- it is part of the whole important event of beginning school -- and they do it.

By contrast, many American Black children who speak Black English at home have trouble with standard American school English.

Although the educational system can be a major means of spreading a language, it is not always the most important means. Language may spread with the help of the educational system or independent of its influence, or even in spite of it -- that is, counter to the language policy aims of the system.

In Nepal, the Nepali language spread at first largely independent of education. It was widely spoken over the whole country long before a national policy of universal free primary education was adopted and schools began to appear in remote hill areas where they had not been before. When the schools did increase in number and accessibility, they simply lent support to the use of the Nepali language, and its standardization in popular use, by Nepalese who spoke other mother tongues.

In East Bengal at the time of Pakistan's partition from India, Urdu was designated as the language to be used for official purposes, but it failed, in spite of its promotion by Pakistan's founder Mohammed Ali Jinnah and the Muslim League. Bengali, which was already present as the mother tongue of the overwhelming majority of East Pakistan's population, prevailed. Bengali's status as a national language on equal terms with Urdu was not secured until there had been prolonged protest, bloodshed, and civil instability which were intolerable to the national leadership. And even then the seeds of a nationalist movement which would grow beyond control 17 years later were already sown by the language issue. East Bengal was a case in which language policy for national life and for education ran so blatantly counter to the practical facts of language use and to popular emotions that it was doomed in advance to fail.

Both historically and internationally bilingual education has had a prominent role in the development of cultures and of nations. Not only did literacy begin with the ancient bilingual Sumerian and Akkadian tablets, but all education includes the more subtle bilingualism of language "registers".

In order to define and implement bilingual education programs today, it seems important to examine the implicit as well as the explicit goals, and to consider the attitudes which influence those goals and their realization.

PEDAGOGICAL MODELS OF BILINGUALISM -- A SOCIOLINGUISTIC APPRAISAL

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Within the past decade, governmental support has grown for the development of bilingual education programs for large linguistic minorities in the United States, and particularly for Hispano-Americans.[1] Contrasting with an earlier insistence on total linguistic assimilation through public-school disapproval of the in-school use of native languages other than English, the newer governmental policy is motivated by considerations which are varied and, while usually complementary, sometimes perhaps in conflict. Some are largely political, being a response to minority-group insistence on bilingual education. Others are more altruistic, involving a conviction that minority languages are a part of the national, as well as minority, cultural heritage, and should accordingly be preserved (or in some instances restored) through formal instruction at public expense. Still others are largely practical, as is the contention that bilingual education will increase both verbal and non-verbal performance in school, and social mobility after school.

Both the multiplicity of motives for initiating bilingual education programs and the inevitable range of experience and competences available for undertaking them have led to varying results in their implementation so far. Because of this, there is now a tendency for educational policy-makers, especially at the governmental level, to exert a great deal more quality control on future bilingual programs. Yet suitable criteria for defining quality, whether at the planning or evaluation stage, are still rather elusive -- no doubt in part due to the multiplicity of motives for implementing bilingual education programs in the first place. Programs which are undertaken largely as a political response to community pressures for bilingual education will tend to be considered by their initiators as successful if the consumer-community is satisfied with them, regardless of the extent of their demonstrable pedagogical effectiveness. By the same token, programs which are implemented in order to institutionalize minority-group languages will succeed definitionally by means of the symbolic recognition of the minority language involved in their mere

establishment. Bilingual education programs which commit themselves to measurable improvement in the intellectual achievements of their pupils are, however, somewhat more difficult to evaluate, and indeed to plan. This is because an extremely complex set of discrete behavioral variables are involved, some of which may be psychological (i.e., associated with the mental characteristics of human beings), some of which will be cultural (associated with the world view, life styles, and folk-knowledge of a particular people, and many of which will be linguistic (associated with the structural patterns of particular languages).

Because the theories of modern education are psychology-inspired and its methodologies psychology-oriented, there is no want of psychological models for planning educational programs of whatever kind, bilingual or not, and no want of psychological instruments for evaluating their results. In fact, there may be too many; or at least they may be applied too comprehensively, since it has been the conclusion of many recent reevaluations of education for minority-group children that many of the so-called "psychological" problems which such children evidence in school are actually the result of linguistic or cultural conflict. Thus, what the planners, implementers, and evaluators of bilingual education programs are sorely in need of at this point are more adequate (in the sense, as will be demonstrated, of more realistic) cultural and linguistic models of bilingual education. A substantial contribution to the reformulation and evaluation of bilingual education programs should accordingly be forthcoming from a budding field of social science which concerns itself specifically with the relationship between language and culture, sociolinguistics.

At one point in the development of a comprehensive theory and methodology for the field of general linguistics, it was held most effective to describe any and all language in and of itself, without regard to relationships which it might exhibit to other kinds of human behavior. Particularly opposed at this time were descriptions of language which formally tied language production to underlying mental processes. 'mentalism' was the disdainful term used to designate such unwanted heterodoxy. And while the influences of underlying cultural perspectives on language form and function were discussed (this was the content of the much-debated "Whorfian hypothesis"), the influences on language of social structure and social context tended to be minimized to the point of being regarded as little more than contaminants by some linguists. This aspect of the history

of modern linguistics would be of little relevance to a discussion of bilingual education, were it not for the fact that it was precisely at this period that the discipline began to exert a strong influence on the theory and practice of language teaching, especially foreign language teaching. Thus, to the present time, even "linguistically sophisticated" language teaching tends to be somewhat mechanistic and tends to be carried out in terms of language usage which, while reality-oriented to the extent of avoiding older "bookish" forms, is still essentially monostylistic and insensitive to the social meanings and distributions of structural variation within the language as used by its own speakers. Now, stylistically rigid and socially non-descript language may be well and good when learned and used by foreigners, but it is another thing altogether to present this kind of language in a bilingual education program as a reflection of the native language of the pupils. Obviously, the pedagogical use of a language which the pupils already use in a real society must be much more sensitive to social variation than the teaching of that language to foreigners would have to be. But language-teaching methodologies -- developed, as they usually have been, for the teaching of foreign languages -- do not have this kind of social sensitivity instilled in them.

Within the linguistics discipline, there was an eventual expansion of theory and description to take account of the relationship of language to other kinds of human behavior, resulting in the formation of specialized branches of the discipline, two of which are of special importance to bilingual education. One of these is psycholinguistics, which concerns itself with the interaction of linguistic behavior and mental processes, and the other is sociolinguistics, which undertakes the study of the interaction between language usage and social behavior. Of course, since social behavior also relates to mental processes, and since these must in some instances be close to those underlying language, there is bound to be a certain amount of overlap between the concerns of psycholinguists and sociolinguists. Yet there are still fundamental differences in focus, methodology, and goals. Psycholinguists are particularly interested in uncovering universal relationships between language and thought -- a goal which they pursue largely through controlled experimentation, a methodology borrowed from psychology. Sociolinguists, on the other hand, are busy describing varying patterns of language usage in different social contexts; their methodology blends the descriptive techniques of linguistics and anthropology with

the survey techniques of sociology and political science.[2] Furthermore, the methodological differences between psycholinguists and sociolinguists, as well as their interests, orient the former more toward the study of individuals and the latter toward the study of groups. Finally, while both psycholinguists and sociolinguists are interested in attitudes toward socially-marked language differences, and in the ability of individuals to differentiate between them, psycholinguists focus on the learning processes by means of which such differences are internalized by the individual, and sociolinguists focus more on the structural characteristics of socially-marked language differences and their societal functions.

From the foregoing, it should be clear that while psycholinguistic studies will be most useful in the development of effective classroom techniques in bilingual education, sociolinguistic studies would be most useful at the initial planning and policy-making stages. That is, sociolinguistics offers insights into the selection of suitable content and goals for bilingual programs, while psycholinguistics furnishes information on the best methods to use for teaching that content and achieving those goals. Yet it is ironic that by far the greatest linguistic contribution to the literature on bilingual education has so far been essentially psycholinguistic in nature -- something on the order of the cart being supplied before the horse. As a result, bilingual education plans and programs exist, particularly for Hispano-Americans, which show some awareness of psycholinguistic research on attitudinal and heuristic aspects of the problems to be faced, but little if any awareness of the sociolinguistic characteristics of bilingual communities of the Hispano-American type. Thus virtually no allowance is made in these programs for the eventuality that special varieties of Spanish and English might need to be involved, or that bilingualism, for actual bilingual Hispano-Americans, might be something quite different from what educators conceive of it as being, or how they envision it as a goal.

As yet, there seems to have been no serious attempt to construct a bilingual education program on an empirically-derived sociolinguistic model of the intended consumer-community -- that is, to have the program reflect the actual linguistic patterns of the speech community, and to relate these in a structured and pedagogically meaningful way to whatever goal behaviors the program might have. One might argue that the main reason for this state of affairs is that

relevant sociolinguistic information is only now becoming available. But even with ample amounts of such information available, it is doubtful whether the task of incorporating it into bilingual education programs would be an easy one. The difficulty is that existing approaches to bilingual education are actually far from being sociolinguistically vacuous; it is rather that the sociolinguistic content of current bilingual education programs derives from tradition and assumptions, and thus lacks both the accuracy and the complexity of empirically-derived sociolinguistic knowledge. Every bilingual education program thus embodies a sociolinguistic model, if only to the extent that all decisions made in the course of its development as to linguistic content, teaching strategies, and pedagogical goals imply certain notions about the sociolinguistic nature of the intended consumer-community. Moreover, these implicit pedagogical models of bilingualism are not necessarily compatible with empirically-derived ones, i.e., they are not merely partial or simplified abstractions of sociolinguistic reality. In many ways, they tend to misrepresent reality to an extent which must threaten their pedagogical effectiveness. A necessary first step toward the sociolinguistic vitalization of bilingual education programs for Hispano-Americans would accordingly appear to be a critical examination of the models of Spanish-English bilingualism implicit in existing ones.[3]

An examination of the literature on Spanish-English bilingual education (including advocacy proposals, as well as pedagogical materials), most of which concerns Hispano-Americans in the Southwest, reveals a number of general albeit tacit assumptions which educators, governmental policy-makers, and even members of the consumer-communities themselves tend to share concerning the sociolinguistic characteristics of Hispano-American bilinguals or potential bilinguals. These assumptions cover both the forms of Spanish and English which such bilinguals can be expected to use, and the relative communicative functions of these two languages with respect to each other. There are, of course, other assumptions as well, but these are particularly important ones since they largely determine the selection of program content, the development of program methodology, and the interpretation of program outcome.

