TOWARDS A SOCIAL THEORY OF LANGUAGE VARIABILITY

Alicia Pousada and Mel Greenlee

> There is no intrinsic reason why science should not learn to deal with the novel elements in the universe which, after all, are as characteristic of it as the repetitious and regular ones.... If we are to master and direct our world, we must learn to cope with the orderly but also with the novel aspects of the universe, even when their novelty is of our own making. (Bernal, **The Social Function of Science**).

> So long as we do not know how to reconstruct through scientific thought, the limited number of possible changes which any particular structures may carry out, history, as of yesterday and tomorrow, will stand over us like an immense mass of facts pressing with all the weight of its enigmas and consequences.... We must therefore go further with our analysis in order to explain the possibilities which depart from the norm, their occurrence or lack of occurrence in other aspects of social life. We ourselves have not been able to go so far, but we have at least recognized the problem. (Godelier, **Perspectives on Marxist Anthropology**).

1.0 Introduction

Human social organization is typified by an almost infinite variety of cultural and linguistic manifestations, which are in constant flux. This variability is both societal and individual (if the two can be discussed apart), a result of the general unevenness which characterizes social development, situations of social or ethnic contact, different life stages and their

accompanying activities, and individual choices made from among different cultural possibilities.

All communities are full of socially-produced variation which is actually merely a cover term for the constant negotiation of conflict, consensus, cooperation, and contradiction within that community. Language diversity (or "heteroglossia" as Bakhtin calls it) is a response to changing historical conditions and both reflects and responds to contacts with outside social forces and groups. In fact, this linguistic variation is probably necessary in order to deal with the multiplicity of social forms and currents (some destructive, some productive) which affect individuals and communities.

Linguistic variation is utilized to a great extent by speakers to reflect and reproduce diversity within social structure, to modify and reconstruct it, and to maintain existing social differences. This complex process can be seen in the conscious or unconscious selection and manipulation of linguistic forms -- phonological or morphological segments, prosodic features, lexical items, syntactic permutations, or even entire language varieties -- and in the varying sociolinguistic norms for personal address, argumentation, and conversational structuring. Individual speakers vary in linguistic strategies, skills, and experience. Groups of speakers (defined, for example, by sex, age, class, ethnicity, and other sociodemographic features) exhibit recognizable patterns, which contrast with and set them off from members of other groups. In

short, language, like all cultural behavior is characterized by constant heterogeneity which is regulated or constrained by social processes and human agency.

In an absolute sense, all social situations are unique and non-recurring. However, people treat some situations as so minimally different that they are seen as the same. Despite the variability present, humans perceive and utilize commonalities and even universals in daily practice. Invariant categories are abstracted and used to organize and classify events and states of existence. The production of categories appears to lend a note of stability and continuity to life, permitting the linkage of presently existing phenomena with those of the past and the unravelling future. Categories serve to guide all of consciousness. However, once constituted as social reality, categories are generally taken for granted and unanalyzed. Reference is made to the "normal," "natural," and "standard." That which fails to fit into the categories is seen as "variation," "deviance," "error," "idiosyncracy," "performance features," or perhaps even "creativity," depending on the analyst's attitude and ideology and the purpose of the analysis. Rarely, however, is the process of creating the categories or the social significance examined.

A socially conscious and radical linguistics like the one we, at the **Centro de Estudios Puertorriqueños**, are attempting to forge is necessarily interested in examining how variance and invariance are produced in their societal contexts. The social

reality of variability is that cultural forms and features are differentially weighted, and people are judged and treated according to the manner in which they use such forms. A radical linguistics must interest itself in the ways in which this social determination of what counts as variation interacts with the ways in which individuals constitute themselves socially and the opportunities available for living out their social potentialities. Of particular importance is how the categories on the basis of which variation is identified are produced, who has the power to produce them, and toward what ends they are produced.

As a Language Policy Task Force, we are also concerned with policy questions. If we are to frame appropriate research questions and utilize our research findings to formulate policy that reflects the needs and concerns of the people upon whom it will impact, then we must face squarely the variable nature of the consciousness, social practices, and language patterns of the community. We must find the means by which to incorporate the richly variegated data of day-to-day existence into generalized statements that in some sense embody the experience of the people we work with, as well as help them better understand their situation and see ways to improve or change it.

Although variability is particularly visible in language, linguistics as a science has tended to skirt, or at least play down the issue. Traditionally, language has been viewed as a code or self-contained system of elaborate rules and patterns to

be examined with minimal reference to social activity or meaning. Linguistic forms are fixed into static texts which, according to positivist and empiricist precepts, permit "objective," decontextualized scrutiny. Actual language use, with all its variability, is avoided or cleaned up in pursuit of the description of underlying grammars and universals. While different schools and sub-areas of linguistics, along with related disciplines, have varied in their rigidity with respect to what is deemed the appropriate object of study, there has been a general consensus that variability presents an obstacle to understanding language as a system, and that a great many human phenomena are best defined as **not** constituting data for science, for social science, or for linguistics.

To justify this rather large generalization, it would be helpful to examine exactly how different areas of linguistics or language-related disciplines have treated the notion of variability.[1] In this essay, we will critically review the areas of phonology, quantitative sociolinguistics, theoretical or transformational generativist linguistics, language acquisition, and ethnography[2] in terms of:

1. How the concept of variability is articulated and how it has developed historically.
2. How variation (once defined) is described methodologically.
3. What value (scientific and social) it is accorded.
4. How, if at all, it is explained, and
5. What, if anything, is done about it.

We will focus particularly on the problems we see in the traditional treatments and attempt to outline the necessary components of an alternative, socially-based approach to the analysis of language variation. Among the notions which will be discussed are the segmentation of a continuous reality into discrete and invariant categories, the functions of idealization and abstraction, the determination of sameness vs. difference, and the relationship between variability and change.

In order to illustrate the kinds of issues we feel a social theory of language variability must address, we will also examine the relationship between the scientific paradigm and social ideology and its implications for the study of variability, the social creation of categories on the basis of which variability is identified, and the manifestation of social significance through variable linguistic forms.

2.0 Variation in Phonetics and Phonology

Phonological variation is one of the most readily obvious and has been the object of considerable attention and theorizing. Such variation has been seen as the key to understanding sound change and its spread both over time (see Jeffers and Lehiste 1979) and across different social groups (cf. Labov 1978, Trudgill 1974, Hudson 1980). It has also been observed that speakers are able to ignore this variability in order to understand one another when social barriers are not imposed (see Locke and Yakov 1982, Studdert-Kennedy 1976).

Critical to the treatment of sound variation has been the relationship between phonetics and phonology and the status of the phoneme as a generalization or idealization of different variants.

The level of phonetics is often viewed as the most concrete and least problematic, since there are agreed-upon universals or tendencies dictated by the physical capabilities of the speech production mechanism. Within these limitations, there is diversity across the inventories of the world's languages with respect to what sounds are utilized and, of these, which become significant or meaning-bearing within the sound system of particular languages. However, there is little concern among phoneticians for variability **per se**.

Despite the seemingly objective nature of phonetics as a descriptive science, there is a process of idealization which takes place in the artificial segmentation of a semi-continuous flow of sounds. Acoustically-speaking, there is no break between what we refer to as one "sound" and another, and some of the acoustic properties of one sound will be realized on the surrounding sounds. Despite this, all native speakers are able to identify discrete sounds. Even the closest phonetic transcription represents a necessary abstraction from the actual physical record since no two utterances are ever exactly alike and all of the physical properties of any given utterance cannot be captured in writing. Given the universalist interests of phonetics, the failure to capture all this variation is not

considered critical. The variation is treated primarily as a product of the physical characteristics of the articulatory organs and the sound waves.

Variation becomes much more salient within phonological analysis. Phonology examines the function of sound segments in a given language and the physical, grammatical, and psychological properties internalized by the native speaker. Key here is another idealization of the concrete phonetic realizations of sound. Phonemic status is traditionally accorded after consideration of the distribution of particular segments in lexical items and through some recourse to speakers' perceptions of sameness/difference and meaningfulness of contrast.[3]

Among structural linguists, there was a division of opinion about the criteria for phonemic status. Whereas Sapir believed that the phoneme constituted a mental category for native speakers, Bloomfield considered psychological reality irrelevant and unscientific for phonological analysis, despite the fact that one of the cornerstones of his analytic method was the commutation test in which informants were asked to judge the phonological similarity of items (see Labov 1978).

European phonologists Trubetskoy and Martinet, as well as others of the Prague School, accorded some value to speakers' mental treatment of phonological variation and to the categorization process of native speakers. Jakobson (1941) went so far as to explore sound symbolism and synaesthesia (feelings generated by sound) in a study directed toward ascertaining

universals. The possibility that individual speakers could have distinct mental grammars was not, however, seriously entertained.

In generative phonology (Chomsky and Halle 1968), mental operations of native speaker/hearers took on a central role, although the phoneme of the structuralists was replaced by distinctive feature bundles and the systematic phoneme. The mentalist position described in **The Sound Pattern of English** has been criticized in recent years, with general agreement that the relationship between the linguist's proposed rules and the speaker's conception of phonology was too close for comfort. Anttila (1974:3) described this relationship as a "photograph" since the underlying forms and rules hypothesized for the language could be found as a "photograph" in the speaker/hearer's mind.

The interface between phonetics and phonology has been of interest to students of second language learning, since the difference between the phonological status of similar phonetic material in different languages was believed to be a source of learners' errors (Briére 1967, Eckman 1977). For example, it was hypothesized that a speaker of Spanish, for whom [d] and [ð] are phonetically conditioned variants of /d/, would experience difficulty in hearing the difference between English /ð/ and /d/ when the distributional characteristics of these two did not match those of Spanish, e.g. in word-initial contexts. Contrastive analysts believed that second-language learners were likely to impose the phonological system of the native language

on the second in both speech production and speech perception tasks (e.g. Stockwell and Bowen 1965).

However, it was found that conflicts in phonological status or distribution of speech sounds did not predict the pronunciation of second language learners. Moreover, second language learners were able to detect others' faulty pronunciation while remaining far from perfect in their own L_2 pronunciation (Neufeld 1980). Observations of both first and second language learners' phonological "errors" have led to questions about the relationship between speech perception and speech production. They have also raised fundamental issues concerning the process by which speakers and listeners come to regard quite different sounds as "the same" -- a process Kuhl (1976) has called "solving the invariance problem."

Recent experimental studies of infant speech perception have shown that the extraction of invariance in the very early stages of exposure to language may be aided by the inherent salience of certain acoustic differences, a psychoacoustic sensitivity perhaps shared with other mammals (Kuhl and Miller 1975). Young infants already judge the same consonant-vowel syllables said by different talkers to be "the same," just as adults do. In other ways, however, infants' listening is distinct from adults' in their speech community. For example, Trehub (1976) and Eilers, Gavin, and Wilson (1979) have found that infants can discriminate between speech sounds which adults from the same community cannot differentiate. As the infant acquires skill in producing the

phonology of his/her native language, it appears that a certain amount of attention to phonetic variation is lost (see McKain 1982). Nevertheless, the ability to attend to just those parameters of the speech stream which are linguistically relevant is a feat of normalization which eludes even the most sophisticated speech recognition systems of computer technology (Gupta and Mermelstein 1982, Remez et al. 1981).

