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**FIVE COLLEGE
DEPOSITORY**

THE CONSTRUCTION OF MEANING IN A SECOND LANGUAGE:
THE IMPORT OF SOCIOCULTURAL CIRCUMSTANCE

A Dissertation Presented

By

CATHERINE E. WALSH

Submitted to the Graduate School of the
University of Massachusetts in partial fulfillment
of the requirements for the degree of

DOCTOR OF EDUCATION

February 1984

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1984

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THE CONSTRUCTION OF MEANING IN A SECOND LANGUAGE:
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By

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DEDICATION

Este trabajo lo he realizado
en honor y en memoria
de Alberto Rivas,
su dedicación y amor por el lenguaje
siempre me servirá como modelo

y

a los niños puertorriqueños
del presente y del futuro,
para que sean libres lingüísticamente
y políticamente soberanos.

ACKNOWLEDGMENTS

The completion of the dissertation is traditionally viewed as the culmination of the doctoral degree. For me, it represents rather a process during which time I advanced my own knowledge, had the opportunity to share some insights with others, and had the chance to verify and put into words some of the psycholinguistic beliefs I have had for some time. The presentation of this work is just one step in this process and in no way reflects its termination.

A number of individuals have been instrumental. My appreciation and respect go to Meyer Weinberg, my chairperson, who has diligently read through each page, has shared his comments, criticisms, and opinions and has spent endless hours with me discussing ideology, education, and language. While Meyer's vast and diverse knowledge continues to amaze me, it is his propensity for critical and reflective thought which I most admire.

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Probably no one knows this work as well as my close friend Debbie Britzman who has participated in its development from the beginning. Her support, interest, friendship, and theoretical

understanding have meant more than words can express. The day-to-day emotional support provided to me by my husband, Juan Aulestia, has taught me what 'compañerismo' is all about.

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ABSTRACT

The Construction of Meaning in a Second Language: The Import of Sociocultural Circumstances

February 1984

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This study analyzes the sociocultural and psychological processes involved in the Spanish speaking Puerto Rican child's construction of abstract meaning in the English language and examines how these processes relate to the child's native language reality. Of major interest was the influence of second language learning on both native language memory processes and lexical/semantic relations at differing points in the acquisition process.

A sample of fifty-four Puerto Rican (representative of four English language ability levels) and thirteen Anglo fourth-grade students from an urban Massachusetts school district were given oral word association tasks in two different treatment modes. In Treatment I, Puerto Rican subjects responded with either a synonymous or defining response to twenty-four Spanish nouns and twenty-four possible English translation equivalents across two intralanguage and two interlanguage conditions. In Treatment II, six Spanish adjectives and their translation equivalents were orally presented to the same subjects in the context of a sentence. Pictures portraying either

a home or school setting were paired with the adjectives and presented simultaneously. Again, there were four conditions. Anglo students received only an English-English condition.

Results demonstrate that the influence of native language meaning is especially strong with regard to culturally salient words and occurs regardless of level of English language proficiency. English meaning was also found to affect Spanish words, especially among mainstreamed students. Interlanguage conditions produced more semantic interference than intralanguage conditions yet, for those subjects in an intermediate stage of English proficiency, meaning for words in all conditions was often confused. In the associations to adjectives and pictures, all subjects were more apt to produce Spanish-type responses.

The findings suggest that both social context and culture play a dominant role in language acquisition and in semantic organization. A semantic shift accompanies English proficiency; words in the mother tongue take on English meaning. The psychological, socio-cultural, and linguistic worlds of the Puerto Rican child appear to be in constant contradiction.

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CHAPTER I

INTRODUCTION

Statement of the Problem

During the last decade there has been a proliferation of research on second language acquisition. Studies in this area have helped provide new perspectives on language as a whole and on the relation between the second language and the mother tongue. Generally lacking in the research, however, are studies which critically examine the processes involved in learning a second language and the related psychological, cultural, and social implications. It is the need for this type of research which prompted the present study.

Because children are equipped from birth with the necessary neural prerequisites for language and language use, they learn, without being taught, the complex rules of grammar and, from an early age, approximate adult speech. The acquisition of this communicative system of verbal codes and messages is tied to a system of social signs within a social reality, the social semiotic (Halliday, 1978)--the intricate web of meaning which defines and governs the community to which a child belongs.

It is through meaning that the child gains access to words. The building of meaning and its subsequent attachment to words is at the center of the language acquisition process. Early meanings, based on individual, contextual, and situational experiences may not comply with those of the adult community but with time are altered and

transformed to become more consonant with those in the child's surrounding world. Through the medium of language, the child constructs a reality, a classification of meaning embedded in the sociocultural and historical conditions. While the child's growing knowledge of and constant interaction with the environment acts as the force which structures these concepts and guides this meaning, class, culture, societal membership and status help determine the actual makeup of the emerging semantic structure. The child's construction of the semantic system and of the social system take place side by side as two aspects of a single unitary process (Halliday, 1975).

The development of this unitary system can become somewhat confused, however, when two sociocultural and linguistic situations are involved. The child placed in a language and cultural setting different from his or her own must somehow sort through experiences and order or categorize them in a way that makes sense. The interaction with and discovery of the second language world entails a new creation of meaning and classification in memory, a classification which must combine past sociocultural and linguistic knowledge with more recent experiences. From a young age, the bilingual child learns the linguistic and behavioral norms associated with each of the two languages and in what contexts the languages may be employed. While the bilingual's speech may reflect interlanguage influence or interference at the phonological, lexical, or syntactic levels, it can also remain functionally independent when the context requires.

During the past two decades, psychologists have begun to take an interest in the cognitive processes involved in bilinguals. Canadians have been at the forefront with research that has focused on the structure of the bilingual lexicon and on the interdependency or independency of the two language systems. Most studies have been made in Canada. In the United States, the growth of bilingual education coupled with the increasing number of Latino children in the nation's cities and schools have stimulated studies such as Alvarez (1976); Fiszman (1978); Gulden, Martínez, and Zamora (1980); López and Young (1974); Riegel, Ramsey, and Riegel (1967); and others on Spanish/English processing. While a majority of the Canadian and U.S. studies emphasize the influence of manner and context of second language acquisition on the bilingual's processing and performance, few actually examine memory processes in the light of social and cultural differentials. The particular case of the Spanish speaking Puerto Rican in the United States seems to be a clear example.

As an ethnic minority from a mother tongue and culture of limited or low prestige (Seda, n.d.), the Puerto Rican child's "place" in the second (majority) language and culture is partly predetermined and his or her dual social meaning system already partially conceived. Each language form is associated with certain resources and elements of power (Bisseret, 1979). Within the cultural context of the neighborhood or family, the Puerto Rican child is able to employ his or her native language with confidence, assurance, and ease. This same language in the context of the general society, however, often lacks the

same positivity and pride. The bilingual, as a member of two groups, must use the language and behavior specific to each context. As a member of a minority group, however, he or she, in most cases, remains marginal to the majority, socially, culturally, and linguistically (Seda, n.d.). Characteristics of ethnicity (and often class) may force the Puerto Rican child to maintain differential membership in two cultures (and, as a consequence, in two language) affecting both the speech form itself and the construction and organization of meaning.

In the process of mother tongue acquisition, the family and peer group act as primary agencies of socialization. By the age of second language acquisition (typically school age), the child has a well developed semantic network in the native language. As abstract concepts are learned in the second language, the child must somehow order them in memory, tag them according to language and cultural relation, and relate the meaning to the translation equivalent in the native language.

In the case of many Puerto Ricans, the school acts as the secondary socializing institution, representing the child's main cultural tie to the English language. Little is known about how the diverse settings of home and school affect the child's system of meaning in each language and whether, in the case of the Puerto Rican, the systems depict a reality which coexists or conflicts with the surrounding world. How and when the two language-cultural systems come together or interact in semantic memory is therefore of interest.

Purpose of the Study

This study analyzes and examines bilingual language organization with particular reference to the sociocultural context and situation of elementary-school-aged Puerto Ricans. Based on a number of previous studies (Fizman, 1978; Gulden, Martínez, and Zamora, 1980; Lambert, Ignatow, and Krauthamer, 1968; Lambert and Rawlings, 1969; Preston and Lambert, 1967; Segalowitz and Lambert, 1969; and Walsh, 1983), it is hypothesized that second language learning influences both native language memory processes and lexical/semantic relations. In order to investigate the actual interaction between the two systems at differing points in second language acquisition, the researcher, by means of word association tasks, looks at how translation equivalents are stored and how this storage compares with the storage of synonyms in the same language.

The primary question addressed is:

What is the nature of the sociocultural and psychological processes involved in the Spanish speaking Puerto Rican child's construction of abstract meaning in the English language and how do these processes relate to the child's native language reality?

Inquiry proceeds with the following implementing questions:

1. What is known in the literature about the social, cultural, and psychological dimensions of language, and, more specifically, semantic memory and meaning?
2. What is known in the literature about how a child acquires and stores concepts in semantic memory in his or her native language and how this process relates to a second language?
3. What is the nature of this acquisition process in the case of the Puerto Rican child learning English and what steps or stages does it seem to follow?

4. What are some characteristics of Spanish/English systemic meaning exchange and relation?
5. How do the socializing agencies of family and school seem to differentially affect the Puerto Rican child's construction of meaning and do ethnicity and social group appear to be of significance?
6. What are the implications of the above findings for the classroom?

Significance of the Study

Studies of syntactical and phonological aspects of bilingualism have, until fairly recently, dominated the literature on dual language development. Ervin and Osgood's (1954) formulation of a psychological theory of bilingualism based primarily on acquisitional context paved the way for exploration into the semantic memory based processes of bilingualism. Research by Lambert, Havelka, and Crosby (1958), Lambert and Jakobovits (1960), Segalowitz and Lambert (1969), and others produced evidence of semantic generalization and semantic satiation in bilinguals, further helping to explain dual memory as well as language learning context differences.

While these Canadian studies have provided a theoretical framework for viewing bilingual processing and memory, the sociocultural context in which they were performed is very different from that of the United States where "bilingual" is seen not in the psychological sense of a two language speaker but rather in racial/ethnic and socioeconomic terms. Studies such as those by Fiszman (1978); Gulden, Martínez, and Zamora (1980); and López and Young (1974) examine

Spanish/English processing in Latinos but, as previously mentioned, fail to take into account questions of social and cultural contextual setting. The bilingual's memory processes do not occur in a vacuum but in a social arrangement imbedded in a multidimensional arena of political, cultural, and economic circumstances.

Because many Puerto Rican children are monolingual when they enter U.S. schools, the educational system provides the physical and psychological setting for English language acquisition. In this context, the retention and development of the native language is seldom considered. The move is for languages and cultures to assimilate and merge while English--the "common tie"--takes over as the dominant force. As both the language of instruction and the language of communication with in-school peers, English occupies a majority of the child's speaking and listening day. In time, the native language assumes more of an intimacy or family-related function. When and how does semantic memory begin to differentiate?

The number of Puerto Ricans in schools is increasing yet research addressing curricular or language teaching approaches for this population are practically nonexistent. It seems that a better understanding of the psychological and sociocultural processes involved in second language acquisition could offer a beginning.

This study's significance rests on the fact that it examines the bilingual's semantic memory in the light of sociocultural circumstances. It is hoped that this innovative approach might offer both

psychologists and linguists further insights into dual language organization and a better look at language's strong tie to the cultural-meaning relation. This study does not purport, however, to limit its audience to the university-based academician. Rather, findings which can provide an acquaintance with the distinctive processes of meaning construction in the non-English speaking and non-Anglo child may be of even greater significance to the educational practitioner.

This is a study which links history, psychology, and linguistics so as to relate forms of thought to "the producers of those thoughts" (Kress and Hodge, 1979). The characters are real and their material conditions not imagined.

Clarification and Delimitation of Study

In order to assure a collective understanding of certain key words used throughout the study, a definition of terms is necessary.

The term class in this study denotes a perceived economic relationship which ties individuals together by means of social, political, and cultural organization based on their relation to the mode of production. As Marx stated in the Eighteenth Brumaire of Louis Bonaparte (1963),

Insofar as millions of families live under economic conditions of existence that separate their mode of life, their interests and their culture from those of the other classes, and put them in hostile opposition to the latter, they form a class.

Such definition rests on the existence of dominant and dominated groups whose only affinity is based on elements of power.

Culture is taken to refer to the socio-historically determined values, customs, beliefs and behavioral styles which define the reality of a given group of people. Within this framework, people are viewed not as separate, distinct individuals but as collective, language-using, social, and historical entities or subjects who act on and transform the objects--including themselves--with which they interact. As with the notion of class, however, we can talk of a dominant and dominated culture and of an institution called education which propagates these inequalities.

Concept as employed here, designates meaning in a "transformed form," meaning which originates in the surrounding social context and then combines with the personal realm to create an abstract picture or idea defined in terms of a differentiated and hierarchical structure. The subjective content of the concept changes as the child acquires an increasingly complete command of the objective content, eventually approximating that of the adult.

The term lexicon can, according to Pei and Gaynor (1954), be defined as the total stock of linguistic signs (words or morphemes) existing in a given language. Each of these lexical items, or words, is tied to a meaning in semantic memory. The exact specifications of semantic memory differ slightly depending on theorist but in most cases include some type of taxonomic or hierarchical organization of the semantic representations, or exemplars, of individual lexical items and processes such as retrieval, deduction, and inference making.

The delimitations of this study are many. First, because this study moves beyond a pure psycholinguistic or cognitive account of memory processes and encompasses elements of sociolinguistics, sociology, and pedagogy, the researcher is entering a subject area without determined boundaries.

Secondly, a study which focuses on second language acquisition as a process should, ideally, be longitudinal. Time limitations, however, make this an impossibility. In order to provide a range of fluency levels, the study looks at children at four different levels of bilingual ability. All children are of approximately the same age so as to not confound the study with developmental issues.

The third area of delimitation is the social and physical context of the testing. Subjects were examined during the school day in a room separate from their elementary classroom. It was anticipated that the "mind set" associated with school might limit responses to the socioculturally appropriate language of the school (i.e., both the English linguistic expression and its meaning relation) and that picture cards portraying images of the home and neighborhood might help counter any deleterious effects. There was no evidence, however, that this occurred.

Lastly, the ethnicity of the researcher--who is an Anglo--may have encouraged subject use of English rather than the native language, although this did not appear to be the case. A three or four minute initiation in the form of a general conversation with the

subject in the language of the experimental task aided in setting the language situation and the speech domain.

Predictions

For Puerto Rican subjects, it was predicted that language ability level affects both language use and meaning. Bilingually fluent persons were thought to be more likely to exhibit a clear differentiation in language and meaning relation while less fluent individuals were believed to be more apt to mix meaning and languages. Semantic interference was expected to occur more frequently in interlanguage situations, i.e., when subjects were given a stimulus in one language and asked to respond in the second language, than when the same language was used for both processes.

In addition, it was thought that the use of a picture stimulus may possibly prompt differences in type and level of response compared to those from words alone. Because the environs of home and school represent different linguistic and cultural contexts for most of the Puerto Rican subjects, it was predicted that bilingual subjects might be more likely to afix the context of the picture to the stimulus language and respond according to context without reference to required response language or meaning.

CHAPTER II

REVIEW OF LITERATURE

Language as a Social System

Experience and Interaction

Language is a medium, an instrument with the help of which people communicate with one another, exchange thoughts and understand each other. . . Language is one of those social phenomena which operate throughout the existence of a society. It arises and develops with the rise and development of a society. It dies when the society dies. Apart from society there is no language. Accordingly, language and its laws of development can be understood only if studied in inseparable connection with the history of society, with the history of the people to whom the language under study belongs and who are its creators and repositories (Stalin, 1972:20).

Yet, modern linguists from the time of Bloomfield's notion of language as a scientific system to Chomsky's development of a generative-transformational grammar have examined language apart from the uses to which that knowledge is put (Edwards, 1976).¹ Emphasis has been on structure rather than on process; language is seen as a grammatical form extracted from day-to-day use.

. . . language acquisition is based on the child's discovery of what from a formal point of view is a deep and abstract theory--a generative grammar of his language--many of the concepts and principles of which are only remotely related to experience by long and intricate chains of unconscious quasi-inferential steps. . . It may well be that the general features of language structure reflect, not so much the course of one's experience but rather the general character of one's capacity to acquire knowledge (Chomsky, 1965:58).

The notion of experience as secondary, however, has not sat comfortably with some psychologists and sociologists who have personally observed young children's language use. One such individual is John Macnamara. In 1972, an article by Macnamara appeared in Psychological Review criticizing the acquisition device idea and proposing instead:

that children are able to learn language precisely because they possess certain other skills--and specifically because they have a relatively well-developed capacity for making sense of certain types of situations involving direct and immediate human interaction (Donaldson, 1978:36).

The acquisition and development of language is more than an automatic and mechanistic process; it is part of an experiential practice in which the child is attempting to make sense out of the surrounding world.

In the last decade, many U.S. and European social scientists have begun to view language as "human activity," as "an integral system of substantive social relations established among people as they interact in their activity" (Marx, as cited in Leont'ev, 1977)--a concept the Soviets have employed since before the turn of the century. Halliday, an Australian linguist, describes language as the major vehicle through which individuals learn to act as members of society, in and through various social groups (i.e., the family, the neighborhood, and the school), and to adopt its culture, its modes of thought and action, its beliefs and its values.²

Until recently, however, the study of language as a social system has been more prevalent in the work of anthropologists and sociologists than in that of linguists per se.