While important in their pedagogical effect, assumptions concerning the forms or variety of Spanish and English which Hispano-Americans can be expected to use are perhaps the most innocently acquired and transmitted of all, since they are embedded in the generally accepted meanings of

"Spanish" and "English", whether these designations are used alone or in phrases like "Spanish-speaking" and "bilingual in Spanish and English". For, unless qualified further, the names of most languages which have developed formal and written norms defining "correct" usage -- that is, of languages which have developed standardized forms -- are now taken as referring specifically, and exclusively, to those standard forms. Thus, when one says "German" or "French", this automatically means standard German and standard French, as spoken and written by educated users of these languages and (presumably) aimed at by others. To indicate any other forms of German or French, the common language designations would have to be further qualified, e.g., "Low German", "Accadian French", etc. By the same token, when Hispano-Americans are referred to as speakers of "Spanish" (and "English", when they are bilingual), it is inferred as a matter of course that the kinds of Spanish and English involved must be reasonably close to those used by relatively educated natives of, say, Mexico City and Dallas respectively. In other words, they will be varieties which reflect written (e.g., textbook) usage to such a degree that, conversely, written textbook forms of Spanish and English accurately reflect them.[4]

In a like manner, bilingual education programs for Hispano-Americans embody assumptions concerning the relative use of Spanish and English which they should attain as bilinguals. Implicit in the effort made in most such programs to impart equal fluency in both languages, and to teach all subjects at all levels in each, the assumptions are that Hispano-American bilinguals should know Spanish and English equally well, and use them to the same degree and for similar purposes. In part, these assumptions are but a continuation into bilingual education of the traditional goals of foreign language teaching, i.e., to make the student as fluent as possible a speaker of the foreign language, and to prepare him to use it abroad for needs not dissimilar to those which he has for his native language at home. But this pedagogical goal is also reinforced by a popular notion of what it means to be bilingual, which likewise stressed equal fluency and parallel functions. In the popular view, the little old Jewish lady down the street who is known to speak Yiddish to her husband, but who uses English (though with maybe a Yiddish accent) with everyone else, is somehow not really bilingual. Nor, in fact, would a teacher of Hispano-American children in a bilingual education program be likely to regard the functional specialization of Spanish and English in the out-of-school usage of many of them, who use "unela-

borated" Spanish with parents and peers and English (probably with a "Mexican" accent) for other purposes, as real bilingualism -- certainly not as a kind which ought to be tolerated, much less accepted, by the educational system. To be bilingual, in both the popular and pedagogical views, is to switch languages with the ease and frequency of a European aristocrat, to have the need and inclination to do so of a Levantine entrepreneur, and to sound native enough in both languages to qualify as a spy for either side in time of war. The pedagogical concept of Hispano-American bilingualism as requiring equal fluency in, and use of, Spanish and English also receives a certain amount of non-linguistic support from a common view of at least Southwestern Hispano-Americans as bi-nationals of sorts; that is, as Mexicans who are also citizens of the United States. This dual status is seen as making them potentially full participants in the national lives and cultures of both countries, for which reason they will have the same needs and uses for Spanish as a citizen of Mexico and for English as a citizen of the United States. Finally, this pedagogical concept of Hispano-American bilingualism is served by, and serves in return, the somewhat romantic expectation (actually a product of the "national resource" characterization of Hispano-American bilingualism which has frequently been used as a political justification of bilingual education) that the national society would be likely to have a need at some high professional or intellectual level for the linguistic skills of Spanish-English bilinguals.

In summary, the pedagogical model of Spanish-English bilingualism implicit in most bilingual education programs for Hispano-Americans would seem to represent a quite common and highly idealized expectation of what this (and indeed all) bilingualism ought to be like. That this turns out to be so should not be too surprising, since, in education in general, the curriculum has been the traditional place for pedagogical idealism to find its strongest formal expression. In essence, this pedagogical idealism involves the setting up of the behavioral ideals of the society which the school represents as, not only the goals of the educational process, but its sole content as well. Such steps may seem reasonable in terms of the tenets of pedagogical idealism, which are, first, that the behavioral ideals of the society are attainable, and secondly, that they are (in some sense which is presumed to be obvious to the school child) preferable to real behaviors which may be at variance with those ideals. The operating assumption is that the presentation of these ideals to the school child through the curriculum will -- or

should -- result almost automatically in the child's emulation of them, so that they eventually replace whatever variant behaviors the child may at first have engaged in. Yet even this formulation of the educational process may represent a form of pedagogical realism which is atypically realistic, in behavioral terms. For it is often the case that variations from the behavioral ideals of the society are not seen as alternative behaviors at all, but are seen rather as underdeveloped or pathological forms of the behavioral ideals. And where this is felt to be the case, educators will feel even less inclined to recognize non-ideal behaviors in the curriculum content.

In addition to its obvious popular appeal as an expression of the ideals of the society, reinforcement for pedagogical idealism is furnished by the fact that curricula developed in terms of it are often highly successful with highly-regarded members of the society. That this may be so merely because there is very little difference between the two sets of behavioral norms, is seldom taken into consideration. And of course the converse of this, that poorly-regarded members of the society may experience chronic failure in their performance on an idealized curriculum because of no clear relationship between its content and their own behaviors, receives almost as little consideration -- especially when, as in the case of bilingual education, the idealized curriculum is assumed to specifically represent the children's own behaviors. Yet scholastic achievement does appear to relate to the extent to which the curriculum actually reflects the children's out-of-school behaviors, or to the extent to which it furnished bridges between these and the curriculum goals when there is an appreciable difference involved. The issue, then, is the extent to which the idealized model of Spanish-English bilingualism implicit in bilingual education programs for Hispano-Americans does or does not represent real or realistic bilingualism for that population, and if not, then the extent to which such programs do or do not supply reasonable pedagogical transitions between the sociolinguistic realities of Hispano-Americans and the pedagogical goals set up for them. This is the issue, that is, to the extent that the level of academic achievement is taken as determining the success of such programs. For there are, as mentioned earlier, other criteria in terms of which the relative success of a bilingual education program may be measured. To satisfy ideological goals, it may be enough that a bilingual program is initiated and put through its paces. Or to satisfy political goals, it may be enough that the consumer-community is content with

whatever goes on. But if bilingual education programs are eventually to take their place within the functional context of modern education, they must work toward making their subjects intellectually viable in a competetive and increasingly technologizing society. And this means working toward maximum academic achievement, in terms of useful and beneficial goals.

What must be avoided at all costs is for bilingual education for Hispano-Americans to move blindly down the same path toward definitional self-stultification that, if an uncomfortably-close historical analogy will be pardoned here. American Negro education blazed a century ago. At an early point along that path, the behavioral goals posited for the newly-emancipated Negro population by its well-wishers, its spokesmen, and its educators became symbolic representations of that population's behavioral realities. These symbolic representations were, for the most part, idealized white behaviors; that is, the symbolic representation of the American Negro became that of a brown-skinned, middle class American white. This substitution -- almost total, in the enlightened rhetoric on race relations in the United States -- was the natural outcome of a historical process through which distinctively Negro (because often African-derived) behaviors were observed first by slaveholders, and wrongly indicated by them as evidences of innate Negro inferiority. Quite innocently, enlightened northerners (who seldom had an opportunity to observe Negroes closely or in numbers) therefore concluded that such observations were racistic in intent (which indeed they were) and accordingly descriptively false (which in fact they largely were not). The irony here was that, since the Negro stereotype was largely based on real Negro behaviors, any further observations of the same behaviors could and would be dismissed as racist stereotype. And since educators tend to be sociopolitically 'liberal' -- at least to the extent of not wanting to be labeled racists -- they would have no choice but to accept the symbolic representations of Negro behavioral realities as true. Indeed, traditional pedagogical idealism would incline them to do so in any case. And so it was that, in American Negro education more than in any educational endeavor in the United States to the present time, behavioral reality became redefined as myth, and myth as reality. Yet, since this rhetorical substitution coped only definitionally with the often immense differences between the curriculum content of Negro education and the out-of-school speech and life-ways of lower-class Negro children, the endemic academic underachievement of such children was virtually guaranteed. What is

more, since that same rhetoric precluded any consideration of language differences or cultural differences between the curriculum and the Negro child as a cause of such failure, once that failure came to be regarded as problematic, it has not been easy for educational reformers to remedy the situation.[5] A complicating factor here has been that precisely the same democratization process which has caused American educators to become more responsive to the academic problems of Negro children has also caused them to become more responsive to the wishes of Negro parents in efforts to deal with those problems. And since Negro adults tend as well to subscribe to the traditional symbolic representations of their behaviors (and those of their children), and reject empirical descriptions as 'racistic' and "stereotypic", educational reformers are now confronted with, not only a conflict between the traditional curriculum and the real behaviors of Negro children, but also a conflict between the needs of those children and the expectations of their parents. Additional confusion for well-meaning educators lurks in this situation in the current trend of developing "relevant" curricula for Negro children, but ones which in fact set forth an equally unrealistic set of new symbolic representations to stand for the real behaviors of such children. So it is that the confusion of behavioral ideal with behavioral reality, and pedagogical goal with pedagogical process, can become so entrenched in the education of minority-group children that effective reform becomes almost impossible.[6]

It is quite possible, of course, that American Negro education represents nothing more than pedagogical idealism operating in a context in which, though linguistic and cultural conflicts may be involved, the behavioral variables have been rendered too subtle by superficial assimilation to have been recognized by educators as behavioral systems in conflict. In fact, however, it is striking how much the theory and practice of Negro education in the United States mirrors the theory and practice of educating native peoples in areas of European colonial expansion, where the fact that different (and often conflicting) behavioral systems are involved should be apparent to all. In colonial French West Africa, to cite one case, the education of tribal Africans developed in terms of a political rhetoric which held that, since the colonial territory was regarded as an administrative extension of metropolitan France, African natives in the territory should regard themselves as black Frenchmen. And since (in terms of the cultural corollary of this same political rhetoric) the culture of metropolitan France represented

civilisation in its most evolved form, with the French language representing a principal langue de civilisation, Africans were to regard the acquisition of French language and culture as equivalent to becoming 'civilized'. It followed, then, that it was the task of colonial administration, and the colonial schools, to fulfill this goal -- this mission civilisatrice. So it was that behavioral differences between Africans and Frenchmen came to be regarded, not so much as alternative ways of acting and talking, each with its own historical, structural, and functional validity, but rather as different levels or degrees of social evolution toward "civilization". In such terms, traditional pedagogical idealism (reinforced, in this case, by the extreme normativism characteristic of French education in the mother country) would dictate that the most reasonable way to "civilize" Africans linguistically (that is, to turn them into French speakers) would be to treat them in school as if they were already "civilized" (that is, as if they were already French speakers when they entered school), by the exclusive use of French in the classroom.[7] As in most other colonial situations, while this type of educational approach failed with the masses, it did succeed for a small clique of European-oriented elites, who outdid the European colonial administrators in further perpetrating and propagating the same educational system, and the values which it represented. And with eventual independence, members of this same elite became the new nation's leaders, and were thus able to continue the same system into the post-colonial period. This is largely the reason why, regardless of the political orientation of the particular government, the newly-independent nations of formerly-French West Africa uniformly exclude vernacular African languages from their respective educational systems to the same extent as did the French before them. And where gestures have been made to include African culture-content in the curriculum, this has been done only in superficially formal and institutional terms, i.e., the teaching of the history of the African nation, rather than that of France. As far as such pedagogically-important cultural matters as spacial orientation in the classroom, teacher-pupil and pupil-pupil interaction, and patterns of performance, learning, and problem-solving are concerned, the classroom techniques employed in African schools have remained comme il faut, i.e., as is done in France.