2.1 The Role of Variation in Sound Change

That sound changes is no discovery -- observations of such changes have existed since Panini, and probably before. The process is generally described as slow and gradual, though abrupt discontinuities are acknowledged in situations of great social upheaval. Suggested causes have run the gamut from ease of articulation to imperfect learning to systemic pressures.

The basic problem in understanding sound change was the difficulty in seeing it in action, of analyzing change in progress. Working primarily from written texts, historical linguists were able to compare languages at different chronological points and see the change which had transpired. Their comparative methodology enabled them to posit "laws" like Grimm's Law, which describes consonantal shifts in the development of Germanic from Proto-Indo-European. However, only rarely were they able to explain how and why particular changes arose.

The American structuralists, along with the early generativists, took the position that sound change in progress could not be observed (Hockett 1958) and that a single change occurring over a period of time had to be treated as a succession of lesser changes taking place instantaneously (Sommerstein 1977:249ff). This instantaneous view of sound shift has given way in recent years to more detailed sociolinguistic studies of forms which would be candidates for an on-going change, and to explorations of the social factors responsible for advancing or impeding a sound change. Weinreich, Labov, and Herzog (1968) demonstrated how the competition of phonological variants leads to the replacement of old forms and adoption of new forms over time. The work of Labov (1966, 1972a, 1972b) and Trudgill (1972, 1974), among many others, has elucidated the nature of the synchronic variation which over relatively short time spans evidences change in process.

What remains unclear is why particular variants are selected by speakers for this competition, and for what purpose, and why this competition arises at certain times and not others. In addition, the fact that there is variation which does not lead to change has yet to be fully confronted. What is its function, and why does it persist?

In short, phonological theory does not provide many clear solutions to the central questions concerning variation and the origin and spread of sound change. This theoretical disarray may be attributed to competing models of individual speakers' roles

in the promotion of sound shifts as well as to the analytical methods which have been applied to the continuously variable stream of speech. More important, perhaps, is the failure to account for the active role of the speakers in initiating and carrying through the changes.

3.0 Variation Theory in Quantitative Sociolinguistics

The notion of variability has been central to the development of sociolinguistic research. In fact, one definition of sociolinguistics could be that area of linguistics which takes as its focus the analysis of the variability found in daily speech. As Trudgill (1974:32) aptly observes:

> One of the main factors that has led to the growth of sociolinguistic research has been the recognition of the importance of the fact that language is a very variable phenomenon, and that this variability may have as much to do with society as with language. A language is not a simple, single code used in the same manner by all people in all situations, and linguistics has now arrived at a stage where it is both possible and beneficial to begin to tackle this complexity.

While we would disagree with the assumptions implicit in this statement that language and society are somehow separate and that linguistics and sociolinguistics somehow deal with different phenomena, the overall chronology presented is basically correct. Variability, being the elusive phenomenon that it is, was avoided (particularly in the days before the tape recorder) by the early linguists who emulated procedures within the so-called "hard" sciences by accounting for linguistic phenomena with categorical rules or laws.

This is not to say that the early linguists did not know about variability. In their phonemic analyses, they often included frequency data on the occurrence of supposed "free" variants. As Labov (1978:344) has argued, the inclusion of such information showed that they realized the skewed distributional nature of these forms and the loss of information which resulted from relegating these variants to the "free" category.

In one sense, quantitative linguistics has dedicated itself to chipping away at that "free" category, showing time and time again that what appeared to be unmotivated variation was actually strongly correlated with certain social factors and processes. Taking its lead from the work of Labov, Cedergren, and Sankoff in the late 1960's and early 1970's, the field has developed a formalistic procedure for dealing with speech variation, namely variable rule analysis. We will therefore explore this area in an attempt to understand how variation is perceived, identified, treated, and explained within a particular conception of what language theory ought to be.

3.1 Variable Rule Theory

Wolfram (1973) identifies three basic premises for variable rule theory. The first is the notion that language is inherently variable, though not all variation is immediately traceable to contextual (linguistic or social) changes. The second is that variation is systematically patterned or replicably regular, which can be demonstrated by isolating the constraints upon

variables and showing the consistent distribution of variants. This regularity has been shown repeatedly by independent studies of the same phenomena (e.g. for Black English Vernacular, see Labov et al. 1968, Wolfram 1969, Legum et al. 1971, Fasold 1972). Finally, the actual variational patterns are specific to a particular language variety and require description apart from any universal grammar.

These fundamental assumptions are not accepted by all sociolinguists. Inherent variability (especially that which appears non-contextual) smacks of the traditional "free" variation, a category which quantitative sociolinguistics has done much to undermine.[4] Some sociolinguists, especially those involved in Creole studies like Bickerton, Bailey, and De Camp, point to dialect mixture as the source of variation rather than inherent variability, and center their analytic efforts on creating pan- or polylectal grammars rather than variable rules.[5]

However, these basic assumptions can be viewed as the foundation of quantitative sociolinguistics, and along with the notion that variation can be quantified in some manner, constitute a rationale for variable rule analysis. The variable rule concept was developed to incorporate into generative grammar the obvious variable element present in spoken language. Variable rules go beyond generative rules by including quantitative measures which specify the linguistic and "extra-linguistic" environments in which rules apply and by incorporating weighted optionality into the formal notation. For

each set of contexts (linguistic/social), a probability of rule application is associated with each rule.

Variable rule analysis was first done with phonological variables and then extended to syntactic features. More recently, the approach has been applied to functional variation (Shuy et al. 1977), semantic variation (Sankoff et al. 1978), and "discourse" (Dines 1980). Code-switching has also been examined via variable rule analysis (Poplack 1978, 1980, Sankoff and Poplack 1980).

The variable rule model is predicated on the notion that variation can be expressed quantitatively in terms of probability of occurrence of alternating features. Procedurally, this involves isolation of all variants tied to an underlying form. An exhaustive list of all the realizations is necessary to establish clearly the non-occurrence of a particular variant and so be able to express its frequency of occurrence (and probability of reoccurrence) as a proportion of all potential occurrences.

The process of ascertaining all the variants can be exceedingly problematic. While there is relatively little difficulty in identification when one looks at gross phenomena like the alternation of language varieties in code-switching, other types of alternants may be more elusive to catalogue. Continuous variables have to be reinterpreted as discrete categories. Vowel quality, for example, varies continuously on at least two dimensions. Sociolinguistic studies have coped with

this continuous variation by assigning a single vowel "score" to speakers based on approximation to discrete points along this continuum. This score is then related to other similarly continuous linguistic and social phenomena which are idealized into discrete categories. "At each stage, the method imposes a structure on the data which may be more rigid than was inherent in the data, and to that extent distorts the results" (Hudson 1980:167). Added to this are the transcription decisions which result in loss of information, and the final question of knowing when all variants have been accounted for.[6]

Once the variants are isolated, the environmental constraints are specified, i.e. the linguistic/social factors which are thought to condition the occurrence of the variants. This may be relatively easy to do with the linguistic (or system internal) constraints on phonological and morphosyntactic features (e.g. negation). However, with syntactic and discourse structures, the relationships among the variants may be more obscure. Showing the social contexts and populations presents further problems, as there is little known about the workings of "extra-linguistic" co-occurrence constraints.

After these basics are accomplished, the analyst begins to make claims about the similarity of variants and posits common underlying forms. The taxonomy is considered complete and ready for quantitative treatment. Variants are coded, counted, and inserted into the variable rule formula. This mathematical formula has evolved from the simple additive equation suggested

by Labov (1969), to the multiplicative model of Cedergren and Sankoff (1974), to the currently preferred logistic (or log-based) model of Sankoff and Labov (1979), which takes the form:

$$\frac{p}{1-p} = \frac{p^{\circ}}{1-p^{\circ}} \times \frac{p_i}{1-p_i} \times \frac{p_j}{1-p_j} \cdots$$

P is the probability that a given variant will occur in a specific context; p° is the average probability over all contexts; and p_i, p_j, etc. are effects produced by various contextual features.

Without going into the mathematics of the variable rule, suffice it to say that once a set of data has been collected and counted, and a statement can be made about the frequency of use of the variants in specific environments, then the analysis moves to determining the amount of influence each environmental feature exerts upon the selection process. Such calculations are made via a form of multivariate analysis utilizing a statistical method known as maximum or log likelihood which measures how well a set of estimated influences correspond to the data set. The significance of the differences or likelihood of two analyses is measured by chi-square tests applied in multiple regression. More simply put, variables are coded as being potentially affected by a number of linguistic and other factors. Then statistically the significant factors are determined and ranked, and a final statement is made about the contribution of specific constraints to the realizations of specific variables.

In brief, then, we have the basic approach of variable rule analysis, a statistically-based, presumably "scientific" way of dealing with variation in speech behavior. However, there are a number of unsatisfying aspects to this approach which must be considered here.

As mentioned earlier, the approach is clearly taxonomic and correlative. Contextual factors corresponding in some way to linguistic features are selected, catalogued, and correlated within grammatical rules without evaluation of the phenomena involved or the criteria for selection. There is no scrutiny of what any correlations reveal about social organization, nor why certain categories are used in the first place and not others. Furthermore, the approach is not dynamic or historical. While it does indeed have the capacity to describe some kinds of language change by positing rule changes, in the attempt to arrive at abstract rules there is a freezing of social process.

Underlying all of this is the question of how theory and science itself are viewed. An intricate means for describing language variation and representing certain changes in the language has been developed, but no truly substantive theory of variation as a social phenomenon. And there seems to be little inclination on the part of quantitative sociolinguists to go beyond replicating Labov's work and results for countless other features and social groups. In their conviction that an empiricist and positivist conception of science is the only "scientific" one and in their acceptance of the conventional

wisdom that ideology has no place in science, these scholars appear to have confused heuristics with theory and side-stepped that which should be the primary focus of their attention: social process and consciousness. As a result, the "socio" part of sociolinguistics is tremendously under-developed and theoretically inadequate, resting on antiquated categories and a conciliatory type of relativity which accepts rather than questions social inequalities and class contrasts (Dittmar 1976).

As we shall see throughout this essay, this is a general problem in language-related and other science and can only be confronted by a radical reassessment of the nature of scientific inquiry.

4.0 The Treatment of Variation in Theoretical Linguistics

Transformational generative linguistics, which is tellingly considered by many to be the only "theoretical" linguistics, represents a dramatic change in linguistic theorizing from the behaviorist/structuralist model which predominated before the publication of Chomsky's **Syntatic Structures** in 1957. While still essentially "structuralist" in that language is seen as a hierarchically designed structure whose description and explanation is achieved via the accumulation of information about constituent elements, the transformational generative (TG) approach does not rely on a stimulus-response model of language acquisition or transmission. Rather, emphasis is placed upon the innate and creative aspects of language as a cognitive entity.