During the first few decades of the twentieth century, Boas (1911), Malinowski (1937), and Sapir (1927), were emphasizing the role of speech in human activities; all advocated the treatment of linguistics as a branch of the general science of culture (Edwards, 1976). Whorf's (1936, 1956) hypothesis of linguistic relativity and his view of the relation between culture and linguistics, language and thought, and language and perception continue to serve as a base for much of the current work in sociolinguistics, a considerable amount of which has come from individuals whose training has been in the anthropological or sociological fields (i.e., Bernstein, Gumperz, Hymes, Labov, Wolfram, etc.). Similarly, C. Wright Mills' (1939, 1940) conception of language as a system of social control and George Herbert Mead's (1934) description of the mind as a system of signs persist as classics. This study of signs, or semiology as it is now called, helps provide the major link between linguistics and related social science fields.

Semiology, "the science of the life of signs within society" is attributed to Ferdinand de Saussure, often referred to as the father of modern linguistics. Saussure distinguished language (*langue*) from speech (*parole*):

But what is language? It is not to be confused with human speech, of which it is only a definite part, though certainly an essential one. It is both a social

product of the faculty of speech and a collection of necessary conventions that have been adopted by a social body to permit individuals to exercise that faculty. Taken as a whole, speech is many-sided and heterogeneous; straddling several areas simultaneously--physical, physiological, and psychological--it belongs both to the individual and to society. . . . Language, on the contrary, is a self-contained whole and a principle of classification (Saussure, 1959:9).

Salamini (1981) describes Saussure's language and speech distinction as characteristic of two types of linguistic analysis: synchronic and diachronic. The synchronic deals with linguistic systems as independent and autonomous whereas diachronic concerns itself with the general, societal, historical content in which linguistic systems develop. According to Salamini, this dual representation allows for the static-dynamic approach to language which Antonio Gramsci postulated and which seemed to show through in the work of Italian neo-linguists during Gramsci's time. Rossiello, one of the few analysts of Gramscian linguistics, identifies commonalities between Gramsci and Saussure's emphasis on the importance of history in linguistic analysis and the social character of language but cites definite contrasts between Gramsci and those individuals of the Saussurean school. Such differences lie in Gramsci's interest in the history of language from the standpoint of political history rather than in the empirical investigation of phonetic and morphological aspects of language.

The collective character of speech is one body which the Sausserian parole was lacking (Rossi-Landi, 1977). As early as 1920,

the Russian Marxist Volosinov underscored the individuality inherent in Saussure's description of signs:

Signs can only arise on interindividual territory. It is territory that cannot be called 'natural' in the direct sense of the word: signs do not arise between any two members of the species *Homo Sapiens*. It is essential that the two individuals be organized socially, that they compose a group (a social unit); only then can the medium of signs take shape between them (Volosinov as cited in Sinha, 1977:87).

This is not to deny that an individual language exists; but rather, as Gramsci (1971) pointed out, it is to give credence to the dialectical character of language and the relation it posits between the individual and the collective.

It seems that one can say that 'language' is essentially a collective term which does not presuppose any single thing existing in time and space. . . . At the limit it could be said that every speaking being has a personal language of his own, that is his own particular way of thinking and feeling. Culture, at its various levels, unifies in a series of strata, to the extent that they come into contact with each other, a greater or lesser number of individuals who understand each other's mode of expression in differing degrees, etc. (Gramsci, 1971:349).

Both Marx and Engels also decried the notion of a private language in German Ideology.³ Marx once again elaborates on this in the Grundrisse:

The individual is related to a language as 'his own' only as the natural member of a human community. Language as the product of an individual is nonsense. . . . Language itself is just as much the product of a community, as in another aspect the existence of the community--it is, as it were, the communal speaking for itself (Marx, 1971:390).

Such absence of privately owned language as described by Marx and others does not, however, deny the appropriation and control over the means of communication, i.e., sign systems, which certain groups or classes of individuals may exercise over other groups or classes.

The Class Character of Language

. . . Not for nothing are various languages born, do they develop, and die; not for nothing is the presence of a language a distinguishing mark of human society just as the presence of material artifacts is; and not for nothing does the edifice of social reproduction, to which also the expressive and cognitive uses of language belong, have its foundation in the modes of production and in class struggle (Rossi-Landi, 1977:180).

Since the time of Marx, theoreticians have examined the relationship between class and language and have discussed the plausible effect of class position on an individual's speech and thought. Perspectives have ranged from historical analyses of social and class structure (including the relationship between and among individuals as determined by their relation to the means of production) to objectified deficit/disadvantage theories such as Jensen's and others. At the center of this debate, is the work of Basil Bernstein which, since the late sixties, has critically examined the interrelations between class, language, and educability.⁴ While Bernstein's theories have helped pioneer a shift in sociolinguistic research from langue to parole and draw attention to the social, cognitive, and cultural substrates of linguistic interaction, they have also been used as an argument that

working class children possess a substandard speech. As Kress and Hodge (1979:65) note,

When a writer claims, as Bernstein has seemed to do, that the possessing class has expropriated the working class of the means to thought as well as of the instruments of material production, working-class forms of language and thought seem to have been disvalued.

Rosen (1972) maintains that there are central ambiguities and unresolved contradictions in Bernstein's papers which have resulted in much of his work being misunderstood. Most of these problems center around Bernstein's conception of elaborated and restricted codes, the result of class-based differences.

. . .Class relations generate, distribute, reproduce, and legitimate, distinctive forms of communication, which transmit dominating and dominated codes; and that subjects are differentially positioned by these codes in the process of their acquisition (Bernstein, 1982:304-305).

At the base of the criticism of Bernstein by Rosen, Kress and Hodge, Sinha, and others, is his lack of an historicist position in reference to the definition of class. Economic strata are defined in terms of two classes only: the middle class and working class. The ruling or dominant class, which plays such a key position in class-based analyses such as Bissieret (1979), Bourdieu and Passeron (1977), Kress and Hodge (1979), and Rossi-Landi's (1977), is not in Bernstein's picture.

There seems to be a definite progression in Bernstein's work however, from Class, Codes, and Control which was published in 1962 to his recent "Codes, Modalities, and the Process of Cultural Reproduction," published in 1982. His more current notions on the

distribution of power and its relevancy to realizations of orientation to meaning are of particular interest to the present study.

As Bernstein notes, ". . .the code regulates the 'what' and 'how' of meanings: what meanings may legitimately be put together and how these meanings may be legitimately realized." Although a more elaborate discussion of meaning will take place in a later section, suffice it to say that the realization of these meanings to which Bernstein refers is contingent upon the power structure at work in society. In other words, social and class relations place limits on the manner and ways in which individuals acquire meaning. As such, it may be that the elaborated and restricted codes are not actual linguistic phenomena but rather aspects of the power play within the social structure which have an effect (albeit linguistic) on the individual.

Stalin (1972:11) contended that the class character of language is not a language factor at all:

. . .language, as a means of intercourse between the people of a society, serves all classes of society equally, and in this respect displays what may be called indifference to classes. But people, the various social groups, the classes, are far from being indifferent to language. They strive to utilize the language in their own interests, to impose their own special lingo, their own special terms, their own special expressions upon it.

Stalin has been attacked by a number of Marxists on this point and rightly so since, through his nationalist policies, he advocated the use of one language, Russian, which he believed could adequately serve the needs of all Soviet peoples. By so doing, he was denying the cultural roots of the people and idealistically viewing class as nonexistent.

Engels spoke not of "class languages" but of class thoughts, ideals, customs, moral principles, religion, and politics. But where, for instance, do we draw the line between language and thought, language and customs, and more particularly, language and culture, which seems to assume the inclusion of all of the above? Explication requires a return to Saussure's parole and its embedded substance, i.e., the system of meanings which gives the language its significance within the speech community--meaning which cannot be separated from the culture from whence it came.

The Role of Culture

According to Whorf, linguistics is an heuristic instrument for the study of a culture, a homogeneous entity which unites a harmonious society (Kress and Hodge, 1979). Malinowski referred to a "context of culture"--the environment for the total set of linguistic options available, the sum of all that is feasible and formally correct (Edwards, 1976). Salamini (1981:34) maintains that language "aids the development of a cultural social unity through the welding together of a multiplicity of dispersed wills in a common conception of the world." Culture is a social process in which individuals define and shape their lives (Williams, 1977) and it is the context within which we as human beings, function, interact and live.

Interaction through language presupposes common ways of speaking which, in turn, presume a common system of conceptual referents and shared knowledge. Gumperz (1968:381) refers to this

interactive body as a "speech community"--a "human aggregate characterized by regular and frequent social interaction by means of a shared body of verbal signs, and set off from similar aggregates by significant differences in language usage."

Hymes (1971) calls language a system of cultural behavior; the reality of communication through speech requires a theory in which sociocultural factors have an explicit and constitutive role,

. . .where language is part of a whole process of interaction, its meanings are inseparable from its context, and it tells us far more than is carried on the surface of the words. It may be patterned in ways which reveal or define who the speakers are, what their relationship is, and how they perceive the situation in which they speak. A 'socially realistic linguistics' tries to account for these patterns. It is not concerned with idealized speakers, but with 'persons in a social world' who must know 'when to speak, when not, what to talk about, with whom, when, where and in what manner' (Hymes, 1972:277).

Culture cannot be separated from language for it is an integral part of the sign system from which language comes. Nor, contrary to what Stalin believed, can language be analyzed apart from the study of meanings whose content is primarily cultural in form. It is culture which gives language a transformational and dialectical character; it is culture which gives language life.

Conclusion

The works cited in this section illuminate language's sociocultural and historical character. It becomes easy to see why the

study of language uprooted from social circumstances loses the flavor of what language is all about.

The approach established here serves as an ideological base for the work which will follow. It can probably best be summarized by the following propositions cited in Salamini (1981) and drawn from Gramsci:

- Linguistics concerns itself with the history of language.
- The history of languages is the history of semantics, itself an integral part of the history of culture.
- The source of 'meanings' in language is history, more specifically the political praxis of a given group.
- Meanings are always 'ideological'; they reflect the interests of a given group.
- Meanings are critical insofar as they indicate the presence of elements derived from old or new conceptions of the world.
- There is a dialectics of meanings, reflecting a dialectics taking place in society.
- Linguistic truths are established by the political praxis of a dominant group.

Language as Substance

The Development of Meaning

Language conveys to the individual an already prepared system of ideas, classifications, relations--in short, an inexhaustible stock of concepts which are reconstructed in each individual after the age-old pattern which previously moulded earlier generations (Piaget, 1960:159).

. . . Each time we begin to speak, all of the language is already present. There it is contained in our speakers' memories, in the books which describe it, in the objects and institutions which represent its meanings (Rossi-Landi, 1977,110).

Language is part of a psychological, sociocultural, and historical process; it is based on that which has come before and that which presently exists. And, since it is social, language is also profoundly oriented toward the future (of classes, the nation, and personal milieux). It presumes an active and dynamic interaction between participants.

. . . Language, which incorporates the experience of generations or, more broadly speaking, of humankind, is included in the process of the child's development from the first months of life. By naming objects, and so defining their connections and relations, the adult creates new forms of reflection of reality in the child, incomparably deeper and more complex than those which he could have formed through individual experience. This whole process of the transmission of knowledge and the formation of concepts, which is the basic way the adult influences the child, constitutes the central process of the child's intellectual development (Luria and Yudovich, 1971:22).

Most theorists would agree with Bruner (1978) that language acquisition is aided by the child's prelinguistic grasp of concepts and that this knowledge later enables him or her to discover syntactic rules and relate words to meaning. As Donaldson (1978:38) notes, language development involves the ability to make sense out of things--to grasp meaning--and, through processes of hypothesis testing and inference, to "arrive at a knowledge of language." The child learning his or her mother tongue is learning how to mean (Halliday, 1975).

The chief prerequisite for the formation of meaning is the child's objective activity in the world around him--the child actively exercises his command over the world of things, incorporating them into his activity and subordinating them to his goals and motives (Leont'ev, 1977, 28).

According to Edwards (1978), early meanings are derived from three sources: the child's understanding of how the physical world of objects, space, and persons is structured and operates; the child's pre-linguistic and concurrent social relationships; and the function of the reference itself--"the conventionalized semiotic relation between sign and referent." It is the third which will be of major interest here.

One of the most basic steps a child has to take in acquiring language is to attach meaning to words. These meanings are based on individual, contextual, and situational experiences and may not correspond with those of the adult. According to Vygotsky (1962), the child's early communication begins with a generalization of several objects as a whole based on direct impressions and, with time and experience, moves to a process of analysis and synthesis of reality where the word is distinguished by necessary features and is related to a definite category. Similarly, Clark (1973:72) argues that early items in the child's lexicon are defined in terms of a relatively small number of semantic features,

. . .that when the child first begins to use identifiable words he does not know their full (adult) meaning; he has only partial entries for them in his lexicon, such that these partial entries correspond in some way to some of the features or components of meaning that would be present in the entries for the same words in

the adult's lexicon. . . The acquisition of semantic knowledge then, will consist of adding more features of meaning to the lexical entry of the word until the child's combination of features in that word corresponds to the adults.

According to Rosch (1973), the young child's concepts are based on focal areas of the child's particular experience with the circumscribing environment. Based on perception, children build a series of features or exemplars representing personal experiences with the objects involved. Strauss (1979) has shown, however, that children will eventually combine these exemplars into the form of general prototypes that depict numerous and more defining qualities.

Luria and Yudovich (1971) emphasize the important role the word plays in the formation of mental processes. Besides its function as an indicator of corresponding objects in the external world, words abstract and isolate necessary signals, generalize received signals, and relate the signals to certain conceptual categories.

Many contemporary psycholinguists have focused on meaning as the logical center of concept-referent relations. In this regard, meaning becomes synonymous with rational knowledge. Szalay and Deese (1978) contend this synonymity had led [psycholinguists and psychologists] to an epistemological interest in meaning and a concern with problems intrinsic to the acquisition of knowledge.

The relations between word and referent, however, are not always arbitrary or logical. Language, as a uniquely human process, interacts with the powerful psychological forces behind the individual's

awareness, thus producing different degrees of saliency for different people.

The meanings we can attach to a word, and therefore the uses to which we can put the word, are limited by our acquired cognitive categories and attributions. In fact, our participation in a temporarily shared social world presupposes our acquisition of public strategies of categorization and social rules of attribution. . . But, to know the categories and attributions commonly associated with a certain word is only a necessary and not a necessary and sufficient condition of the appropriate use and comprehension of the word: these categories and attributions only provide what Rommetveit calls "drafts of contracts," our actual communicative semantic competence depending on our ability to elaborate these general schemes in particular social contexts. . . (Marková, 1978:200).

Meaning, therefore, becomes more than a dyadic relation or a dictionary's lexical description of word and referent. Rather, it becomes as Osgood (1954) described--a reaction of the human organism, a covert coding reaction that is both mediational and representational in nature (Szalay and Deese, 1978). Meaning in its lexical form is what we, as members of a particular society, have in common; in its psychological form, meaning is what subjective experience determines.

Hörmann (1981) says to mean is to understand. A number of theorists maintain that it is understanding, or comprehension, which precedes language production. But, as Donaldson (1978) notes, "understanding" is a complex notion and to state that understanding precedes production may be an oversimplification. In explication, she poses two questions: does the child understand the words he or she hears in the sense that they are "in his or her vocabulary," and given that this is the case, does he or she understand the words in their

context (linguistic or non-linguistic) in the way in which the speaker intends them to be understood?

. . . The point to be made is that we ordinarily speak within the flow of meaningful context which, as it were, supports--or at least does not conflict with--our language. It does not conflict with our language because we fit our utterances to its contours. The child's attention is drawn to something that interests him and he expresses it in whatever form comes most readily to him. He is never required, when he is himself producing language, to go counter to his own preferred reading of the situation--to the way in which he himself spontaneously sees it. But this is no longer necessarily true when he becomes the listener. And it is frequently not true when he is the listener in the formal situation of a psychological experiment--or indeed when he becomes a learner at school (ibid:74).

The Representation of Meaning in Memory: The Semantic Memory Store

In order to understand how a child acquires language's complex system of meaning and classifies and orders this meaning in socially significant ways, it is necessary to introduce the concept of semantic memory: the individual's store of permanent, meaningful knowledge, for the complexities of classification, and for day-to-day language use. The study of semantic memory per se is a recent phenomenon, dating back only to the mid-sixties. Prior to this date, U.S. psychologists tended to view memory in more clinically related terms--as a stage in information processing--a process mechanistically rather than socially determined.

Because of its novelty, psychologists have approached the topic of semantic memory in diverse ways, each bringing his or her

particular training to the forefront. Rummelhart, Lindsay, and Norman (1972) describe a memory structure which is capable of recording facts, solving problems, making logical deductions, and understanding ideas. Kintsch (1970) views semantic memory as an organized internal lexicon that represents a person's knowledge of the language. According to Smith (1978), the study of semantic memory is concerned with "semantic interpretation" or (1) the retrieval of the semantic representation of individual words; (2) the combination of these individual meanings into an overall sentence meaning; (3) the relation of this overall meaning to a real-world situation; and (4) the use of the meaning in drawing possible inferences. For Collins and Quillian (1969) and Collins and Loftus (1975), the concept of semantic memory appears as a hierarchically structured network of concepts, images, and words; a network capable of making inferences and comprehending language.

Memory theorists disagree on the exact specifications of semantic memory and the sundry strategies it might include. In 1972, Endel Tulving introduced a new paradigm into the field of cognitive psychology and memory which has helped resolve some of the disagreement.

Tulving sees a two prong structure: an episodic as well as a semantic store. Episodic memory is the memory which "receives and stores information about temporally dated episodes or events and temporal-spatial relations among these events." Semantic memory acts more as a mental thesaurus "the organized knowledge a person

possesses about words and other verbal symbols, their meaning and referents, about relations among them, and about rules, formulas, and algorithms for the manipulation of these symbols, concepts, and relations" (Ibid:384).