Turning the comparison back around, such superficial efforts in the direction of developing a "relevant" curriculum in African nations resemble recent attempts in the United States to develop specialized education for black children,

where 'black history' has been added to curricula which otherwise, in language and teaching methodology, remain as 'white' as ever. But again, one must remember that American educational policy-makers turn, for advice on relevant content for the education of black children, to middle-class Negro elites who, like their African counterparts, have succeeded through traditional Negro education and who, while posing as spokesmen for the Negro masses, are in fact strong defenders of educational theories and practices which have continually failed with those very masses. Much the same process, though of course extended over a longer period of time, has also operated in the education of Indians in colonial and post-colonial Latin America.[8] And finally, this process has been carried out in all instances in the face of continuing (and sometimes even increasing) failure of the majority of students to perform well in terms of the idealized curriculum. And in all of the cases just cited, this failure has been particularly evident in school-language performance. Yet idealized curricula can be symbolically so important -- both to the originators of such curricula and to upwardly-mobile members of the culturally and linguistically different populations upon which these curricula are imposed -- that mass educational failure in terms of them is seldom seen as casting doubt on their effectiveness. Rather, the tendency has been to ascribe the failure to certain mental or linguistic deficiencies in the student population. These, depending upon the climate of opinion of the times, may be attributed to genetic inferiority, primitiveness, or environmentally-induced linguistic or cognitive deprivation.

For those who insist that all research must have immediate and widespread social utility, it should be instructive that an important breakthrough in dealing with the poor school language performance of colonial, post-colonial, and minority group children came, not from the study of their own performance as such, but rather from linguistic studies of language-learning among individuals who were often affluent, if not upper class. For the efforts of linguists to determine the causes of second-language learning problems stemmed from their own experiences as foreign-language learners and teachers. In essence, the issue on which linguists first focused their disciplinary perspective was why people found it more difficult to learn a second language than their first language, and why many, after years of exposure to the foreign language, continued to speak it in an obviously non-native way, e.g., with a so-called 'foreign accent' involving, not only 'mistakes' in pronunciation, but in grammar and word-usage as well. Linguists soon began to understand that such problems were realizations of a process which they called <u>linguistic</u>

interference, involving the use of the more familiar structures and usages of the learner's native language in producing the foreign language being learned, so that the characteristics of the former "interfered" with the production of the latter. Thus, the fact that most varieties of modern French have no h sound, and no variety of French has either of the English th sounds in thy or thigh would explain why a Frenchman attempting to say English his brother might say something like 'is brozzeur, while the French pattern of using masculine or feminine possessive pronouns, not according to the sex of the possessor but according to the gender of the thing possessed, would explain why a Frenchman would also tend to say 'is brozzeur for English her brother, and 'er sisteur for his sister. In a like manner, French je suis parti would produce I am departed for English I have departed or I have left, and so on.

It was not long before the theory of linguistic interference was well developed enough to form the basis for a new kind of foreign-language teaching methodology. This new methodology came to be known as the contrastive approach, since it involved teaching materials derived from a point-by-point comparison of the structures of the language being learned on the one hand, and the native language of the students on the other. The strategy was to overcome likely interference by focusing specifically on those aspects of the language being taught which differed from those of the language which the students already knew. Eventually, the contrastive method came to exert a strong influence on the teaching of foreign languages the world over. Naturally, this method was most effective when the student population was linguistically homogeneous (i.e., when they shared the same native language), and less effective when the students were linguistically diverse. Yet, while the contrastive method had its most intensive and immediate impact on the teaching of foreign languages as subjects, the language-learning problems which it was designed to deal with were no less in evidence in the difficulties which children from linguistic minorities (or indeed majorities, where their language was widely spoken but not the language of education) experienced with the "national" school language. It followed, then, that these problems could be alleviated by the contrastive method, i.e., by teaching the national or school language to children from linguistic minorities in terms of their native languages. Indeed, some scholars went even further, and urged the actual use of the native language of linguistic minority children for instruction (and not merely as a point of reference for teaching them another language,

in which instruction would be given), with the teaching of the national language being postponed and made independent of the teaching of other subjects. This latter approach came to be known as vernacular education. In their application to the education of linguistic-minority children, what the contrastive approach and vernacular education had in common was that both involved the pedagogical recognition (though to different degrees) of the minority language as a language to be discussed, if not actually spoken, in the classroom. And it was in terms of that common position that both the contrastive approach and education in the vernacular encountered much of the opposition to them.

The nature of this opposition is worth examining in some detail, since it exemplifies one of the most frustrating and yet inevitable issues to be faced by pedagogical reform in the modern sociopolitical context: the conflict between making the education of "oppressed" groups more competent, and making it more democratic. For, as long as the contrastive approach was limited to the teaching of one high-status language to speakers of another (the usual situation when a foreign language is taught as a school subject to middle-class students), the innovation was accepted as a matter of course by all concerned. But when the same innovation was extended to the teaching of high-status languages to speakers of low-status languages or dialects (as is often required in the education of minority-group children), the step suddenly became extremely controversial. Moreover, much to the dismay of sociopolitically "liberal" language teachers, the opposition emanated largely from spokesmen of the very populations whom the innovation was intended to benefit. In point of fact, however, the underlying cause of this opposition was not difficult to perceive; it had to do with the attitudes which minority-group speakers of low-status languages and dialects (or, at least, their spokesmen) tended to hold toward these, and toward the high-status languages which were a requisite -- indeed, a symbol -- of their upward mobility. For the contrastive method of language teaching, and vernacular education even more, required the pedagogical recognition of the language or dialect of the pupil, no matter how low its social status, in the teaching process. And this recognition was necessarily sometimes quite direct and overt, amounting (in the case of the contrastive method) to an explicit comparison of the patterns of the low-status language or dialect of the pupils with those of the high-status language being taught, or (in the case of vernacular education) actual teaching in the low-status language or dialect as an adjunct to, or anticipation of, instruction in the high-

status language. Yet, while the pedagogical recognition of low-status minority-group languages or dialects made a great deal of sense to language teachers, it violated the pedagogical idealism which had been traditional in the education of minority-group members, and it cast aside the much-cherished behavioral symbolic representations which minority-groups tended to present as public images of themselves. The linguistic components of these traditions typically took the form of a belief, by minority-group members themselves, that their low-status language or dialect was not "real" language, or at least not "accurate" language (in both the structural and communicative sense). Accordingly, they would be apt to label their own speech as "incorrect" or "broken" (where it was a dialect of the high-status language), or as "uncivilized" or "barbaric" (where it was a different language). Under such circumstances, the pedagogical recognition of their low-status language or dialect would be seen by minority-group members as amounting to anti-education by (1) failing to provide sufficient (i.e., total) exposure of the students to "real" or "proper" or "civilized" language, (2) failing to make a symbolic commitment to the potential linguistic mobility of the students by not treating them as actual speakers of the "good" language, and even (3) working for their downward linguistic mobility by "teaching" them the "bad" language or dialect.

Each of these assumptions was, of course, incorrect. The real purpose of the pedagogical recognition of the students language or dialect, no matter how low its social status, was (1) to teach the national or school language more effectively by "programming" the students' exposure to it in such a way as to deal with points of potential structural conflict between it and their own speech patterns, (2) to bring about greater linguistic mobility in such students by lessening the likelihood of failure in learning the national or school language, while at the same time giving them a formal awareness and appreciation of the linguistic legitimacy of their own speech, and (3) to make maximum pedagogical use of the linguistic skills which the students would already have when they enter school (indeed, students can hardly be "taught" a language or dialect which they in fact have learned to speak fluently before reaching schoolage).

Now, were they to have been voiced by middle-class majority-group members, such misconceptions of the educational process would have been dismissed as ignorance, and such misconceptions of language differences would have been

attacked as bigotry. But the fact that they were held by the minority-group members themselves and voiced by their spokesmen created a sociopolitical dilemma for liberal educators, since it was fundamental to the liberal mystique that minority-group members could not be more ignorant than others about the solutions to their own problems, and that oppressed people could not possibly be bigoted -- especially toward their own behaviors. And if it was oppressive to educate minority-group children effectively, it was a very diluted and impersonal kind of oppression that was involved, stemming more from history and "the system" than from the actions or attitudes of any single educator. But to insist on more effective education for minority-group children through educational reforms which were opposed by their parents and spokesmen seemed to be a much worse kind of oppression, since it was more immediate, more specific, and more personal. Consequently, when confronted with minority group opposition to educational reforms, no matter how logical or empirical the basis for those reforms, liberal educators have tended to leave them unchampioned, and to retreat back into traditional educational methods -- the very ones, usually, which have failed so much in the past. Indeed, the retreat by intended educational reformers is usually applauded by the minority-group members, who, when push comes to shove, prefer the accustomed plight of continued educational failure (which, after all, can always be blamed on the dominant group, or on the system) to the acute embarrassment of having their stigmatized behaviors formally recognized in the curriculum.[3]

Not all educators, however, have responded to this dilemma solely by flight. A few have insisted that it can eventually be resolved in such a way as to bring about minority-group approval of educational reforms which seem pedagogically necessary, but which such groups at first oppose. The solution offered is parental education and parental involvement in the educational process. Yet it is unlikely that minority-group approval of the contrastive method of language teaching or of vernacular education will result to any significant or workable degree, since the theoretical reasons for both approaches are too technical to be easily explained in laymens terms, i.e., they involve (1) abstract linguistic theory, (2) complex technical information about the structural details and interrelationships of specific languages or dialects, some of which may not even be regarded as "real" ones by the consumer community, (3) conceptions of the teaching and learning process which go counter to popular ones, and (4) the focus on real behaviors to solve educational

problems which members of the consumer-community may have a long-standing commitment to deal with only in terms of symbolic representations of those behaviors. Indeed, education to overcome popular opposition to educational reform may, in this instance, at least, be unworkably circular, since such a strategy would in fact require the minority group to achieve a middle-class intellectual understanding of pedagogical reforms intended to make the group linguistically middle-class, when the very reason for making minority-group members linguistically middle-class would be as a prerequisite to their becoming intellectually middle-class.

If pedagogical models implicit in bilingual education programs are taken as realistic models of the speech communities which they are intended to serve, then there would be little reason to anticipate either the educational failures of traditional monolingual programs or the controversy connected with contrastive approaches to language teaching or with vernacular education. This is because the bilingualism implicit in such programs involves the use of two languages of equally high status (and definitionally so, since otherwise it would be vernacular education, rather than bilingual education). But a question has already been raised as to the sociolinguistic accuracy of pedagogical models of bilingualism, especially as implicit in programs designed for Hispano-Americans in the Southwest, where informal bilingualism is common and is the result of over a century of Spanish-English contact. Given such a history, it would indeed be surprising if highly deviant (in terms of standard Spanish and standard English) varieties of these languages had not evolved in the region -- varieties which would reflect archaisms, innovations, and mutual influences. In fact, there are published observations that such forms of Spanish (e.g., Espinosa 1911) and English (Stewart 1964) have developed among Hispano-Americans of the Southwest. The extent to which these are used and, where used, to which they are structurally distinct enough from standard Mexican Spanish and standard American English to merit pedagogical recognition in bilingual education programs is still largely unknown, but preliminary evidence is such that the possibility of pedagogically-significant differences ought not to be dismissed. Quite the contrary, the implementation of bilingual education programs not based on such information would amount to a blind act. And the statements of Hispano-Americans regarding usage in their speech communities cannot necessarily be counted on to be a satisfactory substitute for on-sight research, any more than can the statements of any members of a behaviorally-stigmatized population. The

probability is great that such persons will not have enough of a technical understanding of their own speech patterns to be pedagogically useful, or, in any event, that they will present a symbolic representation of their groups behaviors as reliable information. Even more problematic, in this regard, is the extent to which sophisticated, image-oriented Latin American immigrants are becoming bilingual-educational spokesmen for Hispano-Americans -- a phenomenon quite parallel in cause and effect to the way in which educated, image-conscious West Indian immigrants have become educational spokesmen for American Negroes.[10] If nothing else, such Latin Americans can be expected to reinforce the traditional pedagogical model of bilingualism as the parallel and equal use of the two languages -- a model which, while it may correspond to their own situations, is highly unlikely to reflect either the actual or future state of bilingualism among Hispano-Americans in the Southwest.