From a TG position, the goal of linguistic analysis is to represent the regularities of language as internalized rules of grammar which are used by speakers to generate utterances, a goal shared in part by sociolinguistics, as we have just seen. However, the TG approach is based upon the premise that knowledge of grammatical rules is completely different from the act of speaking, and, in fact, that speaking represents a deviant and degenerate form of language. Thus, in contrast to sociolinguistics, generative linguistics sees as the object of study the competence or innate human ability to produce and comprehend sentences, rather than the performance or actual production of speech in daily interaction.[7]

This has tremendous implications for the way variation is viewed and treated by the generativists. Chomsky (1968:52-53) describes his position as follows:

> ...to account for the normal use of language we must attribute to the speaker-hearer an intricate system of rules that involve mental operations of a very abstract nature, applying to representations that are quite remote from the physical signal. We observe, furthermore, that knowledge of language is acquired on the basis of degenerate and restricted data and that it is to a large extent independent of intelligence and of wide variations in individual experience.

In other words, the TG grammarian completely pulls away from any treatment of language as it is spoken (considered to be "damaged goods") and thus away from dealing with the variation embodied in it. The variability of cultural and social experience is dismissed as irrelevant to the development of language in the individual. Instead there is vague reference to

"normal" language and a concern with the underlying cognitive system or universally internalized system of rules which makes human language possible. (This is consistent with Chomsky's personal view of linguistics as a branch of cognitive psychology.) Language variation or diversity is merely a phenomenon of surface structures and not the critical deep structure, which remains stable despite variations in human intelligence, learning conditions, ability to use language, vocabulary development, etc.

Chomsky makes very clear his opinion of the study of language as a social phenomenon (1968:87):

> One cannot quarrel with the desire of some investigators to study "the acquisition and maintenance of actual occurrences of verbal behavior." It remains to be demonstrated that this study has something to do with the study of language. As of now, I see no indication that this claim can be substantiated.

While the TG position has softened somewhat over the years and Chomsky himself has acknowledged the contributions of sociolinguistic research to our understanding of the nature of "language," there is still a strong aversion to dealing with language as anything but an abstract, self-contained, a-historical phenomenon.

In order to effect this distancing from language as it is spoken, the generativists "idealize" or abstract language as they experience it. This involves eliminating from their analysis "ungrammatical" utterances or "deviations", which they attribute to memory lapses, inattention, psychological malfunctions, etc. In this respect, the generativists are still very much in the

Bloomfieldian structuralist tradition, which limited linguistic analysis to invariant language samples. The Bloomfieldians avoided universal or abstract explanations and emphasized taxonomies, whereas the Chomskyans posit underlying abstractions. However, the two approaches are based upon a doctrine of linguistic homogeneity.

Chomsky (1968:23) explains the process of idealization in an exceedingly candid and even humble moment:

> Evidently, knowledge of language -- the internalized system of rules -- is only one of the many factors which determine how an utterance will be used or understood in a particular situation. The linguist who is trying to determine what constitutes knowledge of a language -- to construct a correct grammar -- is studying one fundamental factor that is involved in performance, but not the only one. This idealization must be kept in mind when one is considering the problem of confirmation of grammars on the basis of empirical evidence.

In his discussion of Chomsky's work, Lyons (1970:39) defends this idealization yet recognizes some of the problems inherent in such an approach:

> Chomsky is clearly right to claim for linguistics the same right to disregard some of the "raw data" as is accepted as normal in other sciences. There are, of course, serious problems, both practical and theoretical, involved in deciding what constitutes extraneous or linguistically irrelevant factors; and it may well be that, in practice, the "idealization" of the data advocated by Chomsky does tend to introduce some of the normative considerations that marred much of traditional grammar.

Lyons evokes support for Chomsky from the practice of other sciences and suggests that the approach taken toward variability and deviation may have come to linguistics during its search for scientific legitimacy.[8] This possibility warrants consideration

as it reflects the larger question to which we keep returning in this essay -- that of what constitutes science and scientific data.

To summarize, we have seen that as far as so-called theoretical linguistics is concerned, language variation is really not on the agenda at all. If this section has been somewhat sparse, it accurately reflects the amount of attention given to the question by the TG grammarians. It is interesting to note in closing that although the concern of generativists with the innovative, creative, and potentially infinite aspects of language could bring them to the study of variation and diversity, these attributes are seen as aspects of the rule-generating faculty of human beings rather than any socially and attitudinally determined or influenced manipulation of linguistic resources.

This concern with creativity does emerge in the recent work on language acquisition, which is the focus of the next section.

5.0 Variability in Language Acquisition

Up until the 1950's, the prevailing conception of children's language, with the exception of Piaget and Vygotsky, was as a scattered and imperfect collection of mistakes made in the process of imitating adult language. In the 1960's, the field of child language study advanced considerably under the impetus of two hypotheses put forth by generative grammarians: (1) children's language reflects a system rather than a collection of

random errors, and (2) the child, like the linguist, constructs the most economical and general rules possible to account for the input language data. Although considerable variation was evident in children's output, much of this could be attributed to performance factors, i.e. limitations of the young organism in productive speech. The very great emphasis Chomsky (1965) placed on the innate endowments of the child for choosing grammars doubtless diverted attention from crucial ways in which differences in children's internal make-up (preferences or styles) or external environment (including patterns of interaction with older speakers) could influence the acquisition process.

Current trends in first language acquisition research show a reaction against universalist, genetic explanations for language acquisition, which are now regarded as overly deterministic. However, like the research of the 1960's, present investigations tend to retain a strong cognitive interest, although this is tempered by growing evidence of differences in adults' expectations about children's language in different cultures (Cf. Schieffelin 1979). For example, a recent text on children's language (Bloom and Lahey 1978:61) states that it is probable that "...variation in child speech is a function of individual cognitive development in interaction with a variety of different experiences that children have with aspects of the linguistic code..." However, within the variability evidenced by children still lies, for these researchers, an underlying conformity:

> If regularity in variation is not immediately apparent it may be that too few behaviors have been observed, too few children have been observed, or the analysis of behaviors and the indices used to compare behaviors may not be sufficiently sensitive (1978:167).

Recent studies of young children acquiring the same language under similar conditions have pointed to inter and intra-subject variability at all levels of language structure and language use, e.g., phonology (Macken and Ferguson 1981; Leonard, Newhoff and Mesalam 1980), morphology and syntax (Bloom, Lightbown and Hood 1975), semantics of early words (Nelson 1975; Bloom 1973), and in the child's interaction with his or her caretaker (Heath 1982).

The extent of variation uncovered by these studies is somewhat remarkable given the relative homogeneity of the populations studied. Counter to the expectations of Bloom and Lahey, it seems that the more closely one looks at any population of children, the more likely it is that variability will be found.[9]

At present, the long-range implications of variation in language acquisition are far from clear. Studies of children's varied strategies for acquiring aspects of English structure have generally focussed on quite limited, discrete structural components as indices of development. In Bloom and Lahey's terms, these indices are not, in fact, very "sensitive" to variation. Wells (1981:112) points out that "the type of variation that has received most attention so far is the rate at which language is acquired," perhaps because of its easily quantifiable and therefore "scientific" nature. From this

product-oriented interest, some acquisition strategies are viewed as more efficient than others, since they appear to bring along with them a larger vocabulary or a longer mean length of utterance.

The most well-known of these styles are those identified by Katherine Nelson (1973, 1975, 1981) in examining children's earliest vocabularies. She found that some children produced mostly names for objects and people, while others tended to pick up on social expressions (greetings, leave-taking, etc.) and include these in their early vocabulary. In a follow-up study (1975), children who produced more names tended to be more advanced in the rate of language acquisition.

However, subsequent reviews of Nelson's data have often ignored the fact that these styles are a matter of degree. Peters (1983:43) notes that "these extremes are generally considered to define the end-points of continua along which most children are ranged, very few being clearly at one pole or the other." Peters also raises the important possibility that children may use both strategies at different points in the acquisition period or for different conversational contexts. Since analysts have been oriented toward the product rather than the process of acquisition, it can be argued that they have made questionable assumptions about how children go about the task of language learning, one of the more damaging being that children carry out the task in the same way a linguist would. Specifically, Peters believes that child language researchers

have falsely assumed that (1) children use the same units of analysis as do linguists, and (2) development, for the most part, is additive and linear.

Drawing together data from very young children acquiring a number of typologically different languages, Peters shows that the first language units of the child are likely to be much larger than the linguist's, with differences remaining as late as five years of age in matters such as morpheme boundaries. Factors influencing the child's process of extracting adult-size units are the type of speech to which he or she is exposed, community expectations about the child's knowledge and use of language, and those individual factors of neurological and psychological development which the child brings to the task.

Since the language acquisition strategies of the "normal" child are clearly variable across time and across individuals,[10] the exceptionality of learning or language disabled children can be regarded as an extreme of a familiar phenomenon, rather than a typologically different process. Learning disabled children are exceptional "not in having access to totally different strategies, but rather in the relative degree to which they can use the same strategies" (Peters 1983:68). As an example, Peters cites Weeks' (1974) subject Leslie, a cognitively precocious child who nevertheless learned English more slowly than usual. Leslie apparently "had limited access to certain strategies while making fuller use of others" -- a kind of

"compensation" by which she eventually gained control of the linguistic code.

To summarize, major limitations of variability in child language data seem to have come about through an unwitting conspiracy among methods of conceptualization, data collection, and analysis which systematically excluded certain sorts of relevant information.

First of all, the majority of studies have been concerned with a particular population of children, sampled cross-sectionally. Thus, major social and temporal variation has been left out.

Secondly, in sampling children's language, specific studies have focussed on only one discrete aspect of language at a time, obscuring the "synergistic" nature of interaction among different strategies or different components of the child's developing system. In addition, coding procedures have generally excluded unintelligible or seemingly stereotypic utterances, thus leaving out many of those utterances which would provide insight into a holistic or gestalt production strategy such as what Peters has suggested young children may use.

Further omissions have resulted from the way in which subjects are chosen for study and speech is elicited and recorded. A great many studies have excluded very young children, since they do not often cooperate well in experimental settings. Yet these children may be those for whom variability is most apparent. Also, in sampling caretaker-child speech, the

setting and instructions have often been such as to encourage picture naming or other types of elicitation interactions which are geared toward a "referential" child style (Peters 1983).

Perhaps even more critical is the lack of research addressing the reality that children are agents, or in the process of becoming agents. They develop "strategies," not to acquire a linguistic system, but to participate actively in their social positioning. The predominant trend within acquisition research is to see children as learning machines without considering how issues of power, resistance, and accommodation come into play as the child learns. The variability in language acquisition which has been so well-documented is never related to the social needs and struggles of the child as s/he attempts to survive in and understand the adult world.

In the next section, we will examine the discipline which is perhaps most directly involved with such questions of variability of human social practice -- anthropology via ethnographic inquiry.

6.0 Ethnographic Perspectives on Variability

Anthropologists have always been concerned with questions of diversity and variation. One critical goal of the ethnographic approach, which is the backbone of anthropology, is to delve deeply into everyday human life in order to reveal the rich detail specific to each group, and by probing this diversity,

learn something about the possibilities available to the species as a whole.