According to Tulving, episodic and semantic memories are two information processing systems that (1) selectively receive information from perceptual or other cognitive systems; (2) retain various aspects of this information; and (3) upon instructions transmit specific retained information to other systems including those responsible for translating it into behavior and conscious awareness. The two systems differ from one another in terms of the nature of stored information, autobiographical versus cognitive reference, and conditions and consequences of retrieval. They may also differ in their susceptibility to interference. The distinctions between the two, however, should not be taken to mean that two separate memory structures exist. Rather, it suggests an impression of how information from the external environment is taken in and later ordered in semantic memory. A demarcation is made between the individual's personal history and the more general "world knowledge" of which we all share.

In most semantic memory models, the lexicon, or the vocabulary store, constitutes a separate but related system. According to Collins and Loftus (1975), each word name in the lexicon is linked to at least one concept in semantic memory. Organization is based primarily on the phonetic similarity of words and not on associative relatedness.

Shcheiba (as cited in Leont'ev, 1977:47) views the lexicon as more encompassing:

a lexicon is still not a simple, albeit complete collection of examples of individual words; it is a collection of general terms grouped under the heading of particular words, and in any given language the individual phenomena of reality are subsumed under these words.

While the entries of the lexicon may be expressed in surface structure as words or phrases, it is the interaction among words and their use in a particular context which produces meaning, not something inherent in each word separately (Kintsch, 1974). Similarly, concepts in semantic memory are defined in terms of their relationship to other concepts. Some of these concepts may not correspond to specific words in the language but may be more representative of broad topics of knowledge.

The semantic memory structure, which includes as components the lexicon, a semantic-conceptual system, and an episodic memory, is subject to change over time. As previously discussed, words or items in the young child's lexicon may be more representative of larger units of meaning and, as such, may not coincide with the semantic system of the adult. By school age, however, the child is aware of the commonalities and differences among word meanings and that there are domains of meaning which correspond to interrelated sets of words (Gearhart and Hall, 1979).⁵

Essentially, the semantic aspect of a child's speech develops by stages, in which he penetrates, step by step, the "essence of things" and gradually acquires the ability to reflect in his communication not only the subjective and situational attributes of objects but also

their objective attributes, socially fixed in signs, and at the same time, to use signs in noncommunicative activity (Leont'ev, 1977:39).

Concept formation becomes both the process and product of learning and development. The child moves from a specific concept to a system of interrelationships and general world knowledge. This process entails elements of discovery and transformation (Leont'ev, 1977), an assimilation and accommodation of information resulting in the attainment of the conventional language/semantic system of adults. As the child communicates with others in the language community, the conceptual representations for words modify themselves and take on more and more of the information attached to the terms of those around the child.

Acquisition of the L2

This process is somewhat the same in second language acquisition. Whereas cognitive development and experience are the key determinants in the infant's ability to learn the mother tongue, experience combined with comprehensible input appear to be paramount for the second language learner. As Krashen (1980) notes, the L2 learner uses his or her knowledge of the world and of extralinguistic information in deciphering and creating meaning. The learner acquires structure as a result of understanding the message.

According to Strick (1980), L2 learners structure and interpret their experiences in the second language world in terms of categories derived from their native language and culture together with

their perception of phenomena, linguistic and cultural, in the L2 environment. The child learning a second language is also learning how to mean but has the advantage of already established general world knowledge. Concept acquisition would typically begin, then, with concrete, salient, perceptually based universal dimensions of concepts, i.e., categories and objects in which the individual can employ existing prototypes rather than construct new ones. With time, the learner's increased social experience with native speakers of the second language and his or her growing understanding and awareness of culturally relevant meaning and words would stimulate the acquisition of more abstract and culturally tied concepts in semantic memory. At first, as with children, "cultural" knowledge is episodically based and remembered in association to particular experiences. As knowledge of the second culture expands, however, such information becomes more conceptually embedded and "semantic."

As Gearhart and Hall (1979) suggest, however, this process does not always run smoothly. The limited English speaking (LES) child may interpret lexical meaning differently than does the monolingual English speaker. "A child may 'misinterpret' or be unable to assign any interpretation to a word, and, if that happens too often, she/he may just tune out the interaction." The use of conventionalized, middle class, literal meanings for words within the school context can further exacerbate the beginning stages of second language organization for the language minority child.

The acquisitional context. Much of the bilingual child's organization of meaning seems to be related to the social and psychological context in which the languages are learned. Uriel Weinreich (1953) coined the terms "compound," "coordinate," and "subordinate" to refer to nuances in the age and manner of the languages' acquisition. The importance of the compound/coordinate/subordinate distinction has traditionally been taken to reflect the degree of semantic overlap between the bilingual's two languages.

The compound bilingual, as a result of acquiring both languages at the same time (i.e., infancy) and in the same context (i.e., the home), has a single set of representational processes, meanings, or responses for his or her two sets of linguistic signs. It is generally believed (Albert and Obler, 1978; Hornby, 1977; Weinreich, 1953; and others) that individuals who acquire two languages simultaneously during infancy assume one single language context system with two distinct modes of expression. Bain (1981) calls the compound a "natural bilingual" because both languages and culture are completely in tune. Paradis (1978) points out, however, that compound bilinguals are not able to function quite as native speakers of either language since their units of meaning represent a merging of related but not identical units of content in both languages.

In contrast, the coordinate bilingual has differing meanings for corresponding terms in each language and two distinct mediation processes for translation (Ervin and Osgood, 1954; Lambert, Havelka, and Crosby, 1958; and Jakobovits and Lambert, 1961). Language

acquisition contexts for the coordinate occur in different cultural environments (i.e., home and school) and in a disjunctive rather than simultaneous fashion. In Paradis' (1978) opinion, the coordinate functions presumably as a native monolingual speaker of each language, always using the proper unit of expression to refer to the proper unit of content in each language.

Subordinates, on the other hand, speak their first language as a native but, in using their L2, employ units of expression whose referential meaning lies in the mother tongue. The subordinate bilingual may have the ability to speak in the new language but must constantly translate while encoding or decoding messages. Such situations typically occur in the foreign language classroom.⁶

According to Mägiste (1979), all bilinguals store words in memory in terms of the semantic representation of these words. A number of researchers have discovered differences in performance, however, between compound and coordinates, suggestive of differing strategies in semantic processing and possible differences in semantic content. Jakobovits and Lambert (1961) found that compounds experience a decrease in meaning of a word and its translation equivalent as a result of its continued presentation while coordinates exhibit a "generation" of meaning with no negative cross-linguistic effects at all. In other words, compounds tend to merge words and their translation equivalents and see them as synonymous while coordinates are more likely to identify nuances in meaning.

Kolers (1963) postulated that all bilinguals store semantic information in one of two ways. The first, which he called interdependent memory, assumed bilinguals store information in a single memory from which both languages might draw. The second, independent memory, saw bilinguals assigning information to functionally independent, separate memories determined by the language in which the information was received. In order to test this notion, Kolers distributed intra and interlingual free word associations to native speakers of Thai, German, and Spanish, all of whom were proficient in English (and, by his description, appeared to be compound bilinguals). Over thirty percent gave shared associations to translation equivalents, however, prompting Kolers to conclude all bilinguals have a separate mode of storage. In such a model, the two languages interact only through translation processes and interference never occurs. Macnamara (1971) and Tulving and Colotla (1970) have supported Kolers' hypothesis.

Studies by Glanzer and Duarte (1971), Gulden, Martínez, and Zamora (1980); Lambert, Ignatow, and Krauthamer (1968); López and Young (1974); Mägiste (1979); Preston and Lambert (1969) and others have shown that while meaning for coordinates is language tagged, semantic interference across languages can and does occur, thus calling into question Kolers' notion of separate and distinct stores. Results from a study by Segalowitz and Lambert (1969) of language synonyms suggest both compound and coordinate bilinguals use semantic generalization; subjects tend to focus on the semantic content of a

word before looking at the language of the word or the actual recollection of the item itself. Compounds, however, place relatively more emphasis on language factors than do coordinates apparently because of interlingual dependencies.

Preston and Lambert (1969) hypothesized that bilinguals would encounter less interference when different languages were used for encoding and decoding than when the same language was used for both processes. To demonstrate this, they employed a bilingual version of the Stroop Color Word Task in which color words were presented in one language and in an opposing color print. Subjects were asked to identify the color word over differing trials in either the same language or the second language. Even when the response language differed from the printed letter of the color words, the authors found problems in the reading of the words. Although under normal conditions bilingual subjects have no difficulty in keeping their two languages functionally separate, they are unable to ignore the semantic aspects, in this case the inherent concept of color present in the printed word. The Stroop Test, by bringing the perceptual and productive processes into play simultaneously in both languages, shows that the languages must come in contact and overlap (or interfere) in some way, most likely at the semantic level.

Both Fiszman (1978) and Ortony (1976) argue that compounds and coordinates have the same semantic store with differences lying in the contents of semantic memory. This distinction might be better explained by the concept of "biculturalism." The coordinate bilingual

can be described as having culturally specific contexts for each language, based on modes of acquisition and language experience. This individual learns word referents according to transmitted meanings from the particular culture. Although lexical translation equivalents of phonetic sound-alikes may exist, meaning outside the cultural context is not quite the same. Biculturalism, as such, however, does not necessarily mean a significant separation of linguistic systems within the individual. Rather, it denotes a cultural orientation to language that the compound with only one context may not possess.

Gekoski (1980) and Lambert (1969) maintain the distinction between compounds and coordinates should not be viewed as dichotomous but as two idealized ends of a continuum:

The continuum notion recognizes that even if language acquisition context were the sole determinant of linguistic orientation in the bilingual, since very few individuals acquire their second language in a purely compound or purely coordinate context, there are in fact very few pure compound or coordinate bilinguals. It would seem more reasonable to expect each bilingual to have some portion of his language organized in a compound and some in a coordinate fashion. Further, it might be that for certain domains of his experience, a bilingual's languages are compoundly organized, and for other domains they are organized in a coordinate manner. It must be assumed that with time and new experience reorganization occurs; and also, that situational variables are among the determinants of whether a compound or coordinate part of a bilingual's linguistic system is activated on any given occasion (Gekoski, 1980:443).

Gekoski came to these conclusions by working with adult Spanish-English bilinguals and admits that differences may be more pronounced with young children. The point at issue, however, is not

so much the bifurcation which may or may not result from diverse acquisitional settings, but is how and by what means the bilingual can relate his or her language systems.

The Interrelation of L1 and L2

The process involved in the interrelation of the bilingual's two languages might be encompassed in the term "lexical disambiguation" which, according to Miller (1978), refers to the use of context (the immediate linguistic context, the discourse context, and the situation in which communication occurs) in enabling individuals to recognize which meaning a word may express on a particular occasion. As Miller explains, each word is associated in the mental lexicon (semantic memory) with information that can be characterized as a set of concepts the word can be used to express. Each concept has a set of contextual features adequate enough to allow the individual to select it over all others and to attach it to the appropriate lexical entry. In the bilingual, concepts must have associated lexical entries in each language and attached cultural, contextual, and general world knowledge cues.

According to Ramsey (1981:18), however, not all words and meanings can be neatly matched across linguistic boundaries.

What a given word means for the native speaker of L1 may not be the dictionary translation equivalent of what the word means for the native speaker of L2. It is further possible that the learner of L2 may transfer the lexicosemantic structure of L1 to his second language and thereby have a concept in mind when communicating in L2 that is quite different from that of a native speaker.

In order to investigate this notion, Ramsey distributed restricted word associations to native and non-native speakers of English. Results demonstrated that responses made by the non-native speakers resembled the semantic structure of their mother tongue rather than that of the second language.

Mägiste (1979:88) maintains that comprehension and production of words in two languages results in the same semantic representation in memory. "That is, bilinguals have a single conceptual code and accessing this code makes available more perceptual codes than are available for the monolingual. . ." Mägiste's findings from encoding and decoding tasks with German-Swedish bilinguals and Swedish monolinguals indicate that individuals with one dominant language are more easily able to access concepts because the connections between words and concepts are brief and clear. Bilinguals, on the other hand, have numerous verbal associations for each word resulting in greater interference.

While interference clearly occurs for the bilingual, Mägiste's supposition that translation equivalents share the same semantic representation reflects a system with corresponding cultural referents. It seems, rather, that people who have learned their L2 in a cultural setting different from that of the first order words and concepts in an interrelated manner.

Taylor (1971:238) contends inter-language links exist between semantically similar words possibly due to the fact that "semantically similar or equivalent words from two or more languages are used in

similar environments, thus sharing some representational mediational processes in common." But he goes on to note that links across two languages between semantically related words are not as strong as intra-language links (suggestive of a conceptual hierarchy which is language or culture specific). Studies by Lambert, Ignatow and Krauthamer (1968) and Dalrymple-Alford and Aamiry (1969) on free recall of well-categorized bilingual material had findings similar to Taylor's.

Walters (1980) in a study on how children acquiring a second language combine grammatical and sociocultural knowledge in language production, also found that subjects rely heavily on context. Armenian, Spanish, and native English speaking children were given tasks which tested their ability to produce and vary the semantic strategies involved in conveying requests. Walters concludes from his findings that LES children make use of both linguistic (previous utterances in the conversation) and sociocultural context (status and ability of the addressee to comply) to compensate for their limitations. "Those limitations are the lack of grammatical skill necessary to encode their intentions and the lack of appropriacy in the extent to which they have encoded them" (341).

According to Walters, these findings give support to Canale and Swain's (1980) notion that grammatical competence is not a sufficient condition for the development of communicative competence. Based on his or her experience with the L1, the child can, in most cases, adequately encode intentions and can assess the sociocultural rules of interaction.

In processing terms, a speaker begins with an intention (meaning) and a well-specified sociocultural context. What he lacks is an appropriate grammatical form that will link the meaning to the social context. . .[i.e.,] the problem of mapping form onto the relationship between meaning and sociocultural context (Walters, 1980:344-45).

Just as the child needs a suitable grammatical form to relate the meaning to the social context, so too he or she needs an apt understanding of the sociocultural context in order to map the meaning onto the form. In some situations, the child may, as Walters discovered, produce utterances which are grammatically well-formed but lack sociocultural appropriateness.

Clarke (1976:382) contends that students' difficulties in learning a second language often stem from a lack of understanding of the social context of language. He describes this plight as a "clash of consciousness in which double bind phenomena are viewed as the result of differences between culturally determined definitions of reality." Divergent realities may be the standard for children in the early stages of acquiring a coordinate type of bilingualism--where the social institutions of home and school are each associated with a specific language and its related cultural norm.

Conclusion

The development and use of meaning seems to be the key factor in the growth of both the primary and second languages. It is by means of a natural interactive process that the young child builds meaning and subsequently relates this meaning to words. For the

child who acquires the L2 after infancy, however, meaning may be differentially represented.

As Ramsey (1981) and Szalay and Deese (1978) found, cultural frames of reference affect individuals' perceptions and attitudes which, in turn, affect psychological aspects of the reactions to words and the concepts behind them. While the significance of words in the English language may be similar for both native English and non-native English speakers, the sociocultural, experiential context in which lexical meaning is initially derived, varies greatly. In other words, the general world knowledge of semantic-conceptual memory may, in the case of the bilingual, have cultural footnotes or references which help determine meaning salience and use in varying communicative situations.

Language as Grounded Reality

The Reproduction of the Social World

. . . Language serves society as a means of intercourse between people, as a means for exchanging thoughts in society, as a means of enabling people to understand one another and to co-ordinate joint work in all spheres of human activity, both in the sphere of production and in the sphere of economic relations, both in the sphere of politics and in the sphere of culture, both in social life and in everyday life (Stalin, 1972:34).

According to Marx (as cited in Bologh, 1979), nothing is what we know it to be outside of the relations and activities in which it is known. Language's significance is based upon these experiences; it is the "real life" quality of language that makes up a speaker's given reality. As the phenomenologist Joseph Church (1961:136) states,

developmentally, it is clear that one comes to terms with reality only through a continuing dialectic in which language plays an intimate and indispensable role, and which orients us schematically to a multi-dimensional universe infinitely broader and more variegated than anything that can be known perceptually and first hand.

It has been phenomenologists like Church and Bologh (1979) who have philosophized on reality's abstract connection and, in so doing, have placed reality within the realm of the daily world. For Church, the individual's knowledge of reality is culturally defined.

All human beings live in and respond to the same concrete reality. They differ, however, according to cultural and individual backgrounds, in the perspective they have on reality, in the features or reality which to them are prominent or obscure, in their sensitivity to the multitudinous possible attributes of reality, and in the connections which may establish between objects, particularly the degree to which explicit causal chains supplant implicit dynamic connections (Ibid:138).

Bologh also implies the importance of culture in discussing the struggle for self conscious self production in reference to the relation between subject and object: "a self conscious subject is one that [re]produces itself and knows itself in its relation to its object and knows and produces [the meaning of] its object in relation to itself." Knowledge is reflexively tied to the social (and cultural) conditions of its production, the social conditions are internal to the individual and to the knowing of the object. Language, then, which is used in everyday life, continuously provides the necessary objectifications and posits the order with which these make sense and within which everyday life has meaning (Berger and Luckman, 1966).

If, however, a mismatch exists between the internal and the outside world, reality becomes contradictory and without meaning.

As Bologh (1979:33) affirms,

When internal relations are mediated by something external, they become external and indifferent to each other. The external mediation produces a contradictory form of life: a divided subjectivity in which one side negates the other.

This divided subjectivity may be actually reflected in the language proficiency of the child.

Communicative competence. According to Berger and Luckman (1966:144),

One learns a second language by building on the taken-for-granted reality of one's 'mother tongue.' For a long time, one continually retranslates into origin language whatever elements of new language one is acquiring. Only in this way can the new language begin to have any reality. As this reality comes to be established in its own right, it slowly becomes possible to forego retranslation. One becomes capable of 'thinking in' the new language. Nevertheless, it's rare that a language learned in later life attains the inevitable, self-evident reality of the first language learned in childhood. Hence derives, of course, the affective quality of the 'mother tongue.'