It would be unreasonable to suggest, at this point, that the implementation of bilingual education programs for Hispano-American children in the Southwest be held up until adequate research has been carried out on the kinds of skills, linguistic and otherwise, which are part of their vernacular culture and which they therefore bring to school. However, such research should certainly be encouraged, if not insisted upon, by educational policy-makers as a guide to the evaluation of the outcome of such programs. For it may well turn out that an unreasonable amount of failure is experienced by bilingual education programs of the traditional type, and that that failure may in part be due to the lack of fit between the models of bilingualism implicit in them and the patterns of bilingualism learned by Hispano-American children in their own communities. That is, the pedagogical model of Spanish-English bilingualism now embodied in bilingual education programs may be little more or less than a kind of symbolic representation of Hispano-American linguistic realities. As such, it may be as unworkable with the children as appealing to their parents and spokesmen. And were this to turn out to be the case, the most obvious direction of educational reform -- the pedagogical recognition of the actual varieties of Spanish and English which Hispano-American children use, in the relationship in which they use them -- might render bilingual education no less controversial than vernacular education has proven elsewhere. The inevitable result of this would of course be that educational policy-makers would entrench in traditional bilingual education, with its associated pedagogical problems, or abandon bilingual education altogether.

In order for this likely tragedy not to be played out yet another time, it is necessary that the potential conflict between making the education of "oppressed" groups more competent and making it more democratic be anticipated well in advance for Hispano-American bilingual education. And since, like liberal colonial educators in other places and times, liberal American educators place teaching democratically above teaching effectively, any solution to this recurrent dilemma must, to be acceptable to them, be couched in political rather than pedagogical terms. Let bilingual educators and policy makers then see Hispano-American children as constituting an oppressed group, in and of itself -- one potentially oppressed perhaps as much (though in more subtle ways) by the linguistic and cultural symbolic representations and aspirations of Hispano-American adults (including their parents) and Latin American immigrants as by the linguistic and cultural norms of Anglo-Americans. Of course, children articulate their realities and their desires in different ways than adults, ways which are scarcely recognized by traditional mechanisms for expressing the "will of the people", where 'people' always means "adults". Children assert their reality by behaving as they do, so that the way to get them to "articulate" their reality is to study them. In such terms, far from being the mechanism of oppression which it is sometimes claimed to be by political activists, social science (including sociolinguistic research) can become a vehicle of political expression. And as far as "voting" on educational reform is concerned, children "vote" on pedagogical method and curriculum content five days of the week, nine months of every year: they do so by their response to the educational process -- that is, by their academic achievement.

This is, of course, what empirically-oriented educators already do with white, middle-class children. But when they deal with the children of "oppressed" minorities -- particularly with those for whom racial and/or linguistic and cultural differences are associated with minority status -- white guilt is likely to get in the way of empiricism and good sense. Thus the same educator who will stand up for the "new math" against hostile white parents by insisting that it teaches children more effectively will immediately back down from a black (or Hispano-American?) parent who is hostile to contrastive language teaching or vernacular education, even though the reason for adopting the approach in the first place was that it also seemed to teach children more effectively. Yet this kind of professional double-standard, while appearing to be liberalism, is probably more devastating in its educational effect on the minority-group child than dual systems of education ever were.

If the endemically-low educational performance of minority-group children -- including Hispano-American children -- is ever to be dealt with effectively, educators must come to worry less about being "good citizens" and more about becoming competent professionals. In the process, they must become much more empirically-oriented than they are at present -- more like doctors, if an analogy is useful. This change is particularly needed in bilingual education, where the complex interaction of different linguistic and cultural systems, each complex in its own right, is involved. Traditional pedagogical models must be questioned, evaluated, and replaced where performance is not adequate. Relativism must replace normativism, and empiricism must replace idealism. (What child was ever harmed more by educational experimentation and social-science research than by traditional teaching methods?) Pedagogical content must become more realistic, as must educational goals. This does not mean abandoning high standards of achievement; it means developing workable ways of achieving attainable goals. In bilingual education, specifically, it means developing a curriculum which, at one end, starts with the sociolinguistic realities of the Hispano-American child and builds on these until it produces, at the other end, an individual who is sociolinguistically effective both in his home environment and in his national mainstream. Traditional bilingual education programs would claim to be able to do this, but probably cannot; the 'end points' are simply not right, nor therefore is the interim content and methodology. Their restructuring in terms of more empirical sociolinguistic models, and their implementation in terms of more child-oriented political goals may eventually make this worthy goal possible.

NOTES

1. The term Hispano-American is used here to designate individuals, communities, and populations within the United States which preserve linguistic and cultural patterns of Spanish origin, even though perhaps influenced to varying degrees by Amerindian, African, or Anglo-Saxon linguistic and cultural patterns, or affected by innovations. Analogously, Anglo-American designates individuals, communities, and populations within the United States which function primarily in terms of linguistic and cultural patterns of English origin, though also with possible innovations and influences from other sources.

2. Sociolinguistic studies may focus on specific languages or societies, or they may involve cross-language or cross-societal comparisons. For comparative purposes, a number of sociolinguistic typologies have been developed for describing language-usage variables in multilingual societies. Of these, one of the most elaborate (Stewart 1962, 1968) categorizes in terms of four major language types, ten main functions, and six classes of degree of language usage. Yet even this scheme may be too crude for any but the most general cross-societal comparisons.

3. A preliminary effort of this type has already been made by Fishman and Lovas (1970).

4. The assumption being examined here is not the naive one that the spoken forms of Spanish and English of Hispano-American communities in the Southwest are identical to textbook forms of these languages. Rather, the assumption under consideration is the less extreme one that Hispano-American Spanish -- and English, in the case of bilinguals -- will be structurally close enough to normal written Spanish and English to obviate any special written accommodation in the form of a locally-adapted textbook language.

5. The history of the nature vs. nurture debate over Negro educational failure is discussed in Stewart (1970), and the linguistic aspect of that debate in Stewart (1971).

6. This is because these are considered the "right" or "most effective" way to learn. The problem, in terms of cultural labels, is further complicated by the possibility that, if Hispano-American children do show a tendency to employ non-Anglo-Saxon learning and problem-solving styles, these may not be entirely Hispanic in origin, but rather

survivals of Amerindian (in the case of the Southwest) or African (in the case of Puerto Ricans) cultural patterns upon which Hispanic institutions and traditions were superposed. Yet, while there is some question as to how enthusiastic Hispano-Americans would be about a formal pedagogical recognition of Amerindian or African components in their folk-culture, there is also a question as to how well they would succeed in terms of a curriculum in which such components were not recognized.

7. For a brief period during the nineteenth century, and particularly in the Senegambian region under the administration of Faidherbe (a military officer with strong interests in linguistics and ethnology), there was a temporary exception to this assimilationist educational policy in the form of vernacular education in Wolof (one of the most widely-used languages of the region), conducted by the Apostolic Mission of Senegambia. But education entirely in French became the rule when Faidherbe was replaced by colonial administrators without his anthropological and linguistic sophistication, and when education began to be conducted by the colonial government, rather than by the Church. Even here, one finds a reflection in the history of American Negro education. Public education for American Negroes had its beginnings in the "freedmen's schools" which were set up for slaves who had been liberated by Union forces during the Civil War. Initiated by New England abolitionists and church groups, and first conducted by volunteers from these organizations -- who, significantly, were not professional educators -- the early development of these freedmen's schools involved a great deal of informal experimentation toward finding effective teaching methodologies and curriculum content. In some areas (and particularly in coastal South Carolina, where these schools were first set up) volunteer teachers began to recognize aspects of the dialect and cultural patterns of their black pupils, and to adjust their methods and curricula accordingly. But later, when the Federal Government took over the administration of Negro education in the former Confederacy, with policy-making being handed over, first to governmental bureaucrats and then (under Reconstruction) to middle-class Negroes, there followed a complete rejection of the earlier empirically-derived curricula and methods, and their replacement by idealized models which can only be described as parodies of those traditionally used in white schools.

8. Here again, there was a brief period when education in the vernacular Indian languages was begun, largely under

the relativism of the Jesuits, but subsequently abandoned when the Jesuits were expelled. The switch to the exclusive use of Spanish in the education of Indians was indeed insisted upon by a growing clique of Hispanicized Indians (called ladinos, in most parts of Latin America), who became the spokesmen for the Indian masses.

9. As only one of many case histories of this dilemma, Boelaert (1953) is typical. The document consists of the proceedings of a meeting of the Royal Belgian Academy of Colonial Sciences, given over entirely to the issue of African languages in education in the Belgian Congo. It had been established through a great deal of psychological, linguistic, anthropological, and pedagogical research that Congolese children learned better if started in their African languages and moved only later to French -- the traditional language of education in the Belgian Congo. But it was also found that attempts to initiate vernacular education in the Congo would be vehemently opposed by African parents, who did not want their children taught in "barbaric" languages, but preferred them to have the same curriculum as the white (i.e., Belgian) children. Faced with this dilemma, the Belgian colonial educators favored a retention of the traditional (French) curriculum, since they felt that it was more important to educate democratically than to educate effectively. Since that meeting, "community control" -- in the form of independence -- has come to the Congo, and with it a retention of French as the only language of education. And the continued educational failure of Congolese children which this policy insures is now even less of an issue than it was before, since it is now the result of a direct expression of the will of the people. Examples of this same process at work in other colonial and post-colonial areas abound, and lest it be argued that this is only a temporary phenomenon in such situations, the case of Haiti should be recalled. Haiti became independent from France in 1801, almost two centuries ago. Yet formal education is still carried on exclusively in French, a language spoken natively by less than four percent of the pupil population of the country, a fact which is evident in the unbelievably poor school performance of most Haitian children.

10. The point here is not that the statements of educated Latin American immigrants about the bilingual education of Hispano-Americans will necessarily amount to misrepresentation, but rather that this is likely. Hopefully, there will be individuals of this category whose observations on the problem will be competent, realistic, and insightful. The point is that their "Hispanicity", their class-orientation,

and their foreign origins may create problems as well as advantages, just as do the particular kinds of "blackness", mobility-patterns, and foreignness for West Indians who speak for American Negroes. Ultimately, each person's competence must be judged on its own merits.

REFERENCES

BOELAERT, E., 1959. "Afrikaanse talen in he ondervijs in Belgisch-Congo." Bulletin des Seances; Academie Royale des Science Coloniales IV.

ESPINOSA, Aurelio Macedonio, 1911. Studies in New-Mexican Spanish. Revue de Dialectologie Romane 3:241-256.

FISHMAN, Joshua A., and John LOVAS, 1970. "Bilingual Education in Sociolinguistic Perspective" TESOL Quarterly 4.215-222.

STEWART, William A., 1962. "An Outline of Linguistic Typology for Describing Multilingualism." In: Frank A. RICE (editor), Study of the Role of Second Languages in Asia, Africa, and Latin America. Washington, D.C.: Center for Applied Linguistics.