The ethnographer encounters variability at every step of the fieldwork experience. There is the variability that arises from certain biophysical properties which are defined socially as counting for differences among people (e.g. sex, age, personality, ethnic or racial group, etc.). There is the variation which is the result of differing human activities, and that which is produced by personal choices among the cultural options provided by social groups. Variability is also seen in the numerous aspects of self that informants reveal under changing situations or with different fieldworkers, as well as in the contrast between reports of behavior and actual behavior.

The ethnographer's task is very difficult given the wealth of experiential data confronting him or her. There must necessarily be some kind of abstraction from all of this richness, and yet the richness appears to be one of the unique contributions of ethnography to the study of social life. This conflict of needs is clearly visible when one examines theoretical developments over time within the field of ethnography.

In his introduction to **Reinventing Anthropology**, Dell Hymes (1969:12-13) points out the dangers of focusing exclusively on the general (common) or on the specific (differential):

> Concern with only what is common, with similarities, with universals, may constitute a philosophical anthropology, a psychology or biology, characterizing man as an abstract being. Concern with only the

> general contour of development, general laws, or a single level of explanation, may constitute a sociology or history of a certain kind. Concern with only what is different may yield precise ethnography and ethnology. Neither kind of concern alone can constitute the anthropology of the tradition intended here. And at their worst, the one-sidedness of the one may lead to the imposition of a **priori** notions, distortion, and the rationalization of injustice; that of the other may never rise above exoticism or may devolve into sterile empiricism.

The conflict between the general and the specific, sometimes referred to as "macro vs. micro", can be seen throughout ethnographic literature. The ethnographic approach attempts to avoid this conflict by emphasizing holistic views of culture.[11] In other words, an activity is seen in its ecological interrelationship with other behavior within a functional system. Particular events are interpreted as integral units of "cultural wholes" (Kroeber 1957) with cohesive internal structure which are additionally related to one another in larger systems.

Holistic views are theoretically salutary in that they foster a concern with relations of behaviors and struggle against the atomization of knowledge so common within modern scientific practice. However, this perspective has also resulted in a tendency to over-emphasize homogeneity within groups and focus excessively upon order and coherence to the neglect of exceptions and differences. Internal variation was until recently "either simply dismissed or artificially worked into the scheme as indices of change, diffusion, survival, innovation, dysfunction, abnormality, cultural disintegration, opportunities for the

exercise of social control and the like. The only important variations were variations between cultures" (Tyler 1969:3).

This failure to deal adequately with variation as produced and manipulated by the individuals who together actively constitute social groups has limited the explanatory power of ethnography. As Agar (1980:79-80) points out:

> Variation like that is only a threat to a social scientist committed to a monolithic portrait of group life. Unfortunately, the quest for the "normative order", deeply ingrained in many social science traditions, has sometimes blinded us to the many important lessons for the ethnographer when confronted with variability as well as uniformity.

In order to clarify the different stances taken by ethnographers with respect to intra and inter-group variability and continuity, we will briefly review the recent history of the field. As our over-riding concern is with linguistic variation, we will focus upon that anthropological work most directly related to language.

6.1 The Treatment of Linguistic and Cultural Variability Within Anthropology

As we have already indicated, anthropologists have vacillated between documentation of the cultural detail of specific social groups and delineation of universal patterns common to all groups. Within the first broad category falls the work of Boas and the historical particularists,[12] as well as the configurationalist work of Ruth Benedict and Margaret Mead[13] and Kroeber's attempt to derive trait element lists for particular groups.[14] Within the second category falls the mentalist-oriented

research of the English social anthropologists like Radcliffe-Brown, Firth, and Malinowski[15] and the French structuralists like Levi-Strauss.[16]

We cannot go into the very important work of these scholars because, with the exception of Levi-Strauss, they were not concerned with language **per se**. However, it was upon the foundation of these efforts that ethnoscience and the "new" ethnography[17] were built, as well as their modern off-shoots, all of which have emphasized language.

Like structuralism, much of the impetus for the development of ethnoscience came from linguistics, which during the 1950's was a thriving social science with seemingly impeccable technologies for analysis. The anthropological work inspired by the theoretical controversies beginning between the behaviorist and mentalist conceptions of language was characterized by attempts to formulate rules by which cultural categories could be empirically ordered. Goodenough's componential analysis is one such attempt, as are the kinesic analysis of Birdwhistell and the kinship analysis of Lounsbury.

A major problem of the ethnoscientific or ethnosemantic research is that variation is largely ignored or seen as irrelevant. The ethnoscientist searches for immutable categories which presumably represent the underlying mental apparatus of the entire culture. There is little consideration of the variable exposure to cultural phenomena and access to technical vocabulary which is the case in many groups, particularly in complex and

hierarchically-ordered societies. There is also a tendency to lean upon evidence provided by single informants.

One area of ethnoscience which developed during the 1960's, typical of much of the work currently done within anthropological linguistics, is the ethnography of speaking or communication. The focus of study in this new application of ethnography (first articulated by Hymes in 1962 and developed further in 1964, 1967, 1972) is the speech event. The approach is similar to the componential paradigm which characterized other ethnoscientific efforts in that it is concerned with the structure of relations among the various components of speech events -- the setting, participants, ends, acts, key, instrumentalities, norms, and genre. The ethnographer's task is to test, enlarge, and revise this grid based upon the emic perception of the speakers.

Studies in the ethnography of speaking have examined such events as contrapuntal conversations (Reisman 1974), greetings (Irvine 1974, Salmond 1974), narratives (Kirshenblatt-Gimblett 1974, Darnell 1974), male and female speech (Keenan 1974), and even silence (Basso 1972). The overall goal of the field has been to continue the proliferation of such studies so as to permit cross-cultural comparisons of the diversity which exists in the ways speech is manipulated and the uses to which it is put in different cultures. This goal has only partially been realized. But an even more important failing has been the putting aside in many cases of holistic thinking in the pursuit of greater detail in description. It is furthermore the

exceptional ethnography of speaking that does not fall into the trap of treating language apart from society, and that does seek deeply within social conditions for explanations of linguistic variation and its significance.[18]

This has also been the case with the micro-ethnographic studies of interactional events which utilize linguistic and "paralinguistic" analysis of video-taped behavior to address very small units of behavioral patterns in specific social settings. The work in this area has focussed on the form and organization of social exchanges, the sociocultural competence underlying behavior, and the potential and real cultural conflicts existing among participants. The great bulk of the research has involved school settings (cf. Bremme 1976, Shultz 1976, Erickson 1975, McDermott and Gospodinoff 1979, Michaels 1981, Au and Jordan 1981, Mohatt and Erickson 1981), and a good percentage of these studies have involved children of ethnically or racially different backgrounds. As a result, the issue of linguistic and cultural diversity and variation has come to the forefront.

However, few micro-ethnographies attempt to relate the careful, detailed analysis of micro-structures to the larger environment that shapes them. Indeed, the very distinction between "micro" and "macro" structures is taken for granted and unanalyzed in terms of its theoretical and social implications (see Bennett and Pedraza's papers in this volume for further consideration of this problem). Few micro-ethnographers leave the school or institutional setting to examine the communities

that house the setting and the participants in the inter-actions under study. There is clearly a severe lack of social theory behind the ever more sophisticated structural analysis.

Most recently have come certain challenges to the traditional conceptions of ethnography and anthropological theory, threads of which run through the other schools of anthropology reviewed here, in particular the ethno-scientific and the micro-ethnographic. Among these are the symbolic or interpretive and the neo-marxist analyses.

Symbolic or interpretive anthropology conceives culture as a system of symbols or a web of significances. Every artifact or event represents a coming together of significances reflective of the collective mental life of the people. The anthropologist is responsible for deciphering the meaning of these symbols. Empirical access to the symbols is gained through an examination of cultural events and the way they are spoken about. The interpretation of what happens is rooted in the context of the event -- how, where, when, why it took place, what people say and do about it, and how it relates to other events. As Geertz (1973:19) put it: "anthropological interpretation consists in tracing the curve of a social discourse, fixing it into an inspectable form." In other words, the interpretation captures what is "said" (meaning) in forms which can be perused long after the event is past and forgotten. Cultural phenomena examined in this way by interpretive researchers have included law, politics,

art, common sense, the "self," etc. (cf. Geertz 1983, Wagner 1981).

The symbolic or interpretive anthropologists have been concerned with variation in terms of the question of representativeness and scientific verification of interpretations. Geertz (1973:22-23) correctly placed variation at the heart of the anthropological problem:

> The great natural variation of cultural forms is, of course, not only anthropology's great (and wasting) resource, but the ground of its deepest theoretical dilemma; how is such variation to be squared with the biological unity of the human species? But it is not, even metaphorically, experimental variation, because the context in which it occurs varies along with it, and it is not possible (though there are those who try) to isolate the y's from the x's to write a proper function.

Geertz does not see any other way of dealing with the variation except through the standard positivistic/empirical approach of laboratory controls, which he appropriately rejects as untenable in social science, and he leaves it at that. In general, the symbolic anthropologists have not developed a theory of cultural interpretation which confronts variation squarely. They see generalization within cases as necessary for the positing of symbolic meaning, but have not been successful in generalizing their findings across cases or cultures. In addition, they do not relate symbolic meaning to any political or economic forces.

Marxist and neo-marxist approaches to anthropology have focused primarily upon such broader issues, in particular the effects of capitalism on social and cultural life in colonized nations and capitalist centers, with some recent work on the

structure and development of pre-capitalist societies (see Bloch 1975 and Seddon 1978). This concentration on economics as the determining element in human history is a misinterpretation of Marx, who actually stressed that many other elements were involved and could override the economic in their influence at times. As Lenin (1960:161-2) pointed out, Marx and Engels "were the first socialists to raise the need to analyze all aspects of social life and not only the economic."

Bloch's (1983) account of the relationship between anthropology and Marxism goes back to Marx and Engels' reliance on Lewis Henry Morgan's fieldwork and theory in their development of an evolutionary approach to culture formation. Marx was genuinely concerned with social variation, since this variability illustrated different human responses to changing economic, technological, and social conditions, and helped him prove that capitalism was not the only way to organize society.

But Marx was most interested in proposing general laws of social development which necessitated temporarily putting aside much of the variation he acknowledged. This concern with evolution and general laws was reduced by many of his followers to a conception of unilineal evolutionism in which societies marched inexorably through fixed stages toward communism. Although Lenin opposed this line of thinking because of the complex cultural variation he witnessed in his dealings with the Russian peasantry, the controversy between unilineal and

multilineal explanations continued for several decades in the Soviet Union and elsewhere among Marxists.

In the 1950's and '60's, the multilineal schemata began to win out, and most present-day Soviet scholars believe that although general principles may govern cultural evolution, each case is distinct. Different evolutionary lines are followed in different locales, and not all societies pass through the same stages. While there is a strong effort to establish the general unitary tendencies, there is also a willingness to consider the variability which exists, particularly in the examination of archaic or "primitive" groups traditionally viewed as classless and homogeneous (see Seddon 1978).