Communicative competence, the ability to interact verbally in accordance with principles of social appropriateness, is one aspect of language proficiency. As Bialystok (1981:31) notes, communicative competence "refers to that aspect of a learner's proficiency which permits that learner to interact fluently and effectively through the language for instrumental purposes." It is the development of a range of language functions and various forms for conveying each of

these functions; the learning and use of communication rules and the shaping of language to fit each individual situation (Lindfors, 1980). But as Cummins (1982) points out, there is still little consensus among researchers as to the nature of language proficiency or of communicative competence.

In 1981, Canale proposed a framework for communicative competence composed of four components: grammatical competence, sociolinguistic competence, discourse competence, and strategic competence. Grammatical competence refers to mastering the rules of the language: the morphosyntactic, phonological, and lexical parts that together help make up a language code. The appropriateness and use of language in different social settings comprise Canale's vision of sociolinguistic competence while discourse competence refers more to how speakers combine meanings and forms to achieve a particular purpose. Strategic competence involves the use of both verbal and nonverbal strategies, i.e., paraphrases and gestures. According to Cummins, Canale's framework refers to the achievement of language mastery in native speakers and, as such, cannot adequately be applied to minority students' acquisition of English.

In short, current theories of communicative competence are not particularly helpful in elucidating issues related to the development of English proficiency by language minority students. This is because these theories (1) fail to incorporate a developmental perspective; (2) fail to consider the development of communicative competence explicit in relation to specific contexts, in particular the school context; and (3) fail to examine the developmental relationships between L1 and L2. In other words, the usefulness of most current theories is limited because

they exist in a developmental or contextual vacuum or else have been proposed in a very different context from that of bilingual education in the United States (Cummins, 1982:9).

Instead, Cummins proposes a framework which conceptualizes communicative competence along two continuums. The first, which is horizontal, is related to the range of contextual support available for expressing or receiving meaning and is described by "context-embedded versus context-reduced" communication. In context-embedded communication, the actors actively negotiate meaning and employ paralinguistic and situational cues. This type of communication usually occurs in an environment where the participants share a reality and do not need to explicitly elaborate the linguistic message. In context-reduced communication, however, elaboration is necessary. No shared reality can be assumed. Meaning is derived primarily from linguistic cues; use of the surrounding setting is suspended and communication is "decontextualized." Context-embedded communication is typical of the world outside the classroom whereas context-reduced is typical of that within.

The second continuum, graphically depicted in a vertical form, addresses the developmental aspects--including the "degree of active cognitive involvement in the activity" (Ibid:12). At the upper level are communicative tasks which have become largely automatized and require little cognitive involvement. Those tasks which require active involvement are located at the lower level.

Cummins superimposes one continuum on the other so that, for example, a young child learning the phonology and syntax of the

mother tongue would be in both a context-embedded and cognitively demanding situation whereas the child in the second language class would be in a context-reduced setting with cognitively demanding tasks. The cognitive demands for both children will, with development and experience, progressively change.

As both Cummins (Ibid) and Bialystok (1981) emphasize, there is a direct relationship between aspects of proficiency and learner knowledge. When a fluent speaker uses language, he or she draws upon the structural or formal features of language, including pronunciation, grammatical rules and vocabulary; rhetorical aspects which include the use of spoken and written discourse rules; and instrumental components such as the ability to interpret or express socioculturally appropriate conceptual meaning. Bialystok argues that, together, these aspects of language proficiency point to two distinct knowledge sources which vary according to information content and degree of accessibility.

Explicit knowledge refers to the extent to which information is understood and used by the learner as an abstract linguistic structure, independent of the context in which the information occurred. Implicit knowledge, on the other hand, involves the ability to intuitively produce correct, coherent utterances. Implicit knowledge is 'descriptive' in that the structure of the knowledge is not apparent apart from its application; explicit knowledge is 'explanatory' in that its logical basis is understood independently of its application (Ibid:34).

Bialystok's notion is in line with Cummins' (1979) distinction between cognitive/academic language proficiency (CALP) and basic interpersonal communicative skills (BICS). CALP refers to proficiency

in relation to overall cognitive and academic skills (i.e., explicit knowledge) while BICS refers more to language use and interpersonal communication (i.e., implicit knowledge).

Both of these theories emphasize that language mastery is based on a number of separate skills which may or may not come together in specific language tasks. Thus, performance and proficiency may differ depending on the situation. An obvious instance of this difference in the LES child is in the potential conflict of home and school.

The Polemics of Family and School

The normal child comes to school with well established skills as a thinker. But his thinking is directed outwards on to the real, meaningful, shifting, distracting world. What is going to be required for success in our educational system is that he should learn to turn language and thought in upon themselves. He must become able to direct his own thought processes in a thoughtful manner. He must become able not just to talk but to choose what he will say, not just to interpret but to weigh possible interpretations. His conceptual system must expand in the direction of increasing ability to represent itself (Donaldson, 1978:88-89).

The child has to learn to use language in a disembedded or context-reduced manner. The LES child has to learn both the second language and the second language appropriate to school use. In addition, he or she is expected to learn and correctly use the vocabulary characteristic of the home and that characteristic of the school. As Gearhart and Hall (1979) indicate, the school child needs to understand and use these words in the same way that the teacher does if he or she is to learn from participation in any teacher task.

In the case of words with strong cultural ties to the home, the "lexical assimilation" of translation equivalents may never take place. As indicated in an earlier study (Walsh, 1982), concepts which originate in a home different from the typical middle class Anglo family do not lend themselves readily to translation within the decontextualized setting of the school.

The specific case of the Puerto Rican child. The values of:

authority, respect, dignity, 'capacidad,' and mutual responsibility and obligation are cornerstones of Puerto Rican child rearing practices. Through them, children are raised, probably with quite a few more restrictions than North American children, to view the family, not the individual, as the most important unit. From infancy, children are taught to respect elders, to expect dignity from others, and to develop a strong commitment to family and community. Evidently, some of these values clash sharply with those of middle-class America. Where they do, cultural misunderstandings between the home and school often occur which, in turn, lead to further alienation. . . (Nieto, 1979:42).

The world of the Puerto Rican child is a reflection of the culture that language represents. When this child enters the U.S. school system, he or she encounters an environment vastly different from that of the home. The language and culture of the family (including its values) are no longer validated; ethnic heritage is denigrated. There is little relationship between the curriculum and the complex of social and cultural patterns characterizing the children's lives (Bucchioni, 1965).

Parents play the primary role in socializing and transmitting language and culture to the child. As Nieto emphasizes, virtues of

responsibility, responsiveness, maturity, and mutual obligation to family members are at the center of Puerto Rican familial relations. "The socialization of the child is oriented towards a sort of letting the child acquire capacidad," helping the child become "a precocious, responsible person, given to the duties of the home, and on the road towards acquiring dignidad" (Seda Bonilla as cited in Nieto, 41), the respect of the community at large. Most Anglo educators would argue, however, that the child's primary responsibility during the school day is to the school; 'capacidad' is of little consequence and 'dignidad,' within the classroom or in the school as a whole, is seldom achieved. How does this contradictory external evidence affect the child's internal reality? The answer to this question is one which this study helps to supply.

As a people, Puerto Ricans are extremely diverse. They span the racial spectrum from black to white, and, linguistically, represent varying levels of dominance in one or more languages and language varieties.

. . .bilingualism and biculturalism cannot be discussed in the Puerto Rican community only in relationship to standard Spanish and the culture it conveys or standard English and the culture it represents. Our linguistic life moves across a spectrum of standard English, standard Spanish, Black English, nonstandard Spanish, Puerto Rican English and code-switching (CENTRO, 1977: 31).

Some would argue that such oscillations are not entirely different from the natural course of assimilation all immigrant groups go through. For Puerto Ricans, however, such changes are not natural but are

rather the result of colonialism and labor migration--both of which have placed many Puerto Ricans in a further subordinated position with regard to socioeconomic class (Seda, n.d. and CENTRO, 1977). As migrants, not immigrants, residence is frequently unstable as are communicative norms and rules for language use.

Regardless of which language is spoken, the "cultures" of home and school for the Puerto Rican child are most often divergent. The meaning behind concepts like respect, 'capacidad,' 'dignidad,' and authority remain the same whether the "word" is spoken in English or Spanish.

The meanings which have been given to him in one culture do not exist in other cultures, and therefore cannot be replaced. It is a fallacy, for example, to assume that there is an English equivalent for the Spanish word *mamá*--or that there is a Spanish equivalent for the English word *mama*. These and hundreds of other words which give to the child his existence in terms of his relation to others and to the world occur in cultural contexts which do not coincide (Christian, 1978: 161).

Yet, all too often teachers presume the two worlds do coincide and that certain words, concepts, and meanings are equatable.

And teachers who do not know these meanings usually find the response of the pupil who knows no others baffling, annoying, and exasperating. Then, when the child begins to discover that the teacher does not understand, he develops negative reactions not only to the teacher but to the educational process, and finally to the entire culture and language which the teacher represents. Or, conversely, he may decide that his parents have provided him with an inferior world, and subsequently attempt to reject entirely what they have provided for him as a cultural base upon which to build a meaningful life. This may mean that the life he chooses will lack the essential meanings which have their roots in infancy, roots which are nourished by the words his parents have taught him (ibid).

Conclusion

By means of conscious and reflective interaction with individuals and objects in the surrounding world, the child creates (and recreates) a reality. This reality is based on subjective experience which is regulated by the society at large. For the young child, reality tends to be most representative of life in and around the home and is symbolized by the use of words and their related concepts in the mother tongue.

When the LES child enters the world of the school, he or she may have difficulty carrying over meaning. In other words, the values, concepts, and ideals of the home, such an integral part of the child's reality, are no longer primary. Because the child's experience with the majority culture is limited, he or she has no previous context upon which to build meaning. Reality thus becomes clouded as words and their meanings take on an entirely different content.

The experimental tasks explained in the next chapter serve as a method to analyze how Puerto Rican children of varying levels of English proficiency actually define words in both the English and Spanish languages. By eliciting word association type responses to certain key words, the results reveal to what extent meaning is socially, culturally, and context related.

FOOTNOTES

¹See Leonard Bloomfield, Language (New York: Holt, Rinehart and Winston, 1933); Noam Chomsky, Aspects of the Theory of Syntax (Cambridge, Mass.: MIT Press, 1965).

²See Michael A. K. Halliday, Learning How to Mean: Explorations in the Development of Language (London: Edward Arnold Publishers, 1975), and Language as a Social Semiotic: The Social Interpretation of Language and Meaning (Baltimore, Maryland: University Park Press, 1978).

³Gramsci's theories were certainly in line with those of Marx and Engels as expressed in German Ideology. But, because German Ideology had not yet been published, any direct influence must have come from other Marxist contemporaries or from Gramsci's own understanding of Marxist thought.

⁴See Basil Bernstein, "Social Class, Linguistic Codes and Grammatical Elements," Language and Speech 5 (1962):221-240, "Education Cannot Compensate for Society," New Society 26 (February 1970): 344-347, "A Sociolinguistic Approach to Socialization: With Some Reference to Educability," in John Gumperz and Dell Hymes, Directions in Sociolinguistics (New York: Holt, Rinehart and Winston, 1971), for a more indepth discussion of Bernstein's theory.

⁵According to Gearhart and Hall, there may be class differences in this organization, with working class persons more likely to organize lexical knowledge in terms of referent functions rather than by hierarchical categorization, the typical method taught and employed in schools.

⁶Ervin and Osgood (1954); Lambert, Havelka, and Crosby (1958); Kolers (1963) and others have included subordinate forms of bilingualism in the category of compound. It seems, however, that subordinates might also comprise an early stage of coordinate bilingualism where the child is acquiring the new language in, for instance, a school context but primarily relates its meaning to the context of home and the native language. For all practical purposes then, the term subordinate could be used to refer to all types of early bilingualism, a component of both compound and coordinates rather than a separate category. It will be employed as such here.

CHAPTER III

METHODOLOGY

Justification for the Method

Meaning is often embedded in one's unconsciousness and, as such, is difficult to measure. Word associations attempt to tap the hidden significance of words and concepts thus exposing language's very core. Use of word associations goes back to the time of Freud who believed that associations, continuous ones in particular, reveal the content of minds in a way that propositional language does not (Szalay and Deese, 1978). The character of spontaneity inherent in associations and their freedom from the syntactic and morphological demands of overall discourse help produce responses reflective of subjective meaning, meaning which is personally attuned to the individual's sociocultural world.

As Szalay and Deese indicate, the central issue in association is not the single connection but the meaning of the stimulus embedded in a matrix of knowledge. Nested in this matrix of knowledge is the influence of culture.

While word associations occur in the context of lexical meaning, of course, it is cultural experience that produces the unique distribution of associations to particular words in a particular language. Because of the close relation between association distributions and cultural experience, the degree of associative similarity between a word in one language and its translation in another has captured the spirit of the original. Associations reveal

nuances that might otherwise be detected only by someone who was intimately acquainted with both languages and cultures (Szalay and Deese, 1978:88).

It is the examination of these nuances which is of critical interest here.

Subjects

A sample of fifty-four Puerto Rican and thirteen Anglo American children were selected from fourth grade classrooms in three schools in an urban district of western Massachusetts. The Puerto Rican subjects were divided into four levels of English language ability as classified by the school district in question. In order to facilitate discussion, the groups are named: low, medium low, medium high, and high. These terms refer only to their English language ability and in no way reflect academic performance. High group members were mainstream students who, at one time, attended bilingual classes. The other group members were, at the time of the study, enrolled in the bilingual program. All were coordinate bilinguals, having acquired English in the context of the school. Both Puerto Ricans and Anglos were representative of low socioeconomic status. This determination was based upon school department records. Anglo students were all enrolled in Title I programs.

Materials

All subjects were presented with either a bilingual or monolingual-English word association task in two different treatment modes.

Treatment I consisted of a list of twenty-four high frequency Spanish nouns, most of which were drawn from Ródriguez Bou's Recuento de Vocabulario Español (1952). Words were chosen by the researcher on the basis of their relation to the social institutions of family and school. A special effort was made to select words whose meaning might differ slightly in the English translation. A second list of twenty-four words, all possible dictionary translation equivalents of the Spanish, were used in addition, making a total list of forty-eight stimulus words (see Appendix 1).

Puerto Rican subjects were tested on all forty-eight words in four experimental conditions, English-English (EE), English-Spanish (ES), Spanish-English (SE), Spanish-Spanish (SS). Anglo subjects were tested on only the twenty-four English words in an English-English condition.

In Treatment II, six Spanish adjectives also compiled from Ródriguez Bou and their translation equivalents were used (see Appendix 1). The adjectives, reflective of cultural attitudes and beliefs learned in the home, were paired with a picture card illustrating Hispanic children and/or adults in either a home or school setting. The adjectives were put into the context of a sentence and the subject was asked to further expand. As with Treatment I, Puerto Rican subjects were given four experimental conditions, while Anglo subjects were given one.

Pictures were adapted from photographs and from children's books. Selection was based on the degree to which the pictures

adequately portrayed Latino children and adults in realistic home or school activities.

Procedure

Treatment I

Words were presented orally at random to subjects with a total of twelve words comprising each condition. In order to interest the young subjects in the task, the experimenter told each child that he or she was to be the teacher and the experimenter to be the student. The teacher's role was to teach the student the meaning of the particular words in question. The only knowledge the student was said to have of either the Spanish or English languages was the ability to pronounce these few words.

In the EE Condition, subjects were given words in English and asked to respond with a definition or an equivalent word in English. The ES Condition also involved English stimulus presentation but the response language was limited to Spanish. Spanish words were used by the experimenter in the SE Condition with subject response in English. Condition 4 (SS) was composed of all Spanish.

Condition order was counterbalanced, with one of the intra-language conditions (EE or SS) always at the beginning (see diagram on the following page). This helped control for effects due to training among the Puerto Rican subjects since Anglo subjects received only an intra-language condition.

Responses were recorded on tape and later transcribed by the experimenter. In addition, notes were taken immediately following each session describing the subjects' attitude and performance.

Treatment II

The second treatment occurred immediately after the first. A picture card was placed in front of the subject as the experimenter recited a sentence with one of twelve possible adjectives (six for the Anglo subjects), e.g., "this boy is very educated." The experimenter then asked the subject to discuss (in the response language and in the

Counterbalancing of Conditions

Condition

Anglo (13)	E-E				
Puerto Rican (18)					
7	E-E	E-S	S-E	S-S	
9	S-S	E-S	S-E	E-E	
(18)					
9	E-E	S-E	S-S	E-S	
9	S-S	S-E	E-E	E-S	
(18)					
9	E-E	S-S	E-S	S-E	
9	S-S	E-E	E-S	S-E	

context of the picture) why the boy is considered to be educated. Response time was limited to no more than two minutes. As with

Treatment 1, conditions were counterbalanced for the Puerto Rican subjects by reassigning individuals to the groups diagramed above.

Picture cards were equally divided into contexts of home and school. Each Puerto Rican subject saw six home-related pictures (three with the use of Spanish and three with the use of English stimuli) and six school-related pictures, also divided between the two languages. Anglo subjects were shown a total of six pictures, counterbalanced into two home, one school; and two school, one home.

As with Treatment 1, all responses were recorded and notes were taken. Total time spent with each subject for both treatments varied from 15-20 minutes for Anglos to 35-45 minutes for Puerto Ricans.

Handling of the Data

Scoring

In Treatment 1, a Spanish and English meaning category was established for each word based on both dictionary definition and the response of five adult native speakers of each language/cultural group (see Appendix 2). Five raters judged the proximity of the subjects' responses to synonymous meaning in the language in question. Scoring was done for all responses on a system of 0 to 2 across three variables: language use, English meaning, and Spanish meaning (see Appendix 3).