STEWART, William A., 1964. "Foreign Language Teaching Methods in Quasi-Foreign Langauge Situations." In: William A. STEWART (editor), Non-Standard Speech and the Teaching of English. Washington, D.C.: Center for Applied Linguistics.

STEWART, William A., 1968. "A Sociolinguistic Typology for Describing National Multilingualism." In: Joshua A. FISHMAN (editor), Readings in the Sociology of Language. The Hague: Mouton.

STEWART, William A., 1970. "The Unacknowledged Role of Culture Conflict in Negro Education." Unpublished OEO Position Paper.

STEWART, William A., 1971. "Facts and Issues Concerning Black Dialect" The English Record 21:121-135.

Biculturalism-Bilingualism

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Introduction

All of us live in somewhat different worlds of experience, desires, controls. Some of these are shared with others, some are ours alone. Each perspective of being is, in some ways, a slightly different view of reality than any other. This paper will inspect some of the similarities and differences among people, particularly those which are thought of as bicultural and bilingual, to examine the circumstances in which these facts of life count or make a difference, as children move through their school experiences.

This paper is written from the dual perspective of a teacher-educator who believes in the possibility of excellence in all educational endeavors and an anthropological linguist who is trained to live and study in diverse worlds, to enter the minds and logics and terms of a wide variety of people. In order to explore the notion of biculturalism and bilingualism from this dual perspective the paper has been divided into four sections.

Section I shows how any child comes to interpret the world via particular perspectives and more specifically how he experiences the meaning of biculturalism and bilingualism.

Section II explores the meaning of biculturalism and bilingualism in modern America. This section indicates the dynamic aspects of the concepts and how their meaning varies widely according to place, time, and history.

Section III discusses the existential position of the teacher-educator in general and more specifically the relationship of the varying concepts of biculturalism/bilingualism to that position.

Section IV examines the need for changes in educational policy to reflect the implications of bilingualism and biculturalism as it has been defined in the previous sections.

The essence of biculturalism is in the diverse experiences of people. Many persons, in a variety of ways, share

certain aspects of experience with others. For example, those currently entering their thirties very likely had a father who was away at war while they were very young oldest siblings share many features of being intermediates between parents and younger children; others live in worlds circumscribed by social or ethnic boundaries, in which much of their experience is concerned with who they are as well as with who they are not. The last of these are those who can usefully be thought of as bicultural. Some of these bicultural people who actively divide the world in 'we' and 'they' terms share linguistic habits; they are bilingual as well as bicultural.

The importance of any individual being bicultural or bilingual is not simply in his existence, but in the experiences and dynamics of life. If a bilingual person is rewarded, punished, or ignored because of the fact that a teacher perceives or evaluates his verbal performance, then bilingualism becomes an important social factor. This is much the same as being a boy or girl in a classroom where the teacher has a boy or girl preference. The problems of biculturalism-bilingualism, as of sex or age, are not simply in being, but in how these features of being are treated as an interface between different people in interactions: whether they are ignored or constantly called to attention.

I.A. Socialization of the Child

Every individual in our society embodies a variety of features which he shares with some, but not all, other people. Differences between males and females, age-grades, socio-economic factors are shared by segments of the population. Each of these factors affects the educational process to some degree.

Although these types of factors often stand outside of discussions of biculturalism, they need to be discussed here. Our educational enterprise has in fact already made significant and large adjustments and accommodations to these kinds of differences. These cultural groupings are so deeply ingrained in our minds that the notion of biculturalism seems to be very special, to require a unique kind of ideation and educational thrust. Yet, as this paper will illustrate, biculturalism and bilingualism are not so very different from factors such as age, sex, and standard English speaking background in terms of how educators and teachers must approach them.

Children are born into a large variety of situations, each one being unique as a conglomeration of a number of features. "where" the family* is -- in terms of the parents' ages, perceptions of their and the child's being, number and "kinds" of siblings; the perceived place in the world of the family in terms of success, how the various family members "project forward" their picture of the infant through the next 20 years or so.

These new beings sense very quickly their way in the world vis a vis the people around them [their immediate family (and extended family)] and seem to choose life strategies within their first year or so, which accommodate well to their continued being and success in that family setting. Most of these so-called life strategies are interactional-political -- the child wants and enjoys being the kind of "person" that the "family" seems to want him to be.

The family view derives from where its members are in their perceived world and what a new person does to their acting in terms of these perceptions. If a child arrives, for example, at a point of major career change of a parent, the child's life may be flavored by the perception of living in, say, a single-parent family. If the parents are relatively old, and this is a number five child, his experiences will be mediated, possibly directed, through the perspectives of particular siblings -- thus it may be the entire family's perception of the infant which presents itself to each new child.

While this may, in some cases, be a continuous and consistent picture, in most families it is in flux frequently, if only because children grow and become more public. What the family regards as public will vary; for example, a poor family may feel very conspicuous in a hospital or university setting, and will attempt to "shush" its children. A child who does not share his family's perceptions of being public, will be forcefully "taught", whether he understands or not. The socialization of children is strongly motivated by their parents' perceptions of who their family is, with respect to its images of the "outside", the public.

* Family -- here used in a broad sense as those people who constitute the effective constellation of [constant] people in terms of which a child organizes his behavior.

In addition, there may well be some inconsistencies about the place of this new being, in the minds of the various family members -- in this case, the child is more highly political in the sense that his assignation in the family is multiplex, and he has to spend a lot of energy trying to figure out who to be, and for whom.[1]

It is worth noting that the forward projection of the child -- the creation of a sense in him of how he will be -- accompanies the ongoing present. Parents (and others) correct or respond to children not only in terms of who they are right now, but of who and how they are supposed to be. For example, the correction of pronunciation of children varies widely, but few parents try to get a perfect (i.e., adult-like) product out of a two-year old. They usually accept his speech pattern -- if he is even articulate by that age -- and work within it. Slightly older siblings not only understand it, but often speak it. By another year or two families perceive that it is time to work on a better speech form (usually in their own terms, but some families try to correct their children in terms of an 'outside' dialect (e.g., trying to suppress 'ain't', even when the family uses it!). But this better or more correct articulation is done in terms of the parents' perception of the child as slightly older than he is right now -- i.e., they correct him in terms of how he will be (and should be), not in terms of how he is.

Such corrections are not only done for speaking, but also for most other aspects of being: how to stand, eat, use the toilet, hold one's face, be clean, play games, interact with strangers, dress, etc., etc. . . Since much, if not most, of this 'teaching' is done by indirection and correction in families, it is usually not explicit, and most people do not seem to be actively aware of how they are educating their children.

Interaction is the testing ground of learning. The notion of the 'autonomous' child of three or five or seven years is a fiction of observers. A child who 'hits', who interacts using bodily activity, or who appears not to inter-

[1] Of course, everyone has occasional 'bad days', and present themselves inconsistently to the child, but most young children seem to be able to see through occasional personal problems and search for the more consistent and enduring patterns of the individuals with whom he interacts.

act, is acting out his place in the world as he interprets it and extrapolates it from his familial model. The pressures from families, in terms of what they "like" or will tolerate as a "successful" child in their terms, is probably the major teaching-socializing factor of children in terms of what educators will observe their behavior to be in schools.

In the parents' minds, the child is not only going to become himself in the parents' terms, but also in terms of the larger world that they perceive. Thus the forward projection, the corrections, are made not only in familial adjustment terms, but also as they (the parents) picture the larger world and their child in it. Different kinds of families project forward in quite different ways and this affects their children's perceptions of themselves, and their "educability" (vis-a-vis mainstream ways) apparently quite deeply. It is very important to try to understand how different families perceive the larger world, because they will continue to correct their child in terms of their images of his place in that world. In so doing they will provide the child with a schematic plan for interpreting his own experiences. Thus child A who is socialized into believing that the world is open, ready for him to zoom ahead, and child B who is instructed that the world is hostile and ready to put him down may "experience" the same event C -- entry into school -- quite differently.

In addition, the skills needed to correct a child effectively in terms of the family's future projections for the child seem to be differentially available to the American communities; e.g., a family who wants its child to become president of a corporation may simply not know how, when and/or what to correct in its child's behavior that will aid in realizing their hopes for their child.

The certification of one's being is a problem area which pervades the public projection of any child. The family is the first, often primary -- in very large families perhaps the solitary -- certifier of the existence, or quality of existence of a child. A family may tell a child he is a good person, and be willing to do this essentially regardless of what happens to him in the outside (i.e., beyond the family). Sometimes this is a cushion, a center of warmth; but it can also be a haven for people whose life strategies include saying: "screw the world", and who go out of their way to do it. In effect, sufficient support for any external behavior is potentially located in the family. This is more easily seen in very large families

which sometimes become their own complete social system and can accommodate and support what most of us would consider to be bizarre. (Example: ethnic views on what constitutes mental illness, deviance, etc.)

In most families, corrections and certification of the child are done in terms of some combinations of the family-inside and the child as a public person. Complications (for the educator) arise immediately because there are differential perceptions of the "public" in different families, and there are, indeed, different effective publics -- i.e., the outside will react differentially to children from different kinds of families.

Children from, say, rich families are likely to be valued highly as friends, by families who want their children to become rich; children (e.g., as potential mates) of the same economic background will then be less valued by such a family. Similarly, families of equivalent income, but from different ethnic groups, will not all see one another as the same as they are, in the same way as they regard equivalent income families of their own "group". Educators and other outsiders are likely to carry over their own particular, family-derived perspectives into their observations and judgements of other children.

In addition, the child's perspectives on the nature of the varieties of outside, as presented by his parents, are limited by his experiences. His perceptions of the outsides, as he comes to experience them, will be colored or filtered by such perspectives. He will come to view the outside to a large extent as his parents have presented it to him: projected forward into his actual experiencing of it.

For example, within the black community there is a great deal of discussion about white people in general -- their coldness, their craftiness, characteristics of "Mr. Charlie and Miss Ann", etc., an particular white types -- "you know he's one of them smart Jews"; "she don't act like no white folks I know, she real nice, she's natural" -- so that before a child actually has contact with white people he has been taught how to think about and evaluate his eventual experiences with white people. This is true of all ethnic groups. Children are taught not only about the types in their own culture but also expectation of others -- if you're sick get a Jew doctor, if you're in trouble get a Jew lawyer, don't trust anybody but your own kind with your money, etc. This is true also as regards how a child learns about the social system.

If a child lives in a culture where a policeman is defined to him as "officer friendly" someone who helps us, someone who we should turn to if we are lost, etc., then his interaction with a policeman (no matter what the policeman's "actual" behavior) will be a different experience for him than it will for the child who has lived in a culture that discusses policemen as "pigs, exploiters", and at most "community nuisances".

It is important to note that each comment about the child's experience which is interpreted at home will become part of the child's perceptual apparatus for interpreting the outside.

As he relates to effective outsides such as teacher-school, a child carries over his perceptions of himself into this situation. He matches this personal picture with the outside and revalues himself as he feels he is treated by the outside. A five-year-old bicultural child has only a vague sense of how an outside reacts to him as a bicultural person -- his usual belief is that a teacher reacts to him as other adults do.

I. D. Socialization of the Bicultural Child

The idea that a child is bicultural or bilingual does not seem to be a child's own inherent picture. It is one which he comes to believe only very gradually. Bilingual children simply speak the "appropriate" language to the "right" people in the proper contexts.