Leacock (1982) examines four types of Marxist or Marxist-inspired studies which have developed outside of socialist countries since the 1960's -- Third World and radical critiques of anthropology, feminist research, French Marxist anthropology, and the (non-Marxist) "cultural materialism" of Marvin Harris. Because of the political climate of most capitalist countries, Marxist anthropology has only just begun to develop there. Different interpretations and reinterpretations of Marxism have been put forward. (We cannot discuss these here, but see Kahn 1974, Diamond 1979, and Wolf 1982).

The available literature on Marxist anthropology, both in socialist and non-socialist countries, indicates relatively little anthropological work on language variability. The reason for this is not entirely clear, since as can be seen in Arutynov

(1980), there is also widespread recognition that language is critical in ethno-differentiation and in formation and preservation of ethnic identity. However, there appears to be no explicit statement of theory about language variability.

This may be due (at least in the Soviet Union and China) to the preoccupation with practical problems like national unification, multilingualism, development of written languages, etc. It may also be that language variability is seen as falling within the realm of sociology or social linguistics. Indeed the work of sociolinguists from Germany like Dittmar (1976) and the Soviet Union like Avrorin (1977), indicates an appreciation of the problematic.

Despite this apparent lack, Marxist anthropology does offer a very important tool in developing a social theory of language variability -- and that is its approach to understanding human social organization and historical development via dialectical and historical materialism. This approach will be discussed more fully later in this paper.

7.0 Central Issues for a Social Theory of Language Variability

Our review of the treatment of language variation within a number of language-related disciplines has revealed a kind of ambivalence toward the phenomenon. On the one hand, the existence of variation at all levels of language structure and its relation to social structure has been fairly well documented. The development of tape recorders, spectrographs, computers,

video recorders, etc., has permitted detection of fine-grained variation and graphic comparison of different speakers' utterances. Variable rule analysis has made possible the mathematical depiction of the variation and its probabilities of occurrence. Sampling and testing techniques have become very refined. In all, there has been a good deal of technological advance with respect to the quantitative treatment of the variation.

On the other hand, most linguistic research proceeds on the implicit assumption that this variation does not really matter and that looking at language as a homogeneous entity divorced from social practice is productive, convenient, and theoretically unproblematical. Even among those who focus upon variation and whose professional and daily practice tells them that language is nothing if not a social construction, there exists a strong tendency to view language in opposition to social reality, an opposition that they describe, and claim to explain, via a number of correlations between the two domains of human enterprise.

However, this dualism of language and society, more than anything else, has kept linguistics from developing real understanding of language variation: why it exists, its function in language change and role in social differentiation. Only by casting aside this dualism and seeing language as an integral part of society, created and used by humans in their social relations, can the scientific study of language move beyond

technological refinement to a truly adequate theory based in practice and capable of guiding that practice.

The kind of social theory of language variation we envision would be based upon a unitary analysis of language and society. It would, by necessity, be dialectical, materialist, and historical in order to deal productively and concretely with the relations among the forms, the constant struggles among them, and the development of new forms according to social needs. It would also have to be flexible enough to respond to the shifting nature of social reality. And most important, it would have to be "self-aware" in that it would have to recognize its own social nature and its vulnerability to social process.

By way of illustrating the kinds of issues with which this theory would be concerned in trying to account for language variation, we will examine three critical areas which have been neglected by traditional linguistic analyses:

1. the role of the scientific paradigm or ideology in determining the way language variation is treated

2. the social creation of categories on the basis of which language variation is identified

3. the social significance or meaning manifested in language variation.

7.1 Science and Ideology

The general perception of science, especially by lay people is as "an exact and impartial analysis of the facts" (Conant 1951:22). The assumption that science is objective and

ideology-free is so accepted in our society that many researchers retreat behind it. On the one hand, they refuse to consider certain phenomena to fall within the realm of science because they are ideologically "tainted" and, on the other hand, fail to see the ideological frame which encloses their own scientific practice.[19] This conception of science comes directly out of the positivist and empiricist schools of philosophy which were current during the 19th century when scientific discovery and industrialization were advancing hand in hand. To understand better the way variation has been dealt with, it is important to examine the positivist/empiricist tradition and its implications for the world-view and practice of both natural and social scientists.

7.1.1 Positivist/Empiricist Philosophy

Positivism was first formulated by August Comte, a 19th century French philosopher and sociologist, as a solution to the controversy waged between idealists and materialists.[20] According to Comte's **Course of Positive Philosophy** (1830-42), this approach is above both idealism and materialism and represents "science." Positivism maintains that human understanding is limited and that it is useless to try and comprehend the "essence" of things. What understanding we are capable of must come solely from "experience," which is defined as that which is felt or observed by the senses.

Borrowing heavily from Condorcet and Saint-Simon, Comte described human social and intellectual evolution as having passed through a theological and metaphysical stage, and saw a new stage -- the positive or scientific -- as characterizing the developments of his day and the future.[21] "Positive" to Comte meant an orientation to the actual, certain, exact, useful, and relational, all of which ostensibly characterize that knowledge which is obtained via systematic observation.

Positivism, in the Comtean sense, did not acquire much of a following. However, positivistic thinking, as reelaborated by Durkheim and passed on to the logical positivists of the Vienna Circle in the early 20th century, survives today and forms the philosophical base of current scientific practice. Giddens (1978) describes the general positivist paradigm as including the following:

1. Belief in phenomenalism, i.e. reality = sense impressions
2. Aversion to metaphysics
3. View that philosophy is apart from and foreign to science
4. Belief in duality of fact and value, i.e. science/ideology
5. Belief in unity of natural and social sciences[22]

In addition, positivism denies causal necessity, the existence of objective reality, and the possibility of a science that can do more than describe sensation. Although positivism appears to be a materialist stance, by denying objective reality and clinging

to the idea that there are unknowables, it leaves open the door to faith and theology, in other words, to idealism.

These positivist notions are closely allied to empiricist thinking also current during the same period. Empiricism, particularly the materialist variety of Hobbes and Locke, developed in opposition to the rationalist, although religious, views of philosophers like Descartes, who belittled experience and observation as misleading and who contended that knowledge comes only through reasoning. Empiricism maintains that reason cannot be trusted and that the only knowledge that exists is that which we directly perceive via our senses.[23] Idealist empiricism, typified by the work of the agnostic Hume, and the empirio-criticism of Mach and Avenarius, concurred with Comte in the limitation of "experience" to the sensations or impressions we get about existence, without recognition of the concrete material base of these sensations. Following this line of logic, Mach asserted that physics is the study of the laws and connections of sensations, rather than of matter or forces.

Lenin made very explicit the severe drawbacks of this kind of thinking in his **Materialism and Empirio-Criticism** (1909). First of all, by giving primacy to sensations over matter and reducing "thing" to "mental symbol for a complex of sensations," the positivist/empiricist philosophies reiterate Bishop Berkeley's subjective idealism of 200 years previous which led him only to solipsism, or the position that since everything is the product of my mind, I am the only thing that exists. As

Lenin pointed out, both scientific inquiry and common sense recognize sensation as one of the properties of matter -- "the transformation of external excitation into the fact of consciousness"(51). In other words, practice itself indicates that things do exist independent of our thoughts or sensations, and lay people and scientists both organize their lives around this fact. Secondly, the denial of objective reality of matter reflected by our sensations goes contrary to scientific discovery and leads only to agnosticism and skepticism. Third, the denial of the role of human reason in the attainment of knowledge reduces **homo sapiens** to a mere receptor rather than a producer of understanding and is an inherently reactionary position.

Habermas (1971) takes this last point even further and shows that a major problem with positivist/empiricist thinking lies in its claim to "objectivism," which gives the illusion of an independent world of facts and laws and conceals the **a priori** constitution of facts. "Facts" are social constructs and do not exist **per se** until humans designate them. (This will be taken up further in the next section of this paper.)

In the U.S., the positivist/empiricist paradigm was further complemented by pragmatism, as exemplified by the thinking of Charles Pierce, William James, and John Dewey. Pragmatism, the philosophical offspring of capitalism, denies that there is any real "truth" or knowledge to be found outside of the individual experience. Science is valuable not as a reflection or explanation of any objective reality but rather as a utilitarian

instrument for anticipating future experience and achieving certain ends.[24] This attitude replaces "truth" with "usefulness," understood in terms of individual experience or consciousness, not social practice on the general human scale, and permits the promulgation of different and even contradictory explanations of the universe, if these are what individuals experience as true in their lives. Under this kind of pluralism, individuals can profess those beliefs which are most useful to them.[25]

It is thus a blend of positivist, empiricist, and pragmatist notions that, as Habermas puts it, has held a "cognitive monopoly" on much of non-Marxist Western scientific thought. The predominant tendency within science today can be characterized as a generalized skepticism with respect to the possibility of finding out why things happen, a disengagement from social issues, and an overriding concern with technical questions. The emphasis on the accumulation of "facts" and postulation of theories to be verified and granted the status of "laws" has created an intellectual atmosphere in which it is very easy for the scientist (both natural and social) to forget the larger social/ideological picture. Scientific inquiry has become increasingly specialized and the focus of work made smaller and smaller, all in the search for ever more detailed descriptions of ever more disconnected phenomena.[26]

The development of linguistics is a case in point. From the broad philological beginnings of the discipline in which language

was seen as part of an overall social drama and unfolding of human potential, we have now reached the point where many linguists explicitly or implicitly view language as separate from society; connected through certain correlations it is true, but constituting a game all in itself.

Yet this is not the only way to view science nor the world. There does exist an alternative, one that is a particularly good candidate for a social theory of language variation because of its focus upon social process and change.

7.1.2 Dialectical and Historical Materialism

Dialectical materialism was created by Marx and Engels during the second half of the 19th century and further developed in the beginning of this century by Lenin and other Marxists. It is concerned with the general laws of evolution of nature, society, and thought. It approaches phenomena dialectically, i.e., in terms of their relation (or opposition) to other phenomena within a constant process of development and change. It is materialist in that it sees matter as primary and thought as secondary.

Dialectical materialism maintains that nothing is unknowable; it is merely not known to us at this time. Unlike positivist/empiricist thinking, it sees the scientific method as a way of learning about the nature of things and achieving greater mastery over the world. Dialectical materialism is empirical yet not mechanical. It recognizes the relationship

between our reason and the material world and considers sense experience, inference, and judgement as inseparable from concrete reality, productive processes, and social life.

Historical materialism is the application of dialectical material foundation of human life and the social relation of production as the base on which rests the ideological superstructure (the customs, politics, religion, ethics, philosophy, esthetics, etc.). As Marx said, "It is not the consciousness of men that determines their existence, but, on the contrary, their social existence determines their consciousness" (**Critique of Political Economy**, 1904:11). Thus ideas have their roots in material conditions and are significant to the extent that they react upon these conditions and change them.

Dialectical and historical materialism are not just concerned with how things are but how they are produced, superseded, and further developed by humans. In other words, they are more concerned with understanding the facilitating change than with merely interpreting it. More specifically, they are concerned with kinds of understanding that help the development and political strategies, and for this reason are of particular interest to us in our policy work.