In the language use variable, a score of 0 was given if subject response was not in the specified language or if the subject did not respond at all. A score of 1 reflected a mixing of languages

(code-switching) within the response; a score of two was indicative of correct use of specified language.

Both meaning variables were scored similarly with all responses receiving both an English meaning and a Spanish meaning score. An absent or irrelevant response was given a score of 0. Responses exhibiting some semantic proximity to the key stimulus received a score of 1, with maximum synonymity scored as a 2.

In Treatment II, judgment encompassed an examination of the descriptive words or phrases used by the subject in further defining the stimulus (adjective) presented. Scoring was based on the degree to which the subject used the adjective or related synonyms in the language and cultural context appropriate to the specified response condition. Again, categories of meaning were established with determination left up to the individual raters. The scoring point system was the same as in Treatment I.

Analysis

Data were analyzed by means of a repeated measure design with a MANOVA program serving as the primary determinant (see Appendix 4). Differences in language ability groups, differences in the language of testing (conditions), differences across the language use, English meaning, and Spanish meaning variables, and the interactions between treatment and language ability, between condition

and language ability, between condition and language use and meaning variables, and between language ability and condition by language use and meaning were all examined.

CHAPTER IV

RESULTS

Treatment I: Word Associations to Nouns

In examining the results, the major question of interest was whether language ability level led to differences in performance in language use and in meaning. Mean scores for each of the four experimental English language ability groups (excluding the Anglos) over the four conditions on each of three dependent variables (language use, English meaning, and Spanish meaning) are presented in Table I.

Language ability groups clearly differed in performance with higher scores earned by higher language ability groups. In the overall analysis of variance summarized in Table 2 it can be seen that this effect of group was significant, ($F(3,50)=29.970$, $p<.001$). Mean scores are, in almost all cases, higher on language use than in the meaning categories. This effect was also significant, ($F(2,100)=650.167$, $p<.001$). Ability to respond in the specified language is discernibly an easier task than differentiating meaning.

Performance differed by test condition ($F(3,150)=11.915$, $p<.001$) and was best when Spanish was both the language of stimulus and the language of response. There were significant differences in the performance of the English language ability groups in the different conditions ($F(9,150)=10.086$, $p<.001$). The patterns of scores in language use and English and Spanish meaning also differed considerably in

TABLE I
MEAN WORD ASSOCIATION SCORES* FOR EACH OF FOUR LANGUAGE
ABILITY GROUPS FOR THE FOUR TEST CONDITIONS

Language Ability Group	Scores											
	Condition 1 EE			Condition 2 ES			Condition 3 SE			Condition 4 SS		
	Language Use	English Meaning	Spanish Meaning	Language Use	English Meaning	Spanish Meaning	Language Use	English Meaning	Spanish Meaning	Language Use	English Meaning	Spanish Meaning
Low	.3056	.0833	.1389	1.264	.0833	.5208	.6944	.3056	.1181	1.542	.0556	1.076
Medium Low	1.575	.6071	.5119	1.329	.119	.6071	1.432	.5397	.2856	1.559	.1706	1.063
Medium High	1.742	.725	.6167	1.575	.1333	.8167	1.775	.575	.4000	1.683	.3167	1.042
High	1.924	1.151	.4167	1.432	.1212	.8256	1.674	.6667	.2642	1.386	.3636	.8864
Overall	1.395	.6234	.4290	1.381	.1142	.6713	1.381	.5201	.2654	1.543	.2114	1.026

*Interrater reliability was 76 percent.

TABLE 2
SUMMARY OF ANALYSIS OF VARIANCE OF WORD ASSOCIATION
SCORES FOR FOUR LANGUAGE ABILITY GROUPS

Source	Multivariate			Univariate		
	Test Statistic*	Significance	df	MS	F	Significance
TOTAL			648			
Between Subjects						
Error			50	.1836		
Constant			1	411.420	2240.523	.001
Group			3	5.503	29.970	.001
Within Subjects						
Error			150	.1288		
Condition	9.302	.005	3	1.535	11.915	.001
Group and Condition	7.213	.008	9	1.299	10.086	.001
Error			100	.1028		
Variable	585.337	.001	2	66.834	650.167	.001
Group and Variable	7.343	.006	6	.8361	8.134	.001
Error			300	.0669		
Condition X Variable	52.393	.001	6	3.948	58.989	.001
Group and Condition X Variable	5.264	.001	18	.3653	5.458	.001

*Wilks

different conditions and language ability groups (condition $\times$ variable $F(6,300)=58.99$, $p<.001$, and group and condition $\times$ variable $F(18,300)=5.458$, $p<.001$. Figure 1 graphically depicts these interactions.

In Panel 1A, mean average responses for the language use variable are plotted for all language groups' ability in the four test conditions. Confidence intervals were constructed by means of the Scheffé method (using coefficients) in order to test if the contrasts between groups in each condition and within each dependent variable were significant.

As was expected, the high, medium high, and medium low groups scored significantly higher than the low English language ability group in the EE Condition ($p<.05$). The Spanish dominant or low English group's lack of facility with the English language is the obvious factor for these differences. No significant differences were found among the high, medium high, and medium low groups' performance.

In the ES Condition, performance was similar for all four groups: no significant differences were noted. The high, medium high, and medium low groups in the SE Condition also did not differ significantly in performance. The low English group's performance did differ significantly from the high and medium high groups', however, ($p<.05$); again, probably due to limited English proficiency.

No significant differences in performance were found in the SS Condition.

Fig. 1. Mean Word Association Scores for the Four Language Ability Groups for the Four Conditions

Panel 1B shows the mean responses for the groups on the English meaning variable in all four conditions. As can be seen, English meaning performance is much lower than language use performance shown in Panel 1A.

In the EE Condition, the only contrast significantly different from zero occurs between the high and low groups. While the high English language ability members employed, in most cases, a minimum level of English meaning (a score of 1) in their response, low level English speakers, for the most part, did not (or were not able to) respond.

The interlanguage conditions (ES and SE) most often produced translation type responses without any meaning expansion. Level of English meaning was discernibly lower in the ES Condition and recognizably higher in the SE situation. No differences were found between groups.

As was expected, subjects from the low English language ability group were the least likely to adopt English meaning in any of the four conditions. Their average performance in the EE and ES Conditions was equal. In the SE Condition, it was slightly higher, however, since, in some cases, subjects were able to respond to a Spanish stimulus with a simple English translation.

Performance in the SS Condition was hierarchically organized from low to high. No significant differences in English meaning scores were found between any of the groups.

Mean Spanish meaning scores are plotted in Panel 1C. In all conditions, there were no significant differences between the groups. The general tendencies, however, are interesting. In the EE and SE Conditions the medium high and medium low groups appeared to exhibit some semantic confusion. In other words, they employed Spanish meaning when English was requested. As can be seen, the trend in the Spanish meaning variable in the EE and SE Conditions is almost an inversion of the English meaning variable (Panel 1B). Low English language ability group members were the least likely to interchange meaning in the EE, SE, and SS situations. In the ES Condition, however, they used less Spanish meaning than their counterparts but, were much more apt to give Spanish related responses rather than English ones. As was expected, the low group exhibited greater use of Spanish meaning in the SS Condition while the high group employed less.

Performance by each language ability group separately on the three dependent variables is depicted in Figure 2. As predicted, for low English ability group members, Spanish language use and Spanish meaning use were the most prevalent with the curves for both variables nearly parallel. English meaning use remained rather stagnant with some improvement visible in the SE Condition (possibly because of some facility with translation as previously noted). The medium low English language ability group scored slightly higher on the average with English language use as opposed to use of the Spanish language. On the English and Spanish meaning variables, they performed as

Fig. 2. Mean Word Association Scores for Each Language Ability Group on the Four Conditions Separately

expected, employing a Spanish type meaning in the ES and SS Conditions and an English meaning category in the EE and SE Conditions. Medium high subjects performed much the same but exhibited a larger discrepancy between English and Spanish meaning scores in the ES Condition and a smaller discrepancy in the SE Condition. For high English language ability group members, Spanish meaning use tended to be lower than it was with the other groups. Greater variations between Spanish and English meaning were also evident in the EE, ES, and SE contexts.

Table 3 presents the performance of Anglo subjects compared to the other four groups in the EE Condition only. These results are depicted graphically in Figure 3. In language use, significant differences were found between the Anglos and the low English language ability group ($p < .05$). With respect to the English meaning variable, significant contrasts were evident between the Anglos and all groups except the high. Similarly, contrasts were found between the high and low groups, but not between the high and medium high and medium low. The Anglos and the high English language ability group, it seems, share a facility with the English language that is obviously significantly different from English proficiency among Spanish dominant (low English ability group) subjects. Both the high group and the Anglos also share the same classroom space. Because they continue to have a semantic memory system which includes two languages, high group members also score similarly to the medium high and medium

low group members who, for at least one year, have attended bilingual classes.

TABLE 3
Mean Word Association Scores for Each
of the Five Language Ability Groups
in the EE Condition

Language Ability Group	Scores		
	Language Use	English Meaning	Spanish Meaning
Low	.3056	.0833	.1389
Medium Low	1.575	.6071	.5119
Medium High	1.742	.7250	.6167
High	1.924	1.151	.4167
Anglo	2.000	1.737	.0320
Overall	1.512	.8395	.3520

They scored significantly different, however, from the low group subjects who have been in the bilingual program only a short time. There were no significant differences between any of the groups in the use of Spanish meaning.

Significant differences were found in performance by school in reference to the use of language and the level of English meaning in the EE Condition, $F(2,64)=6.268$, $p<.003$. In the use of language, the overall mean for students at school three (1.211) was considerably below that of schools one and two (1.754 and 1.704). The most noticeable deviation was in the low English language ability group, where the average mean score at school one was .1389 as compared to .50 and .96 at the two other schools. School three children were also considerably behind those from the other two schools in their use of English meaning, with a mean score of .554 as compared to 1.083 and 1.008.

Differences were also evident with regard to sex. Males scored significantly higher than females in English meaning in the EE Condition, $F(1,65)=3.714$, $p<.05$, but females scored significantly higher than males in language use in the ES and SS Conditions, $F(1,65)=4.05$, $p<.04$ and $F(1,65)=7.33$, $p<.008$; in Spanish meaning in the SS Condition, $F(1,65)=3.91$, $p<.05$.

Treatment II: Word Associations to Adjectives and Pictures

As with the word associations to nouns in Treatment I, the major question of interest was whether language ability level was a factor in performance on language use and on meaning. Table 4 presents mean scores for the four groups in all conditions. The summary of the analysis of variance is presented in Table 5. Language ability groups did differ significantly in performance on this measure as well ($F(3,50)=4.551$, $p<.007$). Once again, performance differed by test

Fig. 3. Mean Word Association Scores for all Five Language Ability Groups in the EE Condition

condition ($F(3,150)=10.073$, $p<.001$) and mean scores were significantly higher on language use than on English and Spanish meaning ($F(2,100)=285.018$, $p<.001$). The English language ability groups' scores varied significantly in some test conditions ($F(6,300)=6.455$, $p<.001$) as did the patterns of their scores within the test conditions ($F(18,300)=2.558$, $p<.001$).

Scheffé confidence intervals were established to examine group differences in performance on the language use and meaning measures in the four conditions. On the language use variable, significant differences were found between the low English language ability group and all other groups in the EE Condition and in the SE Condition ($p<.05$). On the meaning variables, no significant differences were noted in any of the conditions. These results are graphically portrayed in Figure 4.

An interesting and unexpected result was the low English language ability group's performance on English meaning in the SS Condition (see Panel 4A). Although this group's mean score in English meaning was considerably below that of language use and Spanish meaning as Panels 4B and 4C show, it was slightly above that of the other three groups. Spanish dominant subjects, in other words, tended to employ some English meaning type responses in the SS Condition, more so than in any of the other conditions.

An analysis of response to individual words helps to explain this phenomenon. Out of a total of five subjects who received the adjective 'educado' in the SS Condition, three responded with an

TABLE 4

MEAN PICTURE-WORD ASSOCIATION SCORES* FOR EACH OF FOUR LANGUAGE
ABILITY GROUPS FOR THE FOUR TEST CONDITIONS

Language Ability Group	Scores											
	Condition 1 EE			Condition 2 ES			Condition 3 SE			Condition 4 SS		
	Language Use	English Meaning	Spanish Meaning	Language Use	English Meaning	Spanish Meaning	Language Use	English Meaning	Spanish Meaning	Language Use	English Meaning	Spanish Meaning
Low	.3333	0	.1667	1.472	.0833	.8056	1.500	.0556	.5833	1.944	.3889	1.056
Medium Low	1.587	.4127	.6667	1.524	.0635	.9206	1.444	.1746	.8889	1.778	.2381	1.016
Medium High	1.733	.5667	.6333	1.533	.5333	.4333	1.600	.0667	1.067	1.70	.3333	.7333
High	1.727	.7272	.2727	1.424	.4242	.5758	1.545	.3333	.4545	1.576	.3030	.7576
Overall	1.364	.4136	.4691	1.494	.2284	.7346	1.284	.1605	.7654	1.759	.3025	.9197

*Interrater reliability was 88 percent.

TABLE 5
SUMMARY OF ANALYSIS OF VARIANCE OF PICTURE-WORD ASSOCIATION
SCORES FOR FOUR LANGUAGE ABILITY GROUPS

Source	Multivariate			Univariate		
	Test Statistic*	Significance	df	MS	F	Significance
Between Subjects						
Error			50	.6153		
Constant			1	440.605	716.133	.001
Group			3	2.800	4.551	.007
Within Subjects						
Error			150	.2259		
Condition	9.786	.005	3	2.275	10.073	.001
Group and Condition	5.296	.006	9	1.664	7.366	.001
Error			100	.2784		
Variable	272.124	.001	2	79.338	285.108	.001
Group and Variable	5.470	.004	6	1.532	5.504	.005
Error			300	.2006		
Condition X Variable	7.137	.005	6	1.295	6.455	.001
Group and Condition X Variable	3.103	.004	18	.5132	2.558	.001

*Wilks

Fig. 4. Mean Picture-Word Association Scores for the Four Language Ability Groups for the Four Conditions

English type meaning (i.e., a reference to intelligence or schooling). Closer examination reveals that the three had been given school-related pictures; responses were a description of picture context rather than a definition or association of word connotation.

The item 'puertorriqueño' also brought mixed response. Eight Spanish dominant (low English group) subjects were given the adjective in the context of a sentence such as "Estos niños son puertorriqueños." A total of three, or 37 percent, responded with an English type meaning (i.e., a response which focused solely on linguistic or racial characteristics). In all three cases, subjects were describing the individuals in the picture, not expounding meaning. The low English language ability group's unexpectedly high English meaning score seems, therefore, to be closely related to the use of pictures. Of interest, however, is the fact that other group members received the same pictures but, on the whole, did not appear to be as affected by their presentation.

In the SE Condition, response scores were expected to be higher on English meaning than on Spanish meaning, especially for those subjects who had a greater facility with the English language. This was not the case. As Panels 4B and 4C demonstrate, all groups scored higher on Spanish meaning. This trend is a reverse of that in Treatment I (see Figure 1, Panels 1B and 1C).

A probe into response to particular words once again offers some solution. To the stimulus 'familiar,' subjects across all four groups reacted 99.9 percent of the time with a Spanish type meaning.

Although the specified response language was English, subjects tended to focus on the item's relation to the word family or 'familia' rather than on the typical English meaning of well acquainted or well known. It was only among high English group subjects that English-related meanings began to appear. Similarly, the stimulus 'popular' prompted reference to people (the Spanish-related meaning) 100 percent of the time. The remaining four adjectives, 'capaz,' 'educado,' 'puertorriqueño,' and 'respetado' also brought predominantly Spanish meanings. 'Educado' was the only item where response may have been affected by picture context.

Overall apparent differences between the two treatments are most evident with regard to Spanish meaning. Response on this variable was, for the most part, greater for the low to medium high groups across all conditions (see Figures 2 and 5). Among the high group subjects, English and Spanish meaning scores were, in comparison to Treatment I, much less spread out in the interlanguage conditions. Proximity of semantic response may be reflective of the task--Treatment II inspired a natural dialogue while Treatment I prompted short responses, especially in the interlanguage conditions where subjects often gave translation equivalents.

Cultural saliency of the adjectives combined with the use of pictures noticeably affected overall performance of Puerto Rican subjects. Anglo subjects, however, performed much the same in both treatments. As with Treatment I, significant differences were found between the Anglos and all other groups ($p < .05$). Mean scores for

Fig. 5. Mean Picture-Word Association Scores for Each Language Ability Group on the Four Conditions Separately

the five groups appear in Table 6 and are depicted graphically in Figure 6.

A breakdown analysis of the five groups by school found significant differences in performance on the language use and English

TABLE 6
Mean Picture-Word Association Scores for Each
of the Five Language Ability Groups
in the EE Condition

Language Ability Group	Scores		
	Language Use	English Meaning	Spanish Meaning
Low	.3333	0	.1667
Medium Low	1.587	.4127	.6667
Medium High	1.733	.5667	.6633
High	1.727	.7272	.2727
Anglo	2.00	1.692	.2564
Overall	1.487	.6617	.4279

meaning variables in the EE Conditions $F(2,64)=4.20$, $p<.01$ and $F(2,64)=4.64$, $p<.01$. As with Treatment I, the overall mean for students at school three was considerably below that of schools one and two on both variables. In reference to language use, the mean at school

Fig. 6. Mean Picture-Word Association Scores for all Five Language Ability Groups in the EE Condition

three was 1.190 compared to 1.667 and 1.733 at the other schools. The mean on the English meaning variable was .369; it was .84 and .9 at school one and two.