For many bilingual children the world is presented to them not just as an inside-family and an outside world of others, but as composed of two or more quite distinct kinds of outsides. Some children seem to sense such differences as their parents feel and forward project them; for others, it is a discovery process which dawns on them only very gradually.

Within a homogeneous neighborhood, the effective outsides are very much like one another in, say, color, ethnic, or socio-economic terms. A child is likely to be "known" and evaluated as a member of a particular family, somebody's sister, and as a pretty distinct individual. Whether a child has a sensitive, ambitious, careless, tired . . . mother is at issue in this sense of "outside."

Across boundaries, however, the outside tends to perceive a child initially in terms of his dialect or apparent membership in another sub-culture. A store owner faced with twenty ten-year-olds mobbing his store has to deeply know and trust those children to be able to react quickly, to impose reasonable controls, etc. The best an outsider can hope to do is to learn to perceive the children in approximately the same terms as they perceive one another, because that is where the notion of "reasonableness" resides.

The most individualized pictures are cast within families and peer groups. Yet there is little necessary carry-over from a child's perceived position in a family and who he might be outside. Whereas a child is likely to act from the position of being, say a youngest sibling, the outside may perceive him as strong, dominant, or bossy. In other words, the treatment a child receives may be quite different inside and outside a family constellation. Somehow he has to learn how to interpret this fact in a reasonable and useful way.

Where the outside is truly outside -- e.g., across color lines -- a child's perceptions of his treatment are likely to be and remain fairly confused. Much depends on his family's interpretation of those experiences. If the Black family world interprets a set of difficult experiences as hostile toward all Black children, then their individual child can interpret his experience as impersonal. If, on the other hand, these are interpreted as personalized toward their child, the child needs a lot more personal support to dope out some useful strategies to overcome such experiences. Poor families, in general, seem overly likely to personalize their interpretation of bad experiences.

Each time the child is taken outside (beyond family), his activities are commented upon, often implicitly. Comments include how clean to be, how to be clothed, and especially how or how not to behave. How to behave and to interpret his experience is derived from the child's perceptions of others who his family tells him are like him, or who are not like him. Children become very astute observers of behavior, filtered through the perspectives of their parents' interpretations.

In bicultural situations, the family is likely to project forward two different outsides in which the child's experience will be perceived. His behavior will have to be different in each because he will be seen and treated dif-

ferently. In some senses this is very little different from any child learning how to behave in men's groups or women's groups from the perspective of being a girl or boy.

Most children only come to understand gradually how the outside community perceives them. They come to sense deeply that there is often a degree of dissonance between their own model of themselves (family-derived) and the outside picture (outside 1, 2, 3, etc.). They seem to be very vulnerable to this outside view -- especially if they feel that the outside is somehow better or superior. This outside will and does see and treat them differently at different ages. How this is projected forward will affect the child's behavior. This can be extended to bicultural situations.

II. A. Biculturalism-Bilingualism in Modern America

Parents seem to try to interpret the bicultural situation in terms of two, fairly different outsides, but the outsides as seen by any particular American community are not necessarily the same ones perceived by another bicultural family or group.

In the greatest part of America, for example, the Black community seems to be consistent in its perceptions of two basic communities -- one White, one Black. European-derived ethnic communities often have five or six outsides which they distinguish. The perceptions of outsides depend on a number of factors.

1. How distinguishable a person believes he is, by the outside(s).
2. The experience of his particular local community vis-a-vis the outsides.
3. The relative number of people in his local community with respect to the total community; the type of neighborhood, and its extent (if it essentially is a ghetto).
4. The life-experience of the family vis-a-vis the inside and outside -- their success or perceived lack of it in the inside and larger community.
5. Their forward projections -- their belief in "progress" or not; for them as insiders and for their children.
6. The acceptance (or not) of their perception of how the larger outside views them as insiders (e.g., for certain minorities, how much "self-hate" they embody and transmit to their children).
7. The sorts of stereotypes available and used in the inside community -- about themselves and the outside (e.g., the notion of 'luck' or unluck of the Irish).
8. The sorts of behavior which the insiders display in the company of perceived outsiders.
9. Willingness and interest in playing "boundary" games.
10. The extent to which the "inside" culture is actually a counter-culture; and the extent to which the "inside" culture is "in", in the majority view.
11. The felt "presence" of the inside bicultural-bilingual community by the outside.

Most of the people who are thought to be bicultural in the ordinary sense of that term believe that they are recognizably different from the "majority" culture in a direct physical sense. They firmly believe, often correctly, that the outside community is busy pigeon-holing them into

categories. For some groups this is undoubtedly true, for others less than they believe. A complicating factor is that the so-called stereotype is likely to be different from the person's view toward whom it is directed; e.g., a Black's perceptions of a White stereotype of Black people is often partially incorrect -- since he believes, among other things, that White people are not as concerned with White-Black relationships as the Black person is.

A lot of (so-called) Black people fall well within the median notion of whiteness of skin; yet they are consistently perceived by the White community to be Black because of some physical feature or aggregate of features. Their definition of themselves as "Black" is derived to a greater or lesser degree from the outside; here the White community.

The notion of cultural differences is particularly messy because the differences which may "count" are extremely changeable and variable over time and in different settings. Any feature of being -- behavior, physique, money, attitude, age, religion, smell, size, profession, color, hair, nose, sex, life-style, etc., etc., -- which is shared by some people, <u>can</u> become a dividing point between populations.

Since observations of any such group of people by non-group persons are always incomplete, and usually focus on a few "outstanding" features, the use of stereotypes follows group formation almost immediately. This is complicated further because of different perceptions of what is considered outstanding from any observational perspective. A group of sixteen-year-old basketball players on the street appear very different to adults and to sixteen-year-old girls. What the boys are like personally is hardly an issue in this setting; outsiders' responses are based on a most peculiar relationship to a group of very large, strong looking young people in a group.

Similar dynamics are at work in observations of any group. The danger is not in the observation per se (they may be very accurate), but in operating in terms of a very limited stereotype based on the features one considers outstanding. The confusion between stereotype and reality lies principally in the limitation of observations, and in not getting enough depth to discover the actual situation.

Any time a group structure takes on a reality either because it has self-consciously joined together, or because some outside has grouped a set of common features together,

and reacts to any person who has such features as if he is a group member, there are effective cultures, and the necessity for working out ways of operating across the perceived cultural boundaries. The possibility of hostility, remoteness, war all appear in the dynamic of operating across such perceived lines.

The problem of biculturalism is exacerbated because many distinct ethnic communities are measured and measure themselves with respect to the majority (or the successful outside) community and feel inferior or "down" in comparison.

One of the problems of a community which feels "down" is that it tends to interpret any noted difference in teaching technique not as competence and sensitivity on the part of the teacher, but as distinctly racist. In fact, good teachers vary techniques frequently in terms of where her kids are, but the "inside" community, often having a single picture of the outside, fails to observe the individual and group differences for any but their own groups.

The reasons for the bicultural-bilingual community being that way are usually not the reasons for remaining so. The bicultural-bilingual group develops historically because some other community somehow became an effective majority: either the bicultural-bilinguals moved in or were moved in upon. In any case, they are in some senses a minority -- whether in numbers or in terms of power -- and they tend to remain so. The principal question is why bicultural-bilingual communities retain their sense of identity -- or not. What keeps them there, when in most senses, most would be "better off" in joining the majority culture-dialect?

In situations where Europeans moved into this country, they were at first clearly identifiable as to their particular backgrounds -- the Irish looked, dressed, and sounded Irish; the Germans were identifiably German. In many cases these people no longer look very different, they talk about like everyone else, but, in many senses, they remain bicultural -- usually in senses not obvious except to themselves and those who know them particularly well. In the case of the Germans, it is not overstrong to state that they essentially disappeared as a group during the years of World War II and have not re-formed. In most senses, they are part of the majority population.

Part of the answer to the question, "Why do certain communities remain distinct?" depends on when people appear

in a given situation, who else is there, and the nature of the pressures on group integrity. The Chicano population of the Southwest was not bicultural-bilingual until the Anglos (in the Southwest) appeared in large numbers and got power over many aspects of the Chicanos' lives. The majority language was Spanish, not English. As the Anglos encroached, the Chicano population was effectively pushed down, losing control of most institutions, schools, businesses, etc.

The Irish, on the other hand, moved into a world which was already controlled by a WASP majority. They did not try to succeed in WASP schools, so set up their own. They -- as most Europeans -- took English as their language (many were Gaellic speakers) and have gradually worked their way scholastically, politically, and business-wise up to a state which the lower-class bicultural-bilingual communities perceive as highly successful. Nonetheless, Irish people still live in fairly tight communities, vote as blocs generally, control their own schools and businesses. They do not appear -- as a bicultural population -- to be an educational "problem" in the same way as other poor ethnic bicultural-bilingual groups do.

Part of the reason for maintaining bilingual-bicultural features has to do with what is perceived to be "open" in the wider world. At this time most of the business and power world is seen to be "filled." This is not a period of exploration or discovery or expansion. It is a time of "holding" or retrenchment. There is little perceived opportunity in the precluded minority to "make it to the top" in the best HoratioAlger tradition. From the perspective of the child in his bicultural-bilingual family setting, his best bet is often seen as someone who will be able to get and keep a menial job. If this is where he and his family are -- if these are their perceptions -- it will be very hard to convince any child that success is even available to him, no matter how hard he works or how much he learns. The sense of being "down" is extremely hard to counteract, and it seems to be very self-maintaining in that it offers solace for one's state at the same time that it explains it.

Much of the maintenance of biculturalism-bilingualism has to do with the outside caring to discriminate against the insiders. The language and culture are fairly likely to disappear if there is no effective outside which cares. If the perceived outside effectively disappears, biculturalism and bilingualism will tend to lessen and disappear eventually. As the Scandinavian populations in Minneapolis-St. Paul came to speak local English, the outside was no

longer able to distinguish them as very different, and they have effectively disappeared as distinct populations. This seems to be a current running battle for the American Roman Catholic Church, which is having difficulty in recruiting priests and nuns; this is due, in part, to outside hostility being constantly reduced as it has become more an American than a Roman Catholic institution. The tougher the outside is perceived to be, on the other hand, the more firm and resilient will be the retention of the distinct cultural and linguistic aspects of the inside group.

The number of persons in the bicultural-bilingual group vis-a-vis the outside is quite important in any given local situation. In a community where there only are a very few bicultural-bilingual people, the children usually become aware of "who" they are at a relatively early moment in their lives. In a large, ghetto-type situation, the significance vis-a-vis the majority that they are somehow Black, or Chicano, can remain obscure in many senses for many years; they are obviously majority persons in terms of most aspects of their lives. If the ghetto is sufficiently large, the actual number of outsiders they even see on any regular basis is almost zero (most likely they will be the teachers, police, store-owners and a few service persons). Only in the fantasy of television and movies do they have any ongoing contact with the "real" majority world. To attempt to teach majority ghetto children from the point of view of a world they cannot relate to is very peculiar; but, on the other hand, such children are not as likely to directly resist it on personal, experiential grounds as those who daily live these differences.