If we take a dialectical materialist approach to language, we see that linguistic variation is a manifestation of the contradictions experienced by humans in their daily lives. The material circumstances or interests of individuals lead to differences in language patterns and these linguistic differences

are then utilized to perpetuate social differences in a circular, mutually supportive chain. Any variation or change in language (no matter how system-internal it appears) therefore stems ultimately from changes in the social activities and relations of people (of which language is a part) and in turn affects the nature of future activities and relations.

What needs to be investigated then is the nature of this circular process and the role of human agency in it. Why do individuals' experience of the real world and their expression of that world through language vary in specific ways? Can this be altered in any way? More specifically if social differences cease to be operative, will language variation disappear as well? We do not have the answers to these questions nor (to our knowledge) have they been adequately accounted for by Marxist linguists at this time. Yet the dialectical materialist approach appears to offer more than the positivist/empiricist approach in terms of possible solutions.

7.1.3. Summary

As we have seen in this section, the scientific paradigm crucially alters the kinds of questions one asks and the kinds of evidence that are brought to bear upon them. Beyond the selection of a particular paradigm for research, the importance of this issue lies in the demonstration that science is not impervious to social reality and changes in thinking despite the common misperception that science represents ultimate truth.

7.2 The Social Creation and Function of Categories

Human communication or social interaction would be impossible without the utilization of categories. Categories allow us to speak of things and their properties, of processes, structures, and elements, qualitative states and quantitative relations, number and measure, and individual and collective entities. They are generalizations out of concrete experience and afford us a way of handling that experience.

Categories serve as a means of registering the commonalities and unity perceived among phenomena for given purposes and provide a kind of shorthand or lingua franca for discussing and acting upon issues about which there are certain agreed-upon assumptions and understandings. This is particularly true when it comes to technical or theoretical terms. However, the manipulation of categories is not confined to philosophical or learned discourse.

Categories present an interesting philosophical problem which can be seen in everyday interactional settings -- that of their relation to significances or meaning and to ideology. While reflection may bring about an awareness of the arbitrary nature of categories and their function as symbols for a package of significances and distinctions (each appropriate to a given circumstance), daily practice tends toward an unquestioning acceptance of categories as having some precise, universal, a-historical meanings. This fallacy leads to numerous practical and theoretical problems. Along with the unquestioning attitude

comes a denial of the ideological nature of categories, especially when scientific terminology is involved. This brings us back to the issues discussed in the last section.

In dealing with linguistic and cultural variation, one is obliged to confront at some level the nature of categories because it is via these categories that variation is identified as such. Unless there has been some social agreement on norms, there can be no assessment of phenomena as varying from these norms. And therein lies the crux of the matter. How are these norms established and by whom and for what purposes?

Positivistic thinking assumes that the object of study consists of positively-given facts (observable, empirical data), with analysis being the isolation and bringing out of specific characteristics via controlled observation and measurement. However, these "positively-given" facts do not actually come to us directly -- but are mediated through fixed, unanalyzed categories which structure our experience, often without us knowing it. These categories are produced by humans just like the societal relations which they express, and like them they are prone to change and historical conditions. They must be analyzed in terms of their historical roots, their relation to present material conditions, their change, and the effect of developments in our thinking on their change.

The positivist/empiricists utilize categories primarily to institute classifications or taxonomies, which are derived from certain correlations found to obtain among phenomena. However,

this approach is based upon atomistic and static views of reality and requires that the categories be seen as wholly abstract, relatively decontextualized, and independent in order to establish extrinsic relations of inter-correlations among disparate phenomena.

Categories are vital to the organization of social life. As Sapir (1921) and Vygotsky (1934) pointed out, communication requires the generalization of individual consciousness in units agreed upon by society. Phenomena occur locally and transiently. We understand their significance only when we view them in the context of other phenomena which we determine socially to be similar or distinct from the first. In order to work with the phenomena (and talk and think about them), we collectively disregard certain differences which we agree are not important to our goals of the moment. We create the illusion by the use of a category that the phenomena possess an essential character or common quality which we will utilize as representative of all the concrete occurrences.

Therefore categories are social artifices, heuristics that we construct to help us carry out our social life and relations and our science. They do not correspond directly to reality precisely because reality is so variable and diverse that it would be intellectually and socially uneconomical to process each and every occurrence as unrelated to any others. In other words, we create categories in order to deal productively with the teeming variety of life.

However, categories are more than just the pigeon-holes for data that a positivist/empiricist viewpoint would have us believe.

> Like the abstractions on which they are based, categories are products of society; they both express social conditions and through their influence on thought and action help to reproduce them (Ollman 1979:109).

The categories we create and the way we manipulate them are manifestations of our interests and concerns, our social position, our purposes in a given interaction, etc. They also tend to express the dominant ideology of the society.

One of the biggest problems with categories is that they become reified and treated as if they were the reality they represent. They take on a life of their own as their symbolic nature and social creation is forgotten. One result of this within science is that category generation becomes confused with knowledge and taxonomies become replacements for theory building. Another result is that the categories become so fixed that they limit the way we see the world and cause us to ignore crucial relations, distinctions, and changes.[27]

This is clearly a problem within the natural sciences. To paraphrase Engels in **Anti-Duhring**, there are no irreconcilable contradictions and no forcibly fixed boundary lines and distinctions in nature. If we seem to run up against them, it is because we have introduced their rigidity and absoluteness. Sometimes increased information about the world allows us to see our rigidity and adjust it. For example, light and electricity

were categorized as separate phenomena until their relation as manifestations of the same movement of charged particles was clarified. The natural sciences have responded differently at different times in history to efforts to alter categories (witness the struggles around geo- vs. helio-centric astronomy, theories of evolution and origin of species; Newtonian vs. relativistic physics, etc.). Generally it is felt that such changes in categories and world views are the result of empirical data which falsifies preceding theories and necessitates theoretical restructuring. This, of course, neglects the social milieu in which science is practiced and the effect which dominant social ideologies have upon what is acceptable within science.

Within the social sciences, the issue of categories is even more critical, for unlike the natural sciences, the social sciences deal with pre-interpreted categories already formed by and in meaningful conduct of human subjects (Habermas 1971). For example, anthropologists discuss "family," "kinship," and "economy," categories which they rarely analyze in terms of their relation to general use within the society or to that of other societies. The anthropologists are caught up in their fixed categories to such an extent that they end up assuming a homogeneity which does not really exist. As Barnett and Silverman (1979) comment, there are many structural and functional differences among the referents in our own society for the above categories and meaningful comparison with other

cultures is extremely difficult. What actually happens in many cases is that alternate approaches to culture or theories of anthropology are compared rather than the people or cultures themselves.

The ideological nature of categories in the social sciences can most clearly be seen in the development of stereotypes. Stereotypes are particularly rigid categories which are used to maintain social distinctions and limit people's capacities to see their points of common struggle. Stereotypes deny the variable nature of social reality. Even more insidious is their grip on people's attitudes. While stereotypes can be scientifically disproved through quantitative analysis, they are not easily shaken from people's consciousness and belief systems.

Linguistic phenomena are often utilized in the production of class, ethnic, or racial stereotypes. We tend to over-generalize and perceive the occurrence or non-occurrence of particular features or processes in categorical ways -- e.g. they constantly code-switch, or never use the subjunctive, or chop off all their words, etc. Clearly the linguistic phenomena are not what is under contention, but rather the peoplehood, or rights, of the group in question. In a class society, it is particularly useful to keep people divided at as many points as possible. Language, being so intimately tied up with thought and identity, is an especially effective tool in convincing people that their differences are more salient than their similarities. The constant arguing over the supposed superiority or inferiority of

regional and class dialects and varieties, as well as the debates concerning the dangers and deficits of multilingualism are testimony to this.

The important thing in such a situation is to analyze critically the rationales behind the linguistic stereotypes and whose purposes they are serving. Along with this must come a realistic assessment of what those in power in our society have determined as permissible ways to succeed in this society, i.e. what linguistic varieties are granted legitimacy by the social gate-keepers and power-brokers. Only with this information can a response be crafted, whether it is to strive for increased understanding so that language variation is not generated and manipulated in this way, or to change the power base of the society so that no one will be in the position to divide the masses of people through language, or to equip the people with the necessary tools for playing the power game while preparing to undermine it.

7.2.1 Summary

This section has attempted to illustrate the importance of examining the social creation of categories and their relation to language variation. We have shown how language as a social process requires the utilization of categories and also how the use of these categories is subject to certain pitfalls, including the reification of the categories and the subsequent ignoring of their social constitution and ideological base. In closing, we

would like to emphasize that the predominant trend has been to talk about categories as if they only needed to be described, when the real issue is to discover how they are made and for what purposes.

7.3 Language Variability and Social Significance

Given that variability is the norm for human culture and language, it is necessary to consider what of all the variation available for study is most significant. Clearly, in order to advance science, some variation has to be put aside or we would become bogged down in the infinite gradations of differences with no generalizable statements at all, i.e. no science at all. The natural sciences routinely exclude certain variations and account for this by expressing the outcomes of experiments, measurements, and observations in terms of the particular conditions under which action was carried out, along with a statistical assessment of the range of possible error or variability. Variability is only significant if it affects the overall measurements beyond the level considered tolerable.

When attempting to develop a theory that will deal with language variability as a social phenomenon, we are less interested in significance as a statistical notion. Our concern is rather with the people who live the variation and the larger social milieu in which they, as well as the researchers, are situated. We want to know what makes a social difference, what affects the way in which humans constitute themselves and the

opportunities for living their lives fully, and what is recognizable, important, and salient.

It is a difficult task to determine social significance, as this is dependent on the nature and needs of the group(s) concerned, and these may vary considerable over time, especially as their material world changes. We must remember that just as humans create the variability in the language, so too they create the significance which this variability manifests. Therefore there can never be a final statement that: variability X = significance Y.

It is not clear how social significance is granted to particular variants or why certain variants are utilized to communicate significance and others are not. In Labov's work (1966, 1972a, 1972b) there is a suggestion that it is the individual who is responsible for the selection of variants. Labov depicts speakers alternately as romantic figures bucking social systems or change, or ruthless climbers exploiting linguistic variance for social benefit. Similarly, Goffman (1967) views personal motives and needs of individuals involved in the presentation of self as determining the choices among variants. In neither of these two lines of study is there any real analysis of the social forces which constitute the individuals; rather individuals are idealized and isolated from society.

A dialectical materialist approach would have to view the individual as a socially constituted, active agent living out

Optimized by www.ImageOptimizer.net

social contradictions and shaping and being shaped by the world. Individuals have particular life histories which distinguish them. However, they are members of social groups and act within the boundaries for behavior established by those groups. This behavior (and the groups themselves) change constantly as do their needs to register certain things as important or meaningful in their relations.