Sex differences were noted in performance on English meaning in the EE Condition, $F(1,65)=6.120$, $p<.01$, with males outperforming females (as in Treatment I). Girls scored significantly higher than boys in the use of Spanish language in the SS Condition $F(1,65)=6.765$, $p<.01$ and on the English meaning variable in the same condition, $F(1,65)=7.142$, $p<.009$. Although no other significant differences were found, mean response for girls surpassed that of boys on all other variables.

A Summary of the Findings

The results support the hypothesis that second language learning influences both native language memory processes and lexical/semantic relations and, in addition, demonstrate the significance and effect of social and cultural experience on the processing and storage of semantic information. The following findings are relevant:

1. The level of English or Spanish language proficiency affected the manner in which subjects responded to the word association tasks. Spanish dominant children, on the whole, produced elaborated responses in Spanish whereas English dominant children generally excelled in English. The medium groups responded differentially depending on the salience of the stimulus.
2. All groups had more difficulty with interlanguage conditions than with intralanguage conditions. Many of the medium group subjects merely translated the stimuli.

3. The medium high and medium low English language ability groups were more apt to codeswitch and to exhibit difficulties in meaning differentiation, reflective of semantic interference.
4. For all groups, culturally relevant concepts had their prime roots in the L1; the significance of these concepts carried over to the L2. This is indicative of an interdependent semantic system.
5. The associations of the high English group resembled the performance of the two medium groups more than it did that of the Anglo population. The high group's responses in all conditions, however, were representative of a movement towards English rather than Spanish meaning.
6. The use of pictures had a clear effect upon performance.
7. Adjectives in concert with pictures produced a greater saliency than nouns alone.
8. There was a correlation between language proficiency/classroom location and self-identity.
9. Boys were more able than girls to formulate semantically correct responses in English.

CHAPTER V

DISCUSSION AND CONCLUSIONS

The results support the prediction that sociocultural circumstances affect the construction of English language meaning in the Puerto Rican child. While a number of researchers have discussed the social character inherent in meaning, few, if any, have examined the role social and cultural setting and influence play on psychological memory-related processes. The findings demonstrate that these processes are not purely mechanistic in character but are regulated by both the internal and external reality of the child. The reality of the child is, in turn, closely tied to the level of linguistic ability and conceptual understanding and is reflected in meaning use. Analysis of responses suggests a semantic memory structure organized around salience, with the strongest connections being those of concepts acquired in the mother tongue. The lexicon, traditionally thought to be a good indicator of language proficiency, is shown to be superficial in nature.

A better understanding of the significance of the statistical findings reported in Chapter IV and the above synopsis can be discerned through a discussion of the differences and similarities between groups and an examination of responses to individual words.

A Qualitative Look at the Results

As Kintsch (1974) noted, the interaction among words and

their use in a particular context is what produces meaning. In this study, group membership was a significant factor in determining overall performance on the use of words and the meanings behind them. By using continuous associations, subjects were given the opportunity to not only give synonyms for the stimulus words but also to use the words in the context and manner with which they felt most comfortable.

The low English language ability group, however, obviously did less well on variables which involved use of English and, in many cases, did not respond. Repetition type responses in which the child would just repeat the stimulus were common as were repetitions with qualifiers, i.e., "my father" to the stimulus father, or "my teacher" to the stimulus teacher.¹ In several cases, the subjects seemed, as Gearhart and Hall found in their study, to tune out the interaction when stimulus after stimulus was not relevant.² One child made up his own words to rhyme with those used by the researcher. The low English members were found to have an extremely limited English lexicon and a semantic memory system characteristic only of their mother tongue. Such findings are not surprising since most of the children in this group had been in the United States only a few months.

Although all subjects in the medium low to high English language ability groups exhibited some degree of verbal English language proficiency, most also displayed some semantic confusion indicative of native tongue dominance and/or salience. This was especially true among the medium low and medium high ability groups who, because of their participation in a transitional bilingual program, are in a stage

of linguistic transition or change. Direct translation for these subjects had already become a facile task, thus explaining their relative success in the interlanguage conditions. As Dalrymple-Alford and Aamiry (1970) indicated, however, exact translation of a stimulus is seldom possible. What 'confianza' means in Spanish is not quite the same as what trust means in English. Yet, in a bilingual dictionary, the two words are treated as equivalent. A majority of the medium low and medium high subjects responded as dictionaries would, giving only lexical translations of the stimuli with no reference at all to meaning. These findings are congruent with those of Taylor (1971) who pointed out that links across two languages between semantically related words are not as strong as intralanguage links. Unlike the performance on the whole language conditions, concern here seemed to lie with rapidity of response rather than with semantic elaboration. Such behavior suggests an orientation to language typical of all too many ESL classrooms: students become word callers, not meaningfully competent communicators.

The performance of the medium high group in the SE Condition, however, was an exception to the above mentioned case. Mean score on this condition was .575 for English and .40 for Spanish meaning, unusually close since English was the specified response. Medium high respondents demonstrated a propensity to expand on the stimulus, i.e., to define rather than translate. 'Verguenza' (shame), for example, brought responses like:

"That I have to respect the teacher."

"Do what you're supposed to do."

"That you pay respect to the teacher if she's talking.
If you get in trouble, she punish you."

It seems that these subjects' facility with the English language enabled them to fluidly express in the English language what the stimulus meant to them in the mother tongue. The limited English proficiency of the medium low subjects, however, prohibited such elaboration, making translation the most viable alternative.

In Treatment II, neither the medium low nor the medium high group produced translation equivalents in the interlanguage conditions. Both groups used the context of the picture to enlarge on the stimulus. Differences between the meaning variables were sizable in all cases but one and Spanish responses were the most prevalent. English and Spanish meaning scores were comparable for the medium high group, however, in the ES Condition (.53 and .43) with English slightly higher than Spanish. The only apparent reason for this difference was a possible bias towards school-related pictures. With both groups, use of pictures seemed to have a clear effect on performance. This is not startling given Walters (1980) contention that LES children rely on context in producing messages in the L2. Similarly, Bernstein (1982) found that children differentially use context depending on their social class. In examining children's classification of food pictures, Bernstein discovered that the modal principle of classification of middle-class children was relatively independent of specific context whereas the principle of lower-working class children was relatively dependent upon specific context (i.e., "this is what we eat at home."). Since

all subjects in the present study were from low income families, it is possible that Bernstein's theory might apply.

According to Hogaboam and Pellegrino (1977), pictures and words access the same underlying semantic knowledge base. While the pictures used in their study yielded faster latencies than words, they did not produce qualitatively different responses. Szalay and Deese (1978) have shown, however, that when pictures are used in an appropriate context, they produce more concrete responses than do associations to words. In Szalay and Deese's study as with Hogaboam and Pellegrino's, pictures and words were presented to subjects separately. This researcher is not familiar with any study which has combined the two as does the present one. Here, it appears that words helped provide the appropriate context for the picture and gave the subject a starting point from which to begin.

The significant change in mean score from Treatment I to Treatment II in Spanish in the SE Condition, was also indicative of picture use. Because there was a difference in individual response to stimuli in the two treatments, with the adjectives, on the whole, producing more Spanish influence, it appears that pictures alone were not the sole determinant. The cultural saliency of concepts like 'puertorriqueño,' 'capaz,' 'respetado,' 'familiar,' 'popular,' and 'educado' also played a role.

The dominance of the Spanish language and culture was evident in both treatments' EE Condition. Among medium low English language ability subjects, differences in English and Spanish meaning use were

negligible (.607 and .512 in Treatment I and .413 and .667 in Treatment II). While most subjects used the correct language of response, their answers in Treatment I had more of a flavor of Spanish than English meaning. The stimulus respect, for example, generated such replies as:

"Respect is when a little child come and the mother tell him not to do it, they have to respect her."

"Respect is if the teacher say to you shut up, you have to respect. The same thing with your parents, the teacher, the pastor, if they say to you, you have to respect."

"When my mother talk to me, I don't talk back to my mother. When she hit me, I go to my bed and I let my mouth shut as I should because if I'm smart to her, she will smack me."

Some medium low group subjects responded with a more typical English response:

"Respect mean like to go to somebody's house and you don't touch nothin."

"You have to respect people."

Out of a total of twenty medium low English ability subjects who received the word respect, however, only four, or twenty percent, responded with an English-type meaning. Nine (45 percent) employed Spanish meaning and seven (35 percent) either did not respond or gave an irrelevant association. Other words like teaching and black³, which seemed to hold less cultural salience for the subjects, evoked meanings which were commensurate with those of high and Anglo group subjects, thus raising the mean for the English meaning variable.

Similar patterns occurred for the medium high group. While, on the whole, this group employed more English meaning in the EE Condition than did the medium low subjects, their use of Spanish meaning was also higher. The salience of words like neighborhood, for instance, seemed to be determined by a sociocultural experience different from that of Anglo peers. Responses like:

"A place that there is alot of family."

"A place you live and you have friends."

outnumbered two to one responses like: "Where there's alot of houses." In a parallel vein, family was characterized as relatives, including aunts, uncles, grandparents, and cousins seventy-one percent of the time and 'as a nuclear unit of mother, father, and child only twenty-nine percent of the time. Response to the stimulus joke, on the other hand, showed little or no cross semantic influence.

There appears to be a correlation among the medium high group's performance in the EE and the SE Conditions of Treatment I and the ES Condition of Treatment II. In all cases, English and Spanish meaning scores closely approximated one another. Scores on language use (1.742 and 1.775 in the EE and SE Conditions) were also virtually indistinguishable (and were somewhat higher than those in the SS and ES Conditions). At a superficial linguistic level, these subjects would be termed "bilingual" since they have a verbal proficiency in two languages. Semantically, however, Spanish continues to dominate, especially with regard to stimuli that are family or community related.⁴

Even high English group members, whose mean score on English meaning in the EE Condition (1.151) far surpassed that of other groups, were found to elicit Spanish-related meanings to stimuli such as family, respect, neighborhood, and trust, thus leading this researcher to conclude that semantic meaning and cultural salience are intertwined. Such conclusions are consistent with those of Ramsey (1981) and Szalay and Deese (1978) who found, through their investigations of bilingual word associations, that cultural frames of reference affect psychological aspects of meaning.

The use of native language meaning in an English context also verifies Segalowitz and Lambert's (1969) findings of semantic generalization--that subjects focus on the semantic content of a word before examining the actual language of the word itself--and support the notion of semantic interference found by Glanzer and Duarte (1971); Gulden, Martínez, and Zamora (1980); Lambert, Ignatow, and Krauthamer (1968); López and Young (1974); Mägiste (1979); and Preston and Lambert (1969). Kolers' theory of separate and distinct stores is once again contradicted.

Although the stimuli in the EE Condition were spoken in English and the language of response was limited to English, subjects inadvertently tuned into the sociocultural and experiential context in which the lexical meaning was initially derived. When stimulus words were representative of culturally prescribed beliefs and values, response was most often limited to the semantic structure of the mother tongue.

In Treatment II, subjects were also affected by native language influence. Among the low to medium high ability groups, means on Spanish meaning were higher than in Treatment I, surpassing that of English. Again, it seems the use of pictures in concert with culturally relevant words produced a context where subjects were more apt to draw upon their sociocultural experience.

While Spanish meaning influence was evident in all conditions in both treatments, it was naturally most prevalent when Spanish was the language of response. In the SS Conditions, for example, all groups came closer to the maximum score in meaning than in any other condition. Performance in this measure showed little variation from the norm expected; Spanish meaning use decreased as English language ability level increased and influence of English meaning was indicative of classroom location (i.e., bilingual vs. mainstream). Although the combined means for the high group in both treatments were greater in the EE Condition than in the SS Condition, number of minutes spent in an English speaking context was not the primary cause. Rather, the major determinants appeared to be school and teacher influence and peer pressure.

Initial contact with each of the Puerto Rican subjects was in Spanish. Most high English group members answered this researchers' conversational inquiries in English, however, and when given stimuli such as Hispanic, completely disassociated themselves from their culture and ethnicity.⁵ One child went so far as to define a Hispanic as a "Black man that speaks Spanish." Another child blamed his inability to

respond in English to an English stimulus on his lack of knowledge of Spanish. Response to Puerto Rican in Treatment II was associated with stereotyped characteristics seventy-three percent of the time (e.g., member of a gang, speaks only Spanish, dirty, drinks and smokes alot). Reactions to 'puertorriqueño,' however, were more culturally related with seventy-three percent referring to family, to the island of Puerto Rico, to differences and similarities between Puerto Ricans (i.e., color and language), to values like authority and respect, or to social relations and the playing of games like dominoes.

As Halliday (1975) has indicated, it is through language that individuals learn to act as members of society, to adopt the culture, modes of thought, action, and the beliefs and values of those around them. In this manner, language acts as a vehicle of control--control over the access to communication and control over the classification systems which enable that communication to take place.

While it is beyond the scope of this study to examine the actual cultural, political, and economic meanings inherent in the language used by all the various groups which make up our social system, the present data help illustrate the potential for conflict. 'Hispano', for example, appeared to be a linguistically salient word for most Puerto Rican subjects. Its translation, however, was not. Many Puerto Ricans refer to themselves as 'hispanos'; most refrain, however, from use of Hispanic.

Interestingly, the word Hispanic is, in reality, a contrived term designed by U.S. government officials as a catch-all category

in which to lump Puerto Ricans, Chicanos, Mexicans, and other Latinos. It's connotation provides links between Spanish colonialism and modern day imperialism. Ethnicity, culture, and linguistic variation as well as historical and present day struggles of diverse peoples are denied.

For many children, both Anglo and Puerto Rican, Hispanic held no meaning. For others, either because of its phonological likeness to 'hispano' or to Spanish, it meant a Spanish speaker. Decisions about whether or not to include themselves as Hispanic followed much the same group pattern as did responses to Puerto Rican: those in the low or English groups were proud of their ethnic and linguistic heritage while those in the upper English groups were the first to deny it. Eighty percent of the children in the high and medium high groups associated Hispanic or 'hispano' with someone other than themselves but who was Spanish-speaking. In contrast, seventy-two percent of the medium low English group made self associations. About half of the low English group members were either unfamiliar with the term or made reference to its phonological sound-alike, Spanish. The remaining half associated it with themselves or with their families.

The high percentage of English proficient subjects who defined Hispanic as Spanish-speaking but "other" coupled with the negative responses to Puerto Rican already discussed, demonstrate the hegemonic power being exerted by the educational institution. According to Raymond Williams (1977:11), hegemony is

. . . a whole body of practices and expectations. . . :
our senses and assignments of energy, our shaping

perceptions of ourselves and our world. It is a lived system of meanings and values--constitutive and constituting--which as they are experienced as practices appear as reciprocally confirming. . . It is, that is to say, in the strongest sense, a 'culture,' but a culture which has also to be seen as the lived dominance and subordination of particular classes.

The term Puerto Rican or Hispanic ostensibly connotes an "outside" minority group generally placed in low esteem by Anglo culture. Group differences in response to these two words suggests that the bilingual classroom offers a supportive atmosphere, a setting where the Puerto Rican child can employ either Spanish or English, a setting which respects and understands his or her cultural beliefs and values. Responses also reveal that this support and security decline as the child becomes more verbally proficient in English. Once he or she leaves the bilingual program, factors of low self esteem, denigrated cultural identity, and periods of language loss or limitation are seldom accommodated or addressed. In the disembedded or context-reduced (Cummins, 1982) communication of the mainstream classroom, Puerto Rican students seem to share little or no reality with the Anglo majority around them and, as their responses demonstrate, are forced to actively negotiate meaning to fit the context and to comply with the culturally dominant group. This process appears to alter their self image.

In examining Latino students' attitudes towards their own ethnic group, Iadicola (1981) found that factors of busing, testing,

grouping, and competition together constitute a vehicle by which the school may commit symbolic violence.

It commits symbolic violence by promoting the dominance and superiority of the cultural or knowledge system that supports the political economic order over others that are defined as illegitimate or inferior because they may threaten the political economic order, thus promoting the students' rejection of their own ethnicity and the acceptance and striving for conformity to the capitalist Anglo cultural norm. The differentiating and ranking mechanisms within the school perform this function. They serve to isolate the culturally foreign, as determined by the cultural arbitrary, and define them as inferior to the culturally dominant (Iadicola, 1981:380-81).

Analysis of associations to the words 'bilingüe' and bilingual by the four language ability groups further illustrates this point. Forty-four percent of the low English group members associated English (or 'inglés') with the stimulus 'bilingüe.' While only one medium low English subject made this association, no medium high or high English group children did. Half of the medium low and half of the medium high respondents associated 'bilingüe' with two languages, thus making responses like:

"I'll tell you in English or Spanish."

"Una persona que habla español y inglés."
(A person that speaks Spanish and English.)

"Un bilingüe class in Spanish and English."

The remaining fifty percent chose to answer with references to Spanish:

"Otro opposite de inglés, como hablando español."
(The other opposite of English, like speaking Spanish.)

"Una clase de español."
(A Spanish class.)

Of the high English group members, only two made mention of two languages. The remaining children associated 'bilingüe' with Spanish.

The pattern was somewhat similar with the stimulus bilingual except this time all medium high and high English language ability subjects associated it with either Spanish or 'español' (seventy-one percent of the Anglo subjects also made this association). Medium low English subjects were again equally divided.⁶

It seems that only a small number of the Puerto Rican children actually viewed bilingualism in a positive light. For a sizable portion of the Spanish dominant subjects, bilingual or 'bilingüe' is a class that will transcend them into English. For most of the English dominant subjects, it is a reminder of their native tongue and of a time when they were separated from English speakers. It is only the children who were then immersed in the process of becoming "bilingual" (and not transitioning in or out) that saw it as the ability to function in two languages.