In the latter cases, a direct line of difference -- often expressed in the school situation -- can form cohesion around the issues of group difference. That is, it is easier to develop a "self-hate" view of oneself if there is daily demonstration of one's "inferiority" as a group member. In a 100% ghetto situation, there are almost no possibilities of negative group identification of this sort unless it is brought in by teachers, parents, or some other external source (and, unfortunately, it does appear to get into the educational situation in many ghetto situations).

II. B. Biculturalism and Poverty

As the first section of this paper has demonstrated, one's life adjustment takes place largely in terms of familial positions internally and with respect to the larger world. The most obvious fact about bicultural-bilingual families with respect to the larger world is that a majority of them are poor and most likely to remain poor. It even seems likely that most poor people, having adjusted "successfully" to being poor, resist changing even when the opportunity presents itself.

Why should "poorness" become a permanent sort of life style and be so resistent to change; affecting potential success in school, for example?

Most important, perhaps, for poor families is that they seem to believe that they will remain poor -- in many cases, they can point to actual moments of success in retelling the kind of family history which interprets to tell children "who they are". But something happens, and the success is transitory and unreal, not to be trusted -- it can't happen on any permanent basis. This kind of history becomes a self-fulfilling prophecy, because the kinds of consistent skills necessary to be non-poor are either not available to the family, or they deeply believe that they personally cannot maintain success.

Another factor is that the poor family seems to be very susceptible to success fantasies; they seem to buy the American success myths of rags to riches as if it were much easier to achieve than it actually is, and also, to accept each point of momentary failure (e.g., in school) as a confirmation of their own personal inability, rather than as a learning experience in pursuit of their success fantasies.

There appears to be little consistent knowledge in poor families of how to give sufficient support to children who are experiencing momentary difficulties. Such moments, which would bring "successful" families' energies to bear on the situation, are likely to be accepted as confirmation of the "permanent" lack of ability of the bicultural-bilingual, poor child. Many teachers also seem susceptible to making these kinds of judgements, expecially for poor children. The teachers tend to confirm the picture of the child as a failure rather than vigorously attempting to change it.

Closely related is the apparent inability for poor parents

to forward project in any very positive sense. Professionals who speak Standard English speak of poor people as impulsive. Poor people would no doubt describe their behavior as realistic given their history, daily interaction, and the perspectives from which they view their children. Perhaps this is related to why family support seems to be lacking to move children through difficult moments rather than using them to confirm their own views of their children's limited life chances. In any case, the effective time dimension of poor people is often quite short; their projected view of the future is that things will remain pretty stable for them and their children.

Reports on poor families indicate that they are often very happy places internally. But they develop or confirm a bad sense of themselves when they or their children become public in any way. Poor Whites, for instance, in hospital or other institutional settings seem to spend a disproportionate amount of energy telling their children to "shut up" and effectively disappear. This is an example of their lack of forward projection; instead of teaching or letting their children learn about the various "worlds", they tell them -- in effect -- that they do not "belong" there, and never will.

But most of all, the lack of forward projection is felt in the kinds of expectations (and actual family energies) that parents have of their children. (Perhaps it is not forward but upward that is the issue.)

III. Realities in the School Setting

If a group accepts the external image as their (internal) reality, there seems to be little possibility of mainstream education leading to significant lifestyle change. Interestingly, it seems even more difficult for educators who themselves derive from the bicultural-bilingual groups in which they teach.

Teachers, who have "moved up" from poverty have done so often in the image of the external majority view of success. Although they have made it "out", bicultural-bilingual teachers, teaching among poor children of their "own" groups, often seem to confirm the negative view the children already have of themselves, rather than attempting to "pull up" the entire group. They are, in effect, splintering agents, selecting some children (e.g., those who already have partaken of the "Whitening image" process) for potential success but confirming doom for most of them.

At least some of the bicultural-bilingual communities which are educationally problematic at the present time seem to derive a great deal of pleasure, and/or have a major involvement with other people's behavior, style, feelings. This is particularly true of the Black American community and seems to characterize the Native American community very deeply. Not only does this "people-concern" pose an educational problem (we pay off mostly for individual children's ability to attend to abstractions and symbolic systems, not how well they understand other people), but it is also very difficult for an outsider to learn to "read" insiders in the same ways as the insiders read one another.

This poses two types of problems to the educator: 1) whether and how to reward the excellent "people-readers" and learn how to shift their already well-developed observational skills from the "observational-present" to the symbolic and abstract (I don't believe that symbolic skills are very different from observational ones); 2) the children most likely will judge and categorize others in terms of available group-internal stereotypes which may be quite different from those of the teacher(s).

Perhaps the most subtle point in studying bicultural-bilingual children is not that they are inherently so different because they think in another language or culture, but because they tend to organize and interpret behavior into categories, slots, and stereotypes which are different from the outsiders, particularly from those (teachers) who are bureaucratically oriented. Children's notions of a "reasonable" or "nice" teacher is derived from a composite view of their own, their parents', peers',. . . family. Many minority children seem to come to school with the view, for example, that any "nice, White lady" is a boss-type, and the child should be her servant.* Others come to the school scene with quite different pictures of what's happening.

Teachers are sensitive to factors such as sibling position because that type of family factor is present in their own culture too. Statements such as "the baby", "one brother with five sisters", "only child", are meaningful to them. However, the teacher is generally not prepared for children

* The clasic response to polite Black children -- who cast their eyes to the floor when spoken to by any adult -- is to interpret them as weak, guilty, or dumb!

whose style of presenting and evaluating themselves is the product of a different cultural background than her own. It is very difficult to separate out the personal and familial factors to which teachers are usually sensitive, from stylistic factors which other-cultural children bring to school with them and to which teachers are often insensitive.

For example, the teachers of Native American children often complain: "They will not respond; they do not get involved, much less 'turned on'." Most non-Indians see very little expression in the Indian child's face -- the one that is usually presented in adult situations. The children are extremely shy, which the teachers interpret as dumb and uninterested. The children will not volunteer to answer questions; they are extremely sensitive to any public display as "showing off" and are constantly aware of the feelings of their classmates. The teachers tend to respond to these characteristics of Indian children and project the children forward as potential failures. Clearly, the first problem is that the children and teachers do not understand one another's cultures and therefore misread and misinterpret the other's behavior.

The pathos lies in the fact that the teachers in their experience are essentially correct -- the children will most likely fail.

The error lies in the fact that the failure is attributed to the children's individual capabilities, rather than to the lack of mutual insight on the part of teachers and students.

The major point is that the children and the teacher are very likely to have different frameworks of operation and interpretation; the teacher has to be able to discover these, and more difficultly, learn how to move from them, learn what support means for different kinds of children, and will need the support of her colleagues, principals, and teachers as well in this endeavor.

Group-boundary games: A good deal of the activity in the early primary grades concerns children learning who they are. Depending on the setting (ghetto situation versus being a super-minority), the children come to this knowledge in different ways and at different rates. It is very "tricky", educationally, to know how and whether to enhance and teach children who they are -- or to avoid it!

The boundary game phenomenon seems to get activated very

much alongside the development of the children's bodies and psyches as proto-adults. They are, most directly, the "trying-on" of adult roles, the attempt to be "realistically" Black or Indian, as introjected into the sub-adult.

From time-to-time the problem of group identity arises in many school situations, and the "boundary game" may be played out. It may arise because some teachers begin to act implicitly as if the group exists, but deny it publicly; e.g., "too many" Black kids, and not enough White kids get suspended after a fight; or because the internal community feels that its children are "losing" their heritage, etc.

In playing the boundary game, children who identify or are identified as belonging to some sub-culture are made to feel that this particular identity should take on central importance in school. Jewish kids will not sing Christmas songs! Some cafeteria tables of kids will be seen as tables of, say, Black tables or "mixed" tables, or anti-Black tables. Boundaries will be drawn and sides taken.

Since the realistic, honest handling of the children's behavior has not yet been certified as within the educator's domain, by either the education establishment or the parents, the children and the teacher who operate within a culturally realistic framework will inevitably be chastized. Most teachers, at the present time, seem to lack the skills for both handling the child's behavior and handling the responses to treating the kid within a cultural model and instead get a lot of institutional support for blaming educational difficulties on their clients -- low "I.Q." and all that. Rather there should be a lot of support around, based on the facts of this quite common, essentially political experience.

Realistically, I don't think problems of culture conflict are soluble until the children are recognized as highly political creatures who have individual and group strategies. The individual will simply not receive the teacher's message unless and until he is comfortable and supported in his own terms, in the classroom scene.

The school situation reflects the perceptions in the larger community. In a situation where a bicultural-bilingual group is a very minor minority, its actual experiences are likely to be cross-cultural to a large extent; in ghetto-majority situations, this is not true -- the minority cultural group is the effective majority. In both cases the response or reaction of the bicultural-bilingual group to

the external "majority" can be of two basic types.

1. The bicultural-bilingual group sees itself as very similar to the majority in terms of life-styles, ideology, futures -- these are people who see success in White majority terms; they differ from the majority in terms of only a few features such as religion, marriage partner selection (e.g., the Kennedy family).
2. The bicultural-bilingual group may be a kind of counter-culture -- that is, it tends to identify against the majority view, and does this by picking out a few features which it sees as being stereotypically "White," and chooses to live by essentially the opposite or very, very different features. If ambition, greed, and monetary success are seen as the outstanding majority features, the counter-culture (e.g., young, middle-class White "freaks") tries to see life's best values as poverty, ecological balance, etc.

In real life the situation is rarely completely clear, and there is a dynamic which affects schools differently from time to time. A White-oriented, apparently assimilate bicultural-bilingual group may decide that its membership is being persecuted, and will go "counter-cultural". These movements are often temporary and will disappear if the bicultural-bilingual perception of persecution is lessened.

If, as in the case of many Blacks, the counter-culture is seen by others as having a great deal of style in terms of clothes, personal carriage, music, etc., the situation will be more complicated. This seems to be so because the outside, a goodly number of non-bicultural-bilingual kids, tend to be very attracted to and sympathetic with any moves toward becoming counter-cultural.

The actual impress of bicultural-bilingual groups on the majority culture also must be thought of in dynamic terms. One must recall that many of our cities have been a conglomeration of different groups living mixed together in relative peace, for a long time. The presence of a bicultural-bilingual is a perceptual notion and can vary from minimal to maximal on a number of grounds.

The so-called riots of the late 60's are a good case-in-point. If "riot" is "in the air", almost everyone potentially involved will begin to interpret much of life as if it is

ominous, whereas the "same" behavior would have gone unnoticed in another time. Or the current sexism moves -- all of a sudden (from the perspective of the M.C.P.), his behavior is sexist, although it went unnoticed earlier, or may even have been praised.

The major point is that the actual size (in absolute members) of a bicultural-bilingual community does not correlate directly to how it is perceived by the majority community.

IV.

The interface between the educator and the bilingual-bicultural child is much more complex than it might appear to be because there are so many more facets to the problem than has been assumed. In actual fact the classroom teacher cannot know in advance who and where the children are; she must become her own interviewer-social scientist, finding out where the children are, believing that she can do the job, getting support in this venture at all levels (including some sort of 'live-teaching' cross-cultural consultant who does not now appear to exist) and discovering as all good teachers do what works and what does not work for different children in the variety of times and places they find themselves.

Within the 'real-world" of teaching, this is mediated too by the facts of the teacher's school, principal, co-teachers, where the teacher is and lives, joys and felt rewards, energies, competence, etc. As in most bureaucratic settings, success in maintaining one's position is dependent more on pleasing superiors (the principal) than on pleasing or serving her clients (the children). Realistically, every teacher senses that success with certain children is more important than with others, as far as advancing one's career is concerned.