This calls for an assessment of the social needs and goals of the group and the means at their disposal for fulfilling these. Such an assessment is rarely, if ever, made in traditional linguistic studies. Linguists usually feel that this falls within the purview of political economy or sociology. However, the payoff would appear to be great. For example, if we knew something about the group's priorities for cultural and economic survival, we would gain some insight into what is important and meaningful to its people and what sorts of categories will be significant to them.[28] We would be able to understand better what is valued and what counts. Knowing that language variation is often utilized as demarcator of categories of concern, we could then focus upon how it bears the weight of symbolically transmitting the preoccupations and distinctions of the group. Knowing, too, that linguistic demarcators serve to reinforce distinctions important to the culture as a whole, we can direct our attention to the mechanisms by which ideological distinctions penetrate all aspects of social life. The danger to

avoid would be any simplistic or deterministic explanation of significance as solely rooted in economic conditions.

In attempting to deal with the significance of the variation or the significance communicated by it, we would have to keep in mind that the social meaning precedes the linguistic forms -- and that the forms are merely an arbitrary, though effective, way of carrying the meaning. To put it more concretely, if there are, let us say, sexual or gender distinctions in speech (e.g. pronouns of address, code selection, lexical choice, etc.), it is because those distinctions are important to the social agenda of the group, perhaps to its maintenance, and the language variation has been utilized to further emphasize this. In other words, the language forms can tell us a great deal about what is significant to a people, but that significance is derived from broader cultural concerns.[29]

Studies of narration (cf. Rosaldo 1982) have demonstrated that what people choose to tell stories about reveals a lot about what is important to them. In addition, how those stories are told, what is foregrounded, backgrounded, omitted, referred to obliquely, assumed, etc. can also point to critical features of the culture. In order to interpret these narratives, we need to have a sense of the cultural norms, expectations, and values of the narrators, and in turn the narratives teach us more about the nature of the culture. (This is taken up at greater length in the work on narratives presented later in this volume.)

7.3.1 Summary

In sum, we have tried to indicate the necessity of sorting out what language variation is meaningful in order to avoid being dragged down by the multiplicity of forms and diversity of patterns. This is only possible with a careful assessment of the economic and ideological bases of the speakers and of the mechanisms by which meaningful distinctions are borne by the linguistic forms.

8.0 Conclusion

This paper has sought to demonstrate that a social theory of language variation is necessary and that the approaches now existing are not social nor are they adequate to understand the phenomenon. We have done this by reviewing critically the current treatment of language variability within language-related disciplines and then focusing on several themes which have not been adequately considered but which we feel are vital to the creation of a social theory of language variability, i.e. the effect of scientific paradigms or ideologies, the social creation and manipulation of categories, and the manifestation of social significance or meaning through variable linguistic forms.

Our conviction is that we need to do more than describe or even explain variation just because it is there. Rather we contend that such knowledge is useful for improving the lives of people, for changing social conditions so that people can live out their full potentials.

While we cannot spell out an exact agenda for this social theory of variation, we have concluded that:

1. the dualism of language and society is non-productive and invalid and has halted the theoretical development of language study;

2. a dialectical and historical materialist approach avoids and in fact explicitly rejects this dualism, and has a great deal to offer the study of language variability as a social phenomenon; and

3. the study of language variability as a social phenomenon must necessarily include the study of human agents who create the variability, give it social meaning, and use it for social purposes. Among these human agents to be examined are also the researchers.

NOTES

1. We should note in passing that variability plays an important role in the so-called "hard" sciences as well, particularly biology. See Osborne (1959) and Claridge (1973) on genetic bases for biological variations.

2. These areas were selected because they are relevant to the formulation of language policy and because they have figured prominently in our training and our work, thus permitting a relatively informed commentary.

3. More specifically, if phonetically similar variants can be shown to be complementary distribution (i.e. found in mutually exclusive environments) and linked in the native speaker's perception to some underlying form, then they are regarded as allophones of a particular phoneme (e.g. syllable final [p'] and syllable initial [ph] with relation to phoneme /p/). If, on the other hand, those variants distinguish words of different meanings (as do [p] and [b]), they are considered distinctive or separate phonemes.

4. Bell (1976:36) defends inherent variability as necessary: "Inherent variability has too a crucial role in linguistic change, since without it individual freedom of choice would be lacking; each form irrevocably tied to some internal or external conditioning factor, making change impossible."

5. B. Bailey (1966) developed a polylectal grammar within the TG framework. The grammar was based on the assumption that all varieties of Creole were describable via the same phrase structure and transformational rules, with variation occurring in morphophonemic structure by means of readjustment rules. While this morpheme variants model did not become part of established theory, it did give impetus to the investigations of variation within a TG paradigm.

6. According to Hymes (1980), one other issue must be addressed, and that is a social one -- how salient is the variable? Do speakers share an awareness of the stigma or prestige which marks the variable? This brings up the question long argued within linguistic theory of whether rules should be psychologically real to speakers in order to be valid. This issue is seldom if ever discussed in variable rule studies.

7. Chomsky's notion of linguistic competence contrasts severely with Hyme's concept of communicative competence which involves the ability to use the sentences produced appropriately in the correct social situation. Such competence by necessity varies from person to person. This does not mean, however, that any attempts at generalizations must be abandoned, since individuals are socialized within social structures. Thus, this is a unity of individual differences which allows us to speak about the communicative repertoire of an entire group.

8. We should note here that idealization of some kind is unavoidable, even in sociolinguistic research which claims to stay close to the "raw" data. In reality, it is impossible to gather truly "raw" data, as data comes to the observer filtered through his senses and cognitive processes which segment reality in certain ways (Schane 1973).

The collection process is a further idealization of initial facts and thus a partial analysis. This idealization is an inherent reality for any science which attempts to describe non-discrete entities in terms of discrete units of analysis. The problem is not how to rid ourselves of such idealization, but rather to determine how much is necessary for an adequate explanation of the phenomena. Traditional and generative linguistics have called for high levels of idealization, while sociolinguistics has required far less.

9. The universalist would claim that the common thread running through this variability is the adult language which is known to all acquirers. Yet recent experimental studies of adult language belie the notion that adult knowledge of grammar is homogeneous (Gleitman and Gleitman 1970).

10. The extent to which "normally developing" children may use apparently "unproductive" or regressive forms across the course of development has not been fully explored. However, Smith (1973) documents recidivism in phonology, in which less mature surface forms are produced. It seems quite likely that similar phenomena would occur in other aspects of language.

11. At least in traditional ethnography. This would not hold for interpretive models.

12. The historical particularist approach was characterized by detailed, ethonographically-based documentation of cultural developments for a particular culture within a given historical

period. The particularists tended to avoid theoretical synthesis or generalization, feeling that only with the accumulation of masses of historical data could any theoretical statements be made. They saw their work as complementary to the historical comparative approach common in linguistics during the latter half of the 19th century and the early 20th century.

13. The configurationalist approach described groups in terms of configurations of major psychological traits. The emphasis was con cultural consistency. Ruth Benedict's **Pattern of Culture** (1934) concluded that each culture selects from an infinite variety of possible behaviors, and the resulting patterns sometimes conform to particular configurations. Margaret Mead was greatly interested in individuals within a group as illustrative of national character. She took her theoretical support from the linguistic model which utilized single informants to produce entire grammars, unfortunately failing to recognize (as did the structural linguists) the variability provided by those individuals even in relatively small populations (cf. Harris 1968).

14. Kroeber's approach was to develop lists of trait elements or basic regional categories of modes of subsistence as related to ecological factors. His painstaking ethonographic surveys led him to conclude like Boas that generalizations were unprofitable as the interactions of culture and environment were too complex and too group-specific (Kroeber 1939:205).

15. The British school of social anthropology emphasized intensive fieldwork and analysis of synchronic functional relations. The functionalist approach is characterized by a search for significant social laws and a stress upon social structures as primary in determining cultural behavior. The functionalist laws, however, were based on synchronic data and neglected change in evolution. Firth (1961) turned to the study of variations in social structure in order to understand social change because as he said: "Structural analysis alone cannot interpret social change" (35). Malinowski, perhaps the best known of British social anthropologists, emphasized biophysical needs as the driving force behind sex roles and family structure. He, like many other anthropologists during the decline of British colonialism, stressed cohesion and continuity of the cultures found within the empire and avoided questions of variation, conflict, struggle, and change.

16. The French structuralists took their theoretical lead from the Prague linguists (e.g. Trubetzkoy, Jakobson) who had developed an analysis of speech sounds which categorized the

infinite phones in terms of binary oppositions of distinctive features. This approach allowed the operationalization of deeper structures, and moved Lévi-Strauss to the study of underlying forms and relations of items, as well as the nature of general and invariant relationships, in his work on kinship terms. Lévi-Strauss constructed a formal taxonomy of kinship types which allowed him to identify new patterns and compare them to others. Unfortunately, he never analyzed the articulation between the types and other social structures, nor did he account for internal variation. Even more critical was his failure to see that this structure does not have a life of its own except as human agents acts out their lives and create that structure.

17. Harris (1968) retorts this is just the old ethonography with a more operationalized and mentalistic bent.

18. The speech even list of components says nothing about human agents producing their relations through struggle, conflict, cooperation, or any other means. the ethonography of speaking presumes a normative social model, tends toward determinism, and is a-historical in perspective.

19. Clearly this is not the case for all. Social scientists like Searle, Geertz, Ricoeur, and Kuhn would not subscribe to this view of scientific practice, nor would a socially aware natural scientist like Gould.

20. The terms "idealist" and "materialist" are used here in their philosophical sense, not the commonly understood notions of being guided by ideals, on the one hand, and material gain, on the other. Idealist philosophy sees the mind, ideas, spirits as primary, whether that be in that case of subjective idealism, the sensations or consciousness of the individual mind or in the case of objective idealism, a super-human mind or will independent of man. This kind of thinking characterized theology and was especially predominant during feudalism. Materialist philosophy views matter as primary and thought as secondary. While materialist views have existed since ancient time, they came to prominence with the development of capitalism and the concomitant development of industry and natural science. Most scientists today spontaneously adopt a materialist stance in their practice, though they may consciously deny it as such and are inconsistent in doing. A popular philosophical theme today (cf. Bertrand Russell) is that idealism and materialism are both wrong, and that a middle ground is necessary. However, it is difficult to see how there could be a middle ground since the two approaches are mutually exclusive. Clearly, this brief explanation does not do the terms justice and does not even begin to deal with the

many variants, especially the crucial differences among mechanistic, metaphysical, dialectical, and historical materialism. For more elucidation of these terms, see Selsam (1949), Politzer (1976).

21. Comte also utilized these presumed stages as an illustration of the slow, inevitable, evolutionary nature of social process, and to reject the notion of revolution or abrupt change. Habermas (1971) points out that Comte's stages were really a way of justifying science's belief in itself by construing the history of the species as a history of the realization of the positive spirit.

22. This belief comes more from social scientists (particularly phenomenalists) than from natural scientists. There has been an implicit assumption among intellectuals and lay people alike that the so-called "hard" sciences are more 'scientific' because they count, catalogue, and accumulate facts under supposedly controlled conditions. This has had serious implications for the development of the social sciences. The history of these disciplines has been characterized by a quest for ways of making ideas, attitudes, mental states, and other "fuzzy" phenomena attain empirical status and thus convey upon social science the legitimacy of "real" science. A case in point is psychology, which has had great difficulties in establishing itself as a science given the problems inherent in objectively or quantitatively probing the mind. For that reason, behaviorist psychology was so popular -- all human behavior could be accounted for by simple stimulus-response mechanisms.