Predictions were made earlier in the study that increased use (both oral and semantic) of English would influence Spanish meaning, especially within the school context. Differences in means for the high group in the EE and SS Conditions are therefore not surprising. No direct assumptions were made that language proficiency might be

a variable in self-identity, however, although in Chapters I and II of this work such a relationship was implied.

Teacher attitude and behavior also appear to play a role in the Puerto Rican child's self identity and linguistic development. The consistent raising of voices by ESL and other Anglo teachers in speaking to the ESL students in this study prompted many to, as Gearhart and Hall (1979) called it, "tune out the interaction." It seems the teachers believed that by speaking in a louder tone of voice they could break through the language barrier, thus facilitating English language comprehension.

Teachers also frequently criticized the children's absenteeism (which was especially high among the girls), blaming inability to speak English on poor school attendance. Seldom did teachers appear to be aware that many of the children, particularly the girls, were needed at home to care for younger siblings nor did they seem to comprehend that the school is secondary to family. The sex differences found in this study are congruent with these family-related norms; girls are more apt to lag behind boys in their English development since dedication to the family, particularly the mother, always comes first.

In the mainstream classes, children's names were, on several occasions, changed to the English translation. Jorge not only lost instruction in his native language and the potential for bilingualism when he left the bilingual program, he also lost his name and is now called George.

For the mainstreamed Puerto Rican child, everyday life in the school is governed by an overt but hidden agenda. The institution sets out to remake the child to the Anglo middle class image. His or her name is changed and the use of Spanish is discouraged. Cultural ways or styles of learning are overlooked. Class and ethnicity, however, generally prevent the child's complete assimilation.

As Seda (n.d.) asserts, characteristics of ethnicity and class help predetermine the Puerto Rican's membership in the social, cultural, and linguistic realms. Teachers and schools value academic success which, from the LES Puerto Rican child's point of view, is usually accompanied by white skin and English language facility. In an effort to belong, the Puerto Rican child attempts to do away with the ethnic/cultural obstructions. Many children will refuse to use Spanish with parents and relatives at home, further altering their identity and increasing their own self, social, and cultural alienation. Although the influence of the home remains, especially with regard to the cultural values of respect, authority, dignity, and 'capacidad' (Nieto, 1979) which have been inculcated in the child since infancy, the overall result is self-denial and the legitimation of what Apple (1982), Bourdieu and Passeron (1977) and Bernstein (1977) have called cultural capital.⁷ The child is expected to understand and employ the same words and meanings as the teacher in order to academically succeed (Gearhart and Hall, 1979) yet there is little relationship between the curriculum and the complex of social and cultural patterns characterizing the child's life (Bucchioni, 1965). The realities are contradictory.

Mead's (1934) metaphors of the "I," the "me" and the "generalized other" provide a framework in which to view these contradictions. The "I" refers to the biological being, an initiator of solutions to environmental circumstances and problems--the subject--while the "me" entails seeing oneself as an object of the environment, i.e., to see oneself from the point of view of another (Berlak and Berlak, 1981). The "generalized other" represents the perspective and constraints of culture, one's own and that of others, that through social experience become part of the individual's reality. The individual internalizes the contradictions and conflicts within the culture and the political and social system, thus bringing the prevailing practices--the institutions--into the very fabric of his or herself (Weinberg and Shabat, 1965).

According to Mead, it is meaning within the field of social experience which serves as the central factor in the adjustment of individuals to the environment. Embedded in meaning are the contradictions in the society that reside in the situation, in the individual, and in the larger society and which are played out in the educational institution. As this study has shown, much of this meaning is expressed in language.

Language brings into focus the experience, past and present, which determines how I, the subject, view myself and the world around me. For the Puerto Rican children in this study, this world view appears to be divided between the values instilled in the home and those of the Anglo society as manifested in the school. With time,

the child acts to change this divergent reality, to be more aligned with how others seem him or her. As Christian (1978) indicated, the child may either develop a negative reaction towards the teacher and the educational process or may decide the family has provided him or her with an inferior world and thus reject the family and its cultural base. At the age of nine or ten, most choose the latter.

For many of the children, even the notion of school changed over time. Spanish dominant subjects tended to view school in relation to authority and responsibility whereas English dominant youngsters saw it as a building, the setting for teacher-oriented tasks.

The internal reality of the child is mediated by that which is external. That which previously existed, however, cannot be denied (as is reflected in the continued influence of home on stimuli like respect, family, and neighborhood). While the new reality is a seeming reflection of both the new and old, its result is a language and meaning system which is divorced and alienated from both worlds. Semantic meaning is neither totally Spanish nor totally English in its orientation; socially and culturally the now-termed English dominant Puerto Rican child is not sure where he or she belongs.

Conclusions

Active participation in the second language world presupposes a new creation of meaning and classification in memory, a classification which combines past sociocultural and linguistic knowledge with more recent experiences. Ideally, the balanced coordinate bilingual should

be able both to differentiate and relate translation equivalents based upon his or her social and cultural experiences with the concept in question. As this study demonstrates, this is rarely the case. Translation most often occurs at the lexical level; semantically, the words are treated as the same. It is the subtleties of meaning between a word in the native language and its translation equivalent which makes affective and connotative distinctions difficult. Responses to the same words in the intralanguage conditions show, however, that individual as well as sociocultural experience influence how the child perceives the word in the first place.⁸

Over time, there appears to be a shift from Spanish to English dominance as reflected in the meanings of the semantic memory store. In the early stages of English acquisition, the English language lexicon is backed by the semantic structure of the mother tongue while at later stages words in the mother tongue become more reflective of English meaning. At no point did this study find the two systems to be equivalent.

It was argued in a previous work (Walsh, 1983) that during the early stages of second language acquisition, lexicon 2, or the English store, could be figuratively described as being superimposed on the native language lexicon (lexicon 1) with no differentiation in meaning. It was thought that as critical attributes are discovered and nuances in meaning identified, lexicon 2 would begin to occupy more semantic space of its own and eventually the lexicons would become self-sufficient with similarities and differences in meaning semantically

determined. While the present study shows that English does begin to command more semantic space, it also demonstrates that, for the subjects in this study, access to meaning in both languages is neither equal nor balanced. Sociocultural salience and context (the context in which the concepts--not the words-- were acquired and the context present in the study) played a major role in determining which meaning the child chose to employ.

Two major conclusions emerge from the results. The first involves the influence of society and culture on the acquisition, processing, and use of semantic information. The primacy of the culture of the home is reflected in the Puerto Rican children's use of Spanish-type meanings to define English words. Concepts which are used primarily in the English speaking context of the school, however, take on an English significance, even when the word is spoken in the mother tongue. While the process of accessing words from the lexicon and retrieving their meaning from the semantic memory store may be primarily mechanistic in nature, the process by which semantic information is registered, stored, and lexically related clearly is not.

Secondly, the results make a contribution to our knowledge and understanding of how children encode and decode words. In both the word associations to nouns and the word associations to pictures and adjectives, subjects were, for the most part, able to keep their responses linguistically separate. Semantic confusions occurred, however, both inter and intralingually. It seems that in the process of decoding a word, bilingual children examine semantic

content before (or, sometimes, without) registering the language the word was spoken in. Then, in encoding a response, the child takes this semantic content and verbally expresses it in the appropriate language. The lexicon serves as the superficial vehicle of expression but, in and of itself, holds little significance.

FOOTNOTES

¹Mere repetitions were usually scored with a zero since it was unclear whether the stimulus held any meaning for the child. Repetitions with qualifiers, however, were, in most cases, given a one for a minimum level of significance.

²In situations where the subjects' use and knowledge of the English language appeared to be practically nonexistent, only the SS and ES Conditions were given. Scores on the remaining two conditions were recorded as zeros.

³Response to the word 'prieto,' a translation equivalent for black among Puerto Ricans, evoked very different associations. Many children, especially those with less proficiency in English, associated 'prieto' with the skin color of either family members or friends. No children did this with the stimulus black.

⁴It is expected that culturally associated values will always retain a primary link to the Spanish language regardless of English language proficiency. What is expected to change, however, is the individual's ability to identify and understand the cultural nuances.

⁵While the term "Hispanic" is generally used in English to refer to those individuals of Latino descent, many Puerto Ricans as well as other Latinos do not call themselves Hispanic. Use of the stimulus Hispanic in this study was justified by the fact that within the school setting, Puerto Rican and Hispanic are viewed to be much the same. Of interest was how children define both terms and whether they include or exclude themselves in the definition.

⁶One child in the medium low English language ability group split her association by language. When given the stimulus bilingual and asked to respond in Spanish, she replied "español." To the word 'bilingüe' she answered "English."

⁷According to Apple (1982b), cultural capital refers to the communicative and symbolic resources of dominant groups.

⁸This finding is consistent with that of Romney and Bynner (1981) in relation to bilinguals' ability to translate literary texts.

CHAPTER VI

PEDAGOGICAL IMPLICATIONS AND RECOMMENDATIONS

Meaning In and Around the School

When children enter the classroom they bring a history--social, linguistic, cultural, and economic--which affects how others see them. It is this history which grounds the child and provides the backdrop from which he or she builds meaning. Meaning, then, requires both something which is given and something which is acquired. It is the social and linguistic interaction of the individual in unison with others which provides for meaning construction and for the verification and grounding of reality. What makes sense to the child also makes sense to those around him or her and vice versa. For the Puerto Rican children in this study, however, realities were divergent. The systems of meaning were confused. Much of the blame for this confusion lies with the educational institution, the main link between the child and the English language.

Schools as Producers and Reproducers of the Social Order

The educational system, in general, supports the notion that language is neutrally available to all students. The language practices and pedagogies of classrooms tend to ignore the historical and cultural background of students and, in so doing, presume a false equality of

language use and of meaning. As Bourdieu (as cited in Giroux, 1983: 89) has pointed out:

. . .the educational system demands of everyone alike that they have what they do not give. This consists mainly of linguistic and cultural competence and that relationship of familiarity with the culture which can only be produced by family upbringing when it transmits the dominant culture.

Schools are economic, social, and cultural sites which produce and reproduce ideologies and cultural forms. Ideally, the school builds upon that which has been acquired in the home, reinforcing the modes of material and social organization. Realistically, however, the school creates and perpetuates a culture of domination and resistance, a culture which works through and on the student and is evidenced in the social practices, the curriculum, the routines, and the language that characterize day-to-day school life.

By presenting schools as institutions designed to benefit all students, the dominant culture, its knowledge and social practices, misrepresent the nature or effects of social and cultural processes weighted against the interest of students from subordinate cultures. Domination and power represent a 'silent' motif of school life; this can be seen in the way they mediate the instances of class and culture to reproduce in approximate form the social relations of domination that characterize the larger society (Giroux, 1983, 66).

In this study, culture, ethnicity, and class placed the Puerto Rican students in a position subordinate to the majority. The power of the dominant group was apparent in both the overt and underlying meanings of all subjects, Puerto Rican and Anglo, and in the way they appeared to view the contrasting white and Puerto Rican worlds. Although Puerto Ricans comprised over forty percent of the school

population, to be Puerto Rican, as the responses indicated, often had a negative connotation. Either consciously or unconsciously, administrators, teachers, and staff were, by their tacit transmission of unstated norms, values, and beliefs, reproducing relations of domination and power and providing for differential schooling. Puerto Rican students learned to view their language and culture as inferior.

Teacher attitudes and expectations. The fact that social attitudes play a powerful role in determining academic success is nothing new. Since the late sixties, educators have talked about the "Pygmalion effect" that teacher attitudes have on children's school achievement.

Research by Saville-Troike (1980), Seligman, Tucker, and Lambert (1972), and others has demonstrated that teacher attitudes about language, speech style, or dialect also have a strong impact on teacher expectations and, as a result, on student achievement. Ramirez, Acre-Torres, and Politzer (1983) maintain the "prophecy of failure" is based upon a causal link established in the teacher's mind between nonstandard speech, a lack of eagerness to learn, and low achievement. As Saville-Troike (1980) notes, Latino students are expected to fail--for many, this expectation becomes a self-fulfilling prophecy.

The middle class, formal language style of school is often different from the language Puerto Rican children have been taught to use in the home and in the neighborhood. Yet cognitively, the Puerto Rican child comes to the classroom equipped with the same

basic skills as the Anglo child. Differences lie not in ability but in the language and context in which the skills were acquired. In the process of adjusting skills to fit the immediate school context, the Puerto Rican child may appear to lag behind Anglo peers and progress at a very slow pace. Unfortunately, this slower progression is often viewed by teachers as an indicator of low intelligence, a poor home life, and a disinterest in school. In most cases, however, the real cause of depressed achievement may lie with the schools, not with the students.¹ Frequently, school and teacher attitudes make students feel negative about themselves--about who they are and what they can achieve.

In this study, many of the teachers (both bilingual and non-bilingual) made constant reference to the poor study habits, low attendance, supposed depressed home life, and the lack of motivation of many of their Puerto Rican students. Some teachers openly criticized the children in front of their peers, other teachers, and me for their alleged sluggishness and/or their inability to speak English. In contrast, several mainstream teachers attempted to discourage me from using their Puerto Rican students as subjects, maintaining that the children no longer spoke any Spanish. The students could not help but receive the message.

Since language is such a powerful symbol of personal and group identity, direct and indirect attacks on it in the classroom and outside are attacks on the students own identities and their perception of self-worth and the worth of family, friends, and others they admire. Direct attacks may take the form of prohibition on the use of another language, or public

corrections of the form of a student's speech. Indirect attacks are often subtle, and may range from omissions of the students' language from public use (on signs, in announcements, etc.), to disparagements of its expressed power, negative evaluations of the intelligence of its users, failure to utilize it in testing or making home contacts, or restriction pressures on its use by staff. Even where the students' language is incorporated into the curriculum, books and materials used may have an inferior appearance to the English materials, again betraying a second-class status for the other language, and by extension, for its speakers (Saville-Troike, 1980:353-4).

Student attitudes, self-concept, and motivation. Studies of the relationship between learners' attitudes and motivations and second language achievement have, in recent years, been fairly numerous. Much of this research found its base in Gardner and Lambert's work (1972) which identified two distinct motivational complexes--integrative and instrumental--that differentially affect second language learning. While there has been considerable debate on the integrative/instrumental distinction, Gardner and Lambert's underlying notion that social context has a significant impact on second language learning is widely accepted. As Genesee et al (1983) note, it is not difficult to imagine social settings in which there are factors that preclude learning a L2 for integrative reasons (e.g., to belong) while at the same time other factors promote L2 learning for mostly utilitarian reasons (e.g., to get a job). As these authors go on to explain, however, in learning a L2, social context acts in concert with not only learner attitudes and motives but also with the attitudes and motivational support of the target group.

The theory behind bilingual programs is to provide a strong, supportive environment in which the LES student receives skill instruction in the native language while at the same time being introduced to the English language and culture. By integrating with monolingual English speakers for art, music, physical education, etc., the LES child develops a motivation and reason to learn English--to become part of the group and belong. Attitudes toward him or her from the white majority are often viewed by the LES child as representative of his or her inability to communicate in English, thus increasing learner motivation. Self concept for Puerto Rican children in the early stages of L2 acquisition is, therefore, generally high. They feel good about themselves as Puerto Ricans and about the L2 acquisition process.

According to Saville-Troike (1980), included among language's functions are those of a symbol and identifier of group membership and a principal medium for mediating and manipulating social relationships. As a speaker of Spanish, the LES Puerto Rican child is set off from monolingual English speakers. Once he or she acquires the ability to communicate in two languages, however, the Puerto Rican child technically has the option of choosing which group to identify with in a particular situation and to thus convey the metaphorical meaning which goes along with such choice as well as whatever denotative meaning is conveyed by the code itself.

In this study, time spent with English speakers seemed to have a proportional effect on group identification. While an ability to

fluctuate between the Spanish and English speaking worlds was evident in several subjects, the majority identified themselves with either one linguistic group or the other. Most Puerto Ricans in the bilingual program saw themselves as Spanish speaking and as Puerto Ricans, either through self-identification or through a relation in some manner to home, family, or heritage. Meanings, especially for those in the early stages of acquiring English, were Spanish dominant. For those Puerto Rican children in the mainstream, however, linguistic and cultural identification were more Anglo in perspective. This was especially true for males. During recess and lunch, most chose to associate with English speakers rather than with friends or relatives in the bilingual program. Cultural identification and self esteem were diminished. Meaning for words in either English or Spanish was more English oriented.

In wanting to integrate themselves and be included, it seems many Puerto Rican children feel it necessary to deny, at least during the school day, that they have bilingual linguistic identification. But because race/ethnicity limit the extent to which the Puerto Rican can belong in the white Anglo world, identification and membership (or full inclusion) always remains divergent. As the child discovers that race divides him or her from membership at school and that English dominance and perceived differences divide him or her from membership at home, self concept and esteem begin to diminish as does the child's academic motivation.²

Arias (1976), Ribeiro (1983) and others have found a direct correlation between self concept and academic success. In his study of Portuguese children in Cambridge, Massachusetts, Ribeiro discovered that students who felt good about themselves and their families were more apt to achieve and to stay in school. Ribeiro contrasts these findings with those of a study in New Bedford, Massachusetts which found that Portuguese students often develop serious feelings of inferiority when involved in competitive situations with American peers in the classroom or when rejected in their attempts to be fully accepted by American peers.

Ribeiro's findings coupled with those of the present study indicate that self concept and self esteem for language minority children tend to be lower outside the bilingual program. In this study, there also appeared to be a strong correlation between level of English proficiency and self esteem. Valuation of English increased while that of Spanish declined. Meaning in both languages became more Anglo-like in orientation. As Saville-Troike (1980:354) has pointed out:

While minority students are learning to disvalue their language, their culture, and their social group, the majority students are likewise learning to disparage their fellow students and to believe in the inferiority of the minority language and culture, and the inherent superiority of the majority culture and its linguistic medium, standard English. Such beliefs, though founded in ignorance, become deeply engrained to the point that they acquire an almost religious tenacity and become the basis for perpetuating inequities and inequality of educational opportunity.