In terms of doing a better job with bicultural-bilingual children, the job of good teaching has a potentially large number of variables. Since, however, they all impinge directly on each classroom teacher, they all bear consideration and study. Furthermore, in our teaching system, teacher and class spend so much time together that there is time available to learn an immense amount about the children. A major problem for many teachers is how to separate out factors as individual, familial, sibling rank, cultural, socio-economic, counter-cultural, or age-graded.

It may be just as important to understand the degree and kind of analysis and interpretation the bicultural-bilingual children do with each teacher. The children have to strike some kind of balance with each teacher; they have very intensive/extensive gossip lines. So-called successful students are not just "smart" at book-work, they often have well-developed teacher-adjustment/management strategies. Insight into the children in terms of their adjustments to the teacher requires a kind of transcendence of situation which is available to very few people. It requires a kind of study which compares children and teachers of a variety of backgrounds to see how children adapt to the dynamics of the spectrum of teachers that they encounter. It is very difficult to say, offhand, whether bicultural-bilingual children adjust in a particular manner because of their particular upbringing, or that a given adaptation is what certain bicultural-bilingual children tend to do when faced with a particular type of teacher -- in terms, say, of age, experience, socio-economic background, prestige-success orientation.

Although I would like to assume and believe that all teachers are well-motivated toward all children all the time, this does seem like it is less than completely accurate. It cannot even be true of the most loving of parents. Much of the educational-pedagogical literature does not seem to take this into account, but implicitly presents a picture of the teacher as if she were completely temperate, self-assured, in-control, fresh, reasonable, reflective, and every other positive adjective which can idealize the kind of parent we would all like to fantasize about ourselves. Actually the situation is likely to be characterized by a great deal of variation on daily, weekly, monthly, and school-calendar scales -- both teachers and children have differential amounts of energies available to teach/learn -- and all of this must be handled by children and teachers so as to help maintain and support one another as well as they can.

The problem of teacher support is problematic always, but presents special and/or additional problems in a bicultural situation. Teachers -- being basically professionals working alone in most instances -- ply their trades in front of very limited audiences. Whereas the businessman has his profit, the tradesman his product, the teacher only has her children in a set of relationships in which her personal feelings of accomplishment and success are very hard to define and make tangible. Her professional world is observed regularly only by her children. Talk about her work with other colleagues and (bureaucratic) superiors depends on having presumed common

experiences in teaching, but somehow it is difficult to convey these experiences to colleagues in any manner which assures a depth of understanding. Because this is difficult to put into words, teaching remains a lonely profession.

In spite of all the current literature about education, there is virtually no consensus about what might constitute teaching success; i.e., how should teachers evaluate themselves and their performance? How well their classes do, relative to some larger (imaginary?) population, how good their reputation is, their wage boosts, whether some of their students go on to greater things?

In the kind of holding operation which characterizes many bicultural-bilingual situations, the measures of student success are quite different than they are in an upper-middle class White suburb. Just to get the kids to their proper grade reading level in a bicultural-bilingual scene may be considered a success, but a lot of potentially good teachers need to experience -- in their own terms -- a great deal more progress, pretty constantly, in order to feel good about themselves. So bicultural-bilingual schools must either attract teachers who can live with themselves professionally in a holding operation, or they must work very hard to define and redefine for the classroom teacher how to learn to live with the educational product that that school tends to produce. In either of these cases such schools become their own effective system for maintaining the kind of product they are accustomed to producing. "Teachers who seek and need more success or progress, who want really 'turned-on' kids cannot long survive in this sort of scene, and must leave (bitterly?) or become socialized to a new set of success measures for themselves.

The basic problem is that education does not seem to "own" or have its distinct subject matter. Educators do not see themselves as ever being able to make a real contribution to the history of ideas or to the nature of intellectual thought. They borrow methodologies, use outside consultants copiously, but then turn around and exert their own great authority onto their students and former students. Schools of education (including the Harvard School of Education) are not excellent! Their sense of intellectual esthetic is not well developed -- they pass this on to their educational products, our school teachers. Is it any wonder that the front-line teacher is unsure of his own judgements of quality of students?

This is evident in the increased use of I.Q. and other tests to either determine or confirm the teacher's judgements. What the most clear effect of this is in the typical bicultural-bilingual school is that the teachers quit striving for their own continued growth and excellence, because they come to believe and accept the notion that the bicultural-bilingual children are simply incapable of academic, symbolic, abstract excellence. So they tend to practice control, teach little personal responsibility, and spend a lot of their own inter-teacher talk time telling each other how hard it is to teach these children.

Thus, the major preliminary problem in teaching bicultural-bilingual children is not that the children are different or speak peculiarly (or even think peculiarly), but that the teachers perceive the children as somewhat less than "human". (After all, all humans have a language and the teacher sees these kids as verbally destitute.) It is much easier to consider the children objects to be handled and fed information. This is particularly true of the bicultural-bilingual child who the teacher is likely to consider as particularly different from herself; it apparently permits the school and teachers to treat a number of their children as non-persons.

If the essentially political variables can be handled in a way that teachers and students can begin to live with, then (and only then) can the problems of teaching, motivating, presenting ideas to bicultural-bilinguals be considered. A teacher needs to learn how to translate her observations and impressions into useful knowledge as regards how bicultural-bilingual children observe, experience, and interpret her. If a teacher cannot get some insight into how the children are reacting to her, it is difficult to really motivate them, the teacher cannot find where they are. The teachers must be able to gain a sense -- in communities very different from their own -- for how the children regard each other. If, for example, she rewards "neatness" and "punctuality" of a child who is perceived by his peers as a real "loser", she runs a great risk of losing the potentially competent kids in her class. While children's ways of evaluating one another may not be fair or accurate on all counts, it is their way! A teacher must gauge this fairly accurately, or she'll lose a lot of points with her class.

More observation about where the kids find themselves may lead to a better sharing of the children's views of what form and learning is with the teacher's pictures.

IV. B. Policy Changes in Bicultural-Bilingual Education

The primary concern of educationists should be toward increasing excellence at all levels. Since schools of education are approaching a finer level of scholarship and curriculum development, the major lacuna is in the area of direct teaching, of pedagogy.

Regardless of subject matter or of the particular nature of students, most of our attitudes about learning and success are developed in the classroom. The daily interaction; how a teacher effectively talks, interprets, asks questions, rewards, pushes, demands . . . this is precisely what is not taught to future teachers!

The major policy changes needed are thus at the level of teaching teachers. In order to implement this, I suggest that the excellent teachers at all levels of education be identified, their observations, presentation, perceptions, ideas, be studied.

Those who are most able should be pressed into courses and discussions on the actual performative aspects of teaching: they should serve as consultants, and should be available on a constant basis to discuss "case studies" with all teachers. Here, the medical model of pedagogy is probably the best we have with certain cautions (e.g., Medicine tends to teach by "fear"!)

A primary difficulty in promoting educational excellence is that there has been no "pay-off" for good teachers, except the very personal reward of knowing that one has done a good job. This alone can probably sustain a good teacher for quite a while.

Most of the "great" teachers at universities are not presently located in schools of education. What this means is that future teachers are not even exposed to their pedagogy, the "art of teaching"; nor are teachers who return to school for more "training" likely to meet them.

There are a number of excellent teaching styles: these vary according to personality, subject matter, class level. But each future teacher should be able to study with, or at least be exposed to, several of the best so they have a sense of what is excellent, its types and varieties, and purposes. They should not just be exposed to the teachers, they should be able to discuss with him or her what they are

doing, why; how they make certain teaching points, how they conceptualize a course, how they examine, how they "read" students' responses.

Clearly, any particular teacher or style will not be appropriate for all other people or subject matters, but one must gain a deep sense of quality, an esthetic for what good teaching can mean. It takes several years of personal experience in actual teaching for anyone to develop his or her full capacity. But in order to continue to develop, one must have seen others and sensed their struggles in developing.

Future teachers should become acquainted with the forms of teaching, how and when to use them; the lecture, the dialogue, coaching vs. teaching; how to get a class to feel responsible for the subject matter rather than yielding that to the teacher; how to negotiate power with one's students rather than having to exert constant control.

For those who will teach in bicultural-bilingual situations, they must have coursework in such things as language and culture -- a sort of applied linguistics-anthropology. A difficulty here is that most scholars who would teach such courses have been more interested in "facts" about language and culture and less about the variety of perceptions which people bring to the real world. (There are a very few people who study and teach at the level of cross-cultural perceptions.)

Another aspect of policy toward excellence in teaching is that there must be perceived "growth" areas available to excellent practitioner-teachers, which do not completely push them out of teaching. Somehow, if one is good, he usually gets to be an administrator -- for monetary reasons, but also because many really good people feel a need for continuous growth.

It appears that continued intellectual or didactic expansion is not presently available to teachers. There need to be forums for discussion of ideas and teaching. Those scholars who care enough about their own subject matters to have become excellent teachers must be engaged and give their views on teaching as they live it and make it work.

Lastly in this context, the university working across its range of disciplines must begin to set up ongoing studies

in pedagogy for future (and present) teachers of teachers: for those who will be the professorial staffs at the universities and colleges of the country.

The magic of the university as the fount of wisdom is still shared by many teachers. Their reference point, their orientation, the reality of their being a scholar-teacher remains invested in their own professors. For this reason, this is the leverage point in our educational system for effective action. I foresee little improvement in education at any level until the university teacher-certifiers are representative of the best scholar-teachers.

In the specific context of bicultural-bilingual education, the overall picture is essentially the same. Excellence and success in working across cultural lines must be noted and rewarded. At the present time there is not even a well-developed scholarly field of cross-cultural or inter-cultural communication. What there is tends to reside in speech-communication or journalism departments, whose main aim is to get "messages" of the majority-teacher across the boundary to the minorities, but there is little attempt to understand the perspective of the recipients of these "truths", except as they are able to receive them . . . or not! In the real world of politics and business, this attitude would be recognized and called "imperialistic".

The anthropological notion of the "participant-observer" represents , I believe, a deeper approach to bicultural-bilingual education than a more experimental, methodologically rigorous one. The major problem in teaching across cultural lines is to find out where the students are, how to motivate them (in their terms), and how to package the material in useful and attractive manners.

The bulk of educational change has concentrated on the packaging of materials. But it is amply clear by now that unless one is able to gain and maintain rapport, to figure out how to keep the kids "turned-on", the package is almost completely irrelevant to the task. The first way to find out how to teach across cultural boundaries is to watch the people who already do it well, while constantly working as a participant-observer; attempting to feel, to sense the variety of perspectives that children bring to the classroom. The cost of not doing this, as we see it happening now, is a continual hardening of those cultural lines which, as liberals, we have tried to ignore or deny.

Since the usual cost of explicitly recognizing cultural differences is tied directly to accusation of racism, the only way around this is to seek excellence for all. The most direct way to begin is to identfy the people who already do an effective job, give them a forum for teaching others, and let them "grow" in their own terms. As it is now, it is so difficult to maintain the excitement and dynamism of the true teacher, that she or he eventually must tune-down or turn-off from lack of growth, lack of support, lack of any sense that quality pays off. In maintaining this scene, we all end up as losers!

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