23. Despite their apparent opposition, both rationalism and empiricism fail to see knowledge as a social construct. They are egocentric in that they situate knowledge within the individual rather than as the result of social interaction.

24. Pierce described pragmatism as "the principle that every theoretical judgement expressible in a sentence in the indicative mood is a confused form of thought whose only meaning, if it has any, lies in its tendency to enforce a corresponding practical maxim expressed as a conditional sentence having its apodosis in the imperative mood" (**Lectures on Pragmatism V, 18**).

25. This is particularly useful as a philosophical justification for capitalism and imperialism.

26. Along with this comes a failure to recognize that the scientist is part and parcel of the social reality and of the science being created. Scientists play an important role in the advancement of the class interests of those in power and in the maintenance of certain class relations. Every aspect of their work, for the way they are trained, the funding of research, the selection of research questions, to the publication and dissemination of any research findings, is governed by larger social processes and, in turn, has its effect on social relations. Yet when conditions are right, scientists can assist in changing social reality with the knowledge they create.

27. Wolf (1982:6-7) shows how this is very much the case in historical analysis. "By endowing nations, societies, or cultures with the qualities of internally homogeneous and externally distinctive and bounded objects, we create a model of the world as a global pool hall in which entities spin off each other like so many hard and round billiard balls. . .The habit of treating named entities such as Iroquois, Greece, Persia, or the United States as fixed entities opposed to one another by stable internal architecture and external boundaries interferes with our ability to understand their mutual encounter and confrontation." Bonilla (1983) illustrates how this has been done with the category "Hispanic".

28. Of course, there is the as yet unresolved problem of how to ascertain a group's priorities which it may not be able to articulate itself.

29. In this regard, we also need to examine cases in which there have been changes in the ideological system (due to revolutions or other social upheavals), where distinctions that once were critical are no longer so, or the more usual case where there is competition between new and old beliefs and, as a result, variation among the new and old linguistic forms that mark the beliefs. Cases of particular concern to us in the study of language minorities in the U.S. would be colonial and neo-colonial situations and mass migrations.

REFERENCES

Adgar, M. 1980. **The Professional Stranger: An Informal Introduction to Ethnography.** NY: Academic Press.

Anttila, R. 1974. "Formalization as Degeneration in Historical Linguistics." In J. Anderson and C. Jones (eds.). **Historical Linguistics I.** Amsterdam: North Holland, 1-32.

Au, K. and C. Jordan. 1981. "Teaching Reading to Hawaiian Children: Finding a Culturally Appropriate Solution." In H. Trueba, K. Au, and G. Guthrie (eds.). **Culture and the Bilingual Classroom: Studies in Classroom Ethnography.** Rowley, MA: Newbury House.

Avrorin, V. 1977. "On the Subject Matter of Social Linguistics." In. V. Yartseva, et al. **Theoretical Aspects of Linguistics.** Moscow: USSR Academy of Sciences, 23-29.

Bailey, B. 1966. **Jamaican Creole Syntax.** London: Cambridge University Press.

Bakhtin, M. 1981. **The Dialogic Imagination.** (Translated by M. Holquist). Austin: University of Texas.

Bernett, S. and M. Silverman. 1979. **Ideology and Everyday Life: Anthropology, Neomarxist Thought, and the Problem of Ideology and the Social Whole.** Ann Arbor: University of Michigan Press.

Basso, K. 1972. "'To Give Up on Words': Silence in Western Apache Culture." In P. Giglioli (ed.). **Language and Social Context.** Baltimore: Penguin Books, 219-231.

Bell, R. 1976. **Sociolinguistics: Goals, Approaches and Problems.** NY: St. Martin's Press.

Bernal, J. 1946. **The Social Function of Science.** London: George Routledge and Sons, Ltd.

Bloch, M. (ed.). 1975. **Marxist Analyses and Social Anthropology.** NY: Wiley (Halstead Press).

Bloch, M. 1983. **Marxism and Anthropology: The History of a Relationship.** Oxford: Clarendon Press.

Bloom, L. 1973. **One Word at a Time.** The Hague: Mouton.

Bloom, L. and M. Lahey. 1978. **Language Development and Language Disorder.** NY: John Wiley and Sons.

Bloom, L., P. Lightbown, and L. Hood. 1975. **Structure and Variation in Child Language.** Monographs of the Society for Research and Child Development 40:2, serial #160.

Bremme, D. 1976. **Accomplishing a Classroom Event: A Microethnography of First Circle.** Working Paper No. 3, Learning Environments. Cambridge, MA: Harvard Graduate School of Education.

Briére, E. 1967. "Phonological Testing Reconsidered." **Language Learning** 17, 163-171.

Copans, J. and D. Seddon. 1978. "Marxism and Anthropology: A Preliminary Survey." In D. Seddon (ed.). **Relations of Production. Marxist Approaches to Economic Anthropology.** London: Cass; [Totowa, N. J.: distributed by Biblio Distribution Centre].

Cedergren, H. and D. Sankoff. 1974. "Variable Rules: Performance as a Statistical Reflection of Competence." **Language** 50:2, 333-355.

Chomsky, N. 1957. **Syntactic Structures.** The Hague: Mouton.

_____. 1965. **Aspects of the Theory of Syntax.** Cambridge, MA: M.I.T. Press.

_____. 1968. **Language and Mind.** NY: Harcourt, Brace and World.

_____., and M. Halle. 1968. **The Sound Pattern of English.** NY: Harper and Row.

Claridge, G. 1973. **Personal Differences and Biological Variations:** A Study of Twins. Oxford: Pergamon Press.

Comte, A. 1830. **Course of Positive Philosophy.**

Conant, J. 1951. **On Understanding Science.** NY: Mentor Books.

Darnell, R. 1974. "Correlates of Cree Narrative Performance." In R. Bauman and J. Sherzer (eds.). **Explorations in the Ethnography of Speaking.** London: Cambridge University Press, 315-336.

Diamond, S. 1979. **Towards a Marxist Anthropology.** The Hague: Mouton.

Dines, E. 1980. "Variation in Discourse: 'and Stuff Like That'". **Language in Society** 9:1, 13-31.

Dittmar, N. 1976. **A Critical Survey of Sociolinguistics.** NY: St. Martin's Press.

Eckman, F. 1977. Markedness and the Contrastive Analysis Hypothesis. **Language Learning** 27, 315:330.

Eilers, R., W. Gavin, and W. Wilson. 1979. "Linguistic Experience and Phonemic Perception in Infancy: A Cross-Linguistic Study." **Child Development** 50, 14-18.

Engels, F. 1966. **Herr Eugen Duhring's Revolution (Anti-Duhring).** NY: International Publishers.

Erickson, F. 1975. "Gatekeeping and the Melting Pot: Interaction in Counseling Encounters." **Harvard Educational Review** 45: 44-50.

Fasold, R. 1972. **Tense Marking in Black English: A Linguistic and Social Analysis.** Arlington, VA: Center for Applied Linguistics.

Fillmore, C. 1979. "On Fluency." In C. Fillmore, D. Kempler, and W.S-Y. Wang (eds.). **Individual Differences in Language Ability and Language Behavior.** NY: Academic Press, 85-101.

Geertz, C. 1973. **The Interpretation of Cultures.** NY: Basic Books.

_____. 1983. **Local Knowledge: Further Essays in Interpretive Anthropology.** NY: Basic Books.

Gellner, E. 1980. **Soviet and Western Anthropology.** NY: Columbia University.

Giddens, A. 1978. "Positivism and its Critics." In. T. Bottomore and R. Nisbet (eds.). **A History of Sociological Analysis.** NY: Basic Books, 237-286.

Gleitman, L. and H. Gleitman. 1970. **Phrase and Paraphrase: Some Innovative Uses of Language.** NY: W. W. Norton.

Godelier, M. 1973:1977. **Perspectives in Marxist Anthropology.** London: Cambridge University Press.

Goffman, E. 1967. **Interaction Ritual: Essays on Face-To-Face Behavior.** NY: Pantheon Books.

Gupta, V. and P. Mermelstein. 1982. "Effects of Speaker Accent on the Performance of a Speaker-Independent, Isolated Word Recognizer." **Journal of the Acoustical Society of America** 71, 1581-1587.

Habermas, J. 1968 (1971). **Knowledge and Human Interests.** (Translated by J. Shapiro). Boston: Beacon Press.

Heath, S. 1982. "What No Bedtime Story Means: Narrative Skills at Home and School." **Language in Society** 11.

Hudson, R. 1980. **Sociolinguistics.** NY: Cambridge University Press.

Hymes, D. 1962. "The Ethnography of Speaking." In T. Gladwin and W. Sturtevant (eds.). **Anthropology and Human Behavior.** Washington, D.C.: Anthropological Society of Washington, 13-53.

_____. 1964. "Introduction: Toward Ethnographies of Communication." **American Anthropologist** 66, 12-25.

_____. 1969 (1974). **Reinventing Anthropology.** NY: Random House (Vintage).

_____. 1972. "Models of the Interaction of Language and Social Life." In. J. Gumperz and D. Hymes (eds.). **Directions in Sociolinguistics.** NY: Holt, Rinehart, and Winston.

_____. 1973. "On the Origins and Foundations of Inequality Among Speakers." **Daedalus** (Summer), 59-85.

_____. 1980. **Language in Education: An Ethnographic Approach.** Washington, D.C.: Center for Applied Linguistics.

Hockett, C. 1958 (1965). **A Course in Modern Linguistics.** NY: Macmillan.

Irvine, J. 1974. "Strategies of Status Manipulation of the Wolof Greeting." In R. Bauman and J. Sherzer (eds.). **Explorations in the Ethnography of Speaking.** London: Cambridge University Press, 167-191.

Jakobson, R. 1941 (1968). **Child Language, Aphasia, and Phonological Universals.** (Translator: Allan R. Keeler) The Hague: Mouton.

Jeffers, R. and I. Lehiste. 1979. **Principles and Methods for Historical Linguistics.** Cambridge: M.I.T. Press.

Jones, M. 1961. "A Phonological Study of English as Spoken by Puerto Ricans Contrasted with Puerto Rican Spanish and American English." Ph.D. dissertation, University of Michigan.

Kahn, J. 1974. "Imperialism and the Reproduction of Capitalism: Towards a Definition of the Indonesian Social Formation." **Critique of Anthropology 2.**

Keenan, E. 1974. "Norm-Makers, Norm-Breakers: Use of Speech by Men and Women in a Malagasy Community." In. R. Bauman and J. Sherzer (eds.). **Explorations in the Ethnography of Speaking.** London: Cambridge University Press, 125-143.

Kirshenblatt-Gimblett, B. 1974. "The Concept and Varieties of Narrative Performance in East European Jewish Culture." In R. Bauman and J. Sherzer (eds.). **Explorations in the Ethnography of Speaking.** London: Cambridge University Press, 283-308.

Kroeber, A. 1939. **Cultural and Natural Areas of Native North America.** University of California Publications in American Archeology and Ethnology, Vol. 8.

_____. 1957. **