Schools as Sites for Contestation and for Social Change

As has been discussed, the context, form, and content of formal school knowledge and the "hidden curriculum" help create the conditions for the cultural and economic reproduction of an unequal social order. What goes on in schools, however, is not so passive or deterministic.

Students' actions are in large part determined by the way in which the students themselves perceive the world. Although schools, in general, may act to socialize students into believing in the inferiority and superiority of certain groups, not all members of the educational institution (administrators, teachers, and students included) internalize these dispositions. As Apple (1982) has emphasized, no assemblage of ideological practices and meanings and no set of social and institutional arrangements can be totally monolithic. There is always room for contradiction and, as a result, for change.

For students, the everyday life of schools is a lived reality--a reality, for many Puerto Rican children, which is both representative of dominant ideologies and reflective of internal inconsistencies. The meaning of school life is found in school life itself. The school acts as an arena which is often contradictory, inconsistent, and inappropriate; an arena which is comprised of actions, experiences, conflict, and of struggle. Thus, while schools are tacitly working to teach white, middle-class norms and values, some students are either consciously or unconsciously rebelling against this process.³ In overt

terms, this rebellion might take the form of smoking in the bathrooms, defacing school property, physically confronting other students or teachers, or staying out of school. Resistance shows itself in less obvious ways in students' lack of motivation to learn and communicate in English.

As intentional beings, students have the ability to actively create ways to live with the contradictions and to resist assimilation. Similarly, teachers have the capability (and, some would argue, the responsibility) to expose the contradictions between students' history and culture and that of the dominant pedagogies and language practices. Included in this are the need to uncover the meanings and views which perpetuate inequalities, and to struggle with the social relations embodied in the curriculum, in the language, and in the institutionalized nature of schools. This is not to say that teachers should ignore dominant ideologies or "protect" students from race and class inequalities. Nor is it to say that, because students learn to live with the contradictions, schools should not change. What is required is that both teachers and students become critical thinkers and become cognizant that schools are only a part of a much larger whole. The practices of schools go beyond the individual actions of teachers and students. Yet, it is by critically examining the actions and meanings of the actors within the school context that change can begin.

Context. Humans use context both to construct and to derive meaning; meaning is essentially context-bound. The context of school is comprised of a set of values, beliefs, and norms which are reflective of much larger social agencies. The relations between and among individuals, their behavior, their actions, and their language are, to a great extent, determined by the school and/or classroom context.

Much of the second language acquisition literature emphasizes the important role context plays in the process of learning the L2. Both research and common sense tell us that when the child is in a supportive, comfortable, and meaningful environment, chances for positive and successful second language acquisition are enhanced.

While bilingual programs tend to provide a supportive, educationally relevant, and meaningful environment for most LES children, they do not always provide for strong English language acquisition. The fact that most bilingual students remain isolated from English-speaking peers for a good portion of the day and, except for the ESL teacher, from English-speaking adults, creates a "them" and "us" situation: English is associated with those outside the bilingual program, Spanish with those within. While it is included in the bilingual program, seldom does English become a meaningful part of the students' life. It is culturally, socially, and contextually foreign.

As the data in this study indicated, English language meanings hold little salience for many bilingual students. Spanish and English meaning differentiation proved, for a large number, to be a difficult if not impossible task. Many students sought out a context

with which to associate English words and, as Treatment II's use of pictures demonstrated, context often took precedence over language in definition.

According to Walters (1980), children acquiring a second language combine grammatical and sociocultural knowledge in language production and, in the process, rely heavily on context. Yet, as Clarke (1976) points out, students' difficulties in learning the L2 often stem from a lack of understanding of the social context of language.

Research by Johnson (1983) and Fillmore (1980) has shown that English proficiency growth is greater for LES children who interact verbally with fluent English speakers than it is for those LES children whose interaction is limited. Exposure to English speaking peers apparently influences the level of formal and informal language acquisition and the speed with which it is acquired. According to Fillmore, the type of language input learners receive from peers helps them discover how language is used socially and how English speaking children speak. Most ESL components of bilingual programs are not at all concerned that LES students acquire the English used by their English speaking age mates. At issue is not the need for immersion-type approaches which have consistently failed in the United States, but rather how teachers and school officials can create a context from which the LES child can construct English meaning.

One way is by changing both the composition and intent of traditional TBE classes. The view of bilingual programs as minority

and transitory must be contested. Instead, the bilingual program should be seen as a font of language and of culture, from which LES and nonLES children can drink.

With this concept in mind, several school districts across the country have begun to offer two-way bilingual programs for their LES and native English speakers. One such program began in September 1983 in the school district where this study was conducted. In three different classrooms and at three different grade levels, a bilingual, an ESL, and a monolingual English speaking teacher work with a group of LES and English speaking students.⁴ The day is scheduled so that LES Puerto Rican students receive academic support in Spanish and study ESL while English speakers receive academic support in English and study the language and culture of their LES peers. At certain times of the day, all children, regardless of linguistic background, come together for general instruction in subjects like social studies and to interact with one another and with native and non-native English speaking teachers.

Because all students are learning a second language, attitudes towards LES students appear to be positive. English speakers can be seen trying to converse in Spanish with their LES Puerto Rican peers while LES students try their hand at English. Formal and informal interaction with bilingual and nonbilingual teachers is also evident. While it is too early to assess the effects of this program on second language acquisition and on achievement, preliminary observation indicates a propensity for linguistic and cultural interaction that is

seldom evidenced in mainstream, ESL, or bilingual classes. The context appears to be supportive, educationally relevant, and meaningful for all those involved.

The feasibility of providing two-way bilingual programs for students in all schools is obviously limited. The establishment of a culturally supportive classroom can occur, however, in any type of school. In recent years, there has been a dearth of literature on multicultural education. While the development of such programs will not be discussed here, let it suffice to say that multicultural does not mean the integration of activities that focus on clothing or food. Rather, it is a belief that the differences among us are both valid and essential and that they are embedded in the way we learn, the way we talk, and the way we perceive the world. School context alone, however, cannot assure educational relevancy. The form and content of teacher actions and curriculum also play a significant role.

Competence vs. form. Language classroom instruction has traditionally focused on language form alone. Little emphasis has been placed on developing competency in language use. As this study demonstrates, communicative competence is linked to systems of meaning which is grounded in the lived realities of the child. Too often, it is only the surface form of language which pervades in classroom teaching, in curriculum, and in tests. The employment of substitution and transformation drills and the mere repetition of vocabulary does little

to enhance English language competence. Such use tends to set up artificial and unreal patterns of language response by learners (Monane, 1980) thus structuring the mode and content of second language acquisition.

The job then of teachers is to provide a learning environment which focuses on the social and semantic components of language and which recognizes language as much deeper than just a modality of processing. The child must be able to reflect on his or her lived reality and compare and contrast it with that of the language and culture of the school.

Meaning as problematic. Because meaning represents the experiences, thoughts, and actions of individuals, it is in a constant state of flux and of change. However, what we choose to deem meaningful and the interpretation of it we choose to construct remain a function of socio-cultural and historical circumstances.

For the LES child, much of the second language world is seen through the lens of the L1. With increased experience, the child begins to differentiate and separate the semantic systems and develop his or her own definitions. Yet, even for the Puerto Rican children identified as English dominant and in the mainstream, the influence of the Spanish language and culture on English meaning remains strong.

One way of alleviating these divergencies is through semantic mapping activities which help to graphically represent the meanings of particular words. In this way, each student in the classroom can

express what the significance of a word is to him or her and the teacher can discuss where similarities and differences in subjective meaning lie.

There are four principal relationships which make up the semantic map: class, example, attribute, and related concepts. Semantic mapping is most frequently done with concrete examples, e.g., dog. In this instance, the teacher would write on the board "A dog is a mammal," and then extrapolate the word dog as the example. Students would then be asked to give some of the defining features of dogs, e.g., dogs bark, dogs bite, dogs have ears and a tail. A related concept might be cat which shares some attributes but not all.

Dogs, however, are much the same for both Anglo and Puerto Rican children and reflect little or no cultural difference. In order to help the Puerto Rican student differentiate between Spanish and English salience (and to help the Anglo teacher and students understand cultural differences in meaning), it may be appropriate to use more abstract concepts. An example is the word "educated" which in

English typically refers to schooling and intelligence. In Spanish, however, it is most often used to refer to politeness, good behavior or manners, and demonstrative of respect. By generating both typical English and typical Spanish meanings, the teacher can point out that educated, for instance, can also refer to etiquette but is more frequently used in English with regard to the education which takes place in the school, not in the home. For many Puerto Rican children, 'educado' would represent the reverse. Related concepts for the Puerto Rican child, then, might be family and respect. For the Anglo, it might be books, grades, and college. Maps could then be developed for each of these related concepts. Discussion could ensue on the importance of respect among Puerto Ricans, on its ties to family and to social relations. This could be contrasted with the more Anglo concerns of the self, the nuclear family, and individuality.

Use of semantic maps should not be limited to language arts classes but should be extended for use in social studies, in reading, and even in science. The meaning of a flag or the notion of community would be appropriate for a social studies discussion while the understanding of certain key words in a reading lesson would aid in comprehension. In science, the salience of particular foods and their combination might make teachers more aware of the Puerto Rican diet (and prevent them from spending hours talking about the four food groups all children should eat each day).

Instruction which focuses on semantic features (i.e., on the discovery and description of critical attributes or features), on linguistic relationships and on concepts can also be helpful.

In semantic feature activities the teacher begins with a topic word which has the same function as the class word in the semantic map. With older children, this word might be human values, for instance. Students would then be asked to generate a series of examples, e.g., respect, education, authority, and trust, and a series of features which help describe human values, e.g., related to elders or family, school, optional, mandatory. A grid would be set up which looks like this:

	Related to Family	Related to Elders	Related to School	Optional	Mandatory
Respect					
Education					
Authority					
Trust					

Each feature would be rated by a plus or a minus depending upon its ability to describe the example in question. Education might have pluses in the school and mandatory columns, for example, with Anglo students and pluses in the family, elder, and mandatory columns for Puerto Ricans. Class discussion should focus on the uniqueness of particular examples for Puerto Ricans (and other cultural groups)

as compared to Anglos and on the areas of interrelatedness between concepts and among features.

In English, as with any language, the same words are sometimes used in different contexts to mean different things, e.g., "We found some rocks at the beach," and "She has a head like a rock." LES children are more able to grasp the nuances of English meaning and use if time is spent in the classroom discussing these linguistic relationships. Activities, again, would focus on attributes or features of the words in question. With the example above, students might generate such features as round, hard, grey, brown, black, or whitish in color, smooth surface, is found outdoors, varies in size, is used to build houses. While some of these features also apply to head, all of them certainly do not. If we rephrase the sentence into "She has a hard head" and, if we know rocks are hard, then the analogy of "head like a rock" makes more sense.

Concept instruction is also an effective means for delineating meaning. An understanding of where a concept fits into the students' semantic taxonomy can provide teachers with an assessment of both language proficiency and level of comprehension of subject matter. Klausmeir (1976) emphasizes the importance of presenting a definition and a rational set of examples and nonexamples of the specific concept. With the example of educated this might mean generating strings such as "Juan graduated from high school, therefore Juan is educated," versus "María does not speak back to her parents, therefore María is educated." Examples and nonexamples (of

educated) such as these can help children discover for themselves the crossover or noncrossover of critical attributes in each language and can assist children in the development of correct network paths.

While phonetic and structural problems also exist for the second language learner, they are more easily recognized and overcome than problems of a conceptual nature. Personke (1982), in referring to work of his colleagues at the University of Wisconsin-Madison, maintains there is a high correlation between word identification skills and reading comprehension. Of even greater significance is his claim that contextual analysis correlates much higher with reading comprehension than does phonic or structural analysis. Contextual analysis skills are those involved in the conceptual nature of words.

For the Puerto Rican child, meaning is problematic. It represents both that which is a lived part of the child and that which is somewhat apart. The task of teachers is to build on this problematic--to permit students to reflect on their own lives and on the reality of life in the school. Students must be encouraged to struggle and to question and to critically contrast and compare. They must, as Giroux (1983:228) said, "learn to speak with their own voices, draw from their own experiences, and produce classroom 'texts' that reflect the social and political issues important to their lives." Language and meaning thus become their source of power, the source which can help Puerto Rican children decode their own realities and establish an

autonomy that honors the traditional while also advancing despite obstacles thrown in their path by the English speaking world.

FOOTNOTES

¹Research by Troike (1978) of immigrant children's achievement indicates that children who attend schools in their native countries for several years before coming to the United States tend to do better in English than those immigrant children who begin school here.

²In contrast, much research shows that while Black children feel excluded--realistically--their self esteem is relatively high, in many cases higher than that of white children. That, however, did not appear to be the case here.

³It could also be argued that students are rebelling against not only what goes on in schools, but also against conditions that are only, in part, a consequence of school, e.g., the lack of jobs, of a future.

⁴In the school district in question large open classrooms with sliding walls were used to divide the children for different types of instruction. The implementation of a two-way program, however, is not contingent upon such space. The author has been involved in setting up a similar type program in another school district utilizing traditional classrooms.

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APPENDICES

APPENDIX I
WORDS USED IN TREATMENTS I AND II

WORDS USED IN TREATMENTS I AND II

Words used in Treatment I, ordered alphabetically by Spanish and paired with a possible English equivalent.

amigo	friend
bilingüe	bilingual
castigo	punishment
chavo	money
comadre	godmother*
compañero	partner
confianza	trust
educación	manners
enseñanza	teaching
escuela	school
familia	family
hispano	Hispanic
iglesia	church
inglés	English
maestra	teacher (female)
obediencia	obedience
padre	father
pelea	fight
prieto	black
relajo	joke
respeto	respect
trabajo	work
vecindario	neighborhood
vergüenza	shame

Adjectives used in Treatment II

capaz	capable
educado	educated
familiar	familiar
popular	popular
puertorriqueño	Puerto Rican
respetado	respected

*The word "comadre," literally translated as "co-mother," has no equivalent in the English language. Its significance refers to the relationship between a child's godmother and his or her (the child's) mother. In this particular case, I use the word "godmother" in English not as a translation but as a related word that holds significant meaning in both English and Spanish.

APPENDIX II
CATEGORIES OF MEANING USED BY RATERS

CATEGORIES OF MEANING USED BY RATERS

Treatment I

Word	English Meaning/Spanish Meaning
church/iglesia	a place of worship/acto de veneración
father/padre	familia relation/autoridad
friend/amigo	acquaintance, likeable person/persona de confianza
partner/compañero	sharer of task/amigo íntimo
teacher/maestra	instructor/transmitora de conocimiento, valores
teaching/enseñanza	instruction/metodo de aprendizaje, acto de transmitir conocimiento
punishment/castigo	penalty/acción etica o moral, autoridad
godmother/comadre	religious significance, security, fantasy/espiritual, amiga íntima de la familia
neighborhood/vecindario	area, place/comunidad
trust/confianza	honesty/sentido de seguridad, fe, trato íntimo
respect/respeto	honor, admiration/estimar, sentido moral, autoridad
English/inglés	language/idioma asociado con un grupo de gente, una clase, un maestro
Hispanic/hispano	speaks Spanish/latino
joke/relajo	something funny/chiste, bufear
black/prieto	a dark color/negro
obedience/obediencia	to behave/respetar, autoridad
bilingual/bilingüe	speak two languages, Spanish/hablar dos idiomas, inglés, una clase

Treatment I

<u>Word</u>	<u>English Meaning/Spanish Meaning</u>
money/chavo	currency/moneda para un uso
family/familia	people you live with/parientes, ambiente
work/trabajo	employment/oficio, acto, realizar algo
fight/pelea	disagreement/desacuerdo violento, argumento
school/escuela	place of learning/aprendizaje, enseñanza, autoridad
shame/vergüenza	disgrace/bochorno, actitud moral
manners	politeness, etiquette/respeto
educación	school/cultura, conocimiento, respeto

Treatment II

familiar/familiar	known/conocido, de la familia
capable/capaz	able, skilled/de habilidad, destreza o potencia, responsable
educated/educado	intelligent, schooled/persona que tiene respeto y principios
respected/respetado	admired, liked/estimado, amado, de autoridad
popular/popular	well liked, well known/del pueblo o relacionado con las masas
Puerto Rican/ puertorriqueño	Spanish speaker, dark skinned/características culturales, y lingüísticas, de Puerto Rico

APPENDIX III
SCORING SHEET

TREATMENT 11

CONDITION SS												CONDITION SE																			
TARD	LANG	ENG.			Pos.	SPAN.			Pos.	OTHER	S	O	Pos.	Trans	Pict	LANG	ENG.			Pos.	SPAN.			Pos.	OTHER	S	O	Pos.	Trans	Pict	
		MEAN	S	O		MEAN	S	O									MEAN	S	O		MEAN	S	O								MEAN
capaz																															
educado																															
familiar																															
popular																															
puertorriqueño																															
respetado																															
CONDITION EE												CONDITION ES																			
capable																															
educado																															
familiar																															
popular																															
Puerto Rican																															
respected																															
RATER'S NAME																															

APPENDIX IV
MANOVA PROGRAM

MANOVA PROGRAM

Manova

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V1 to V12 by Grp(1, 4)/  
WS Factor=Cond(4)Var(3)/  
WS Design=Cond Var Cond By Var/  
Print=Error(SSCP COV)  
      Signif(Hypoth)Signif(Averf)  
Design(overall)  
Cellinfo(means)  
Parameters(Cor)/  
Analysis(Repeated)/  
Design=Grp
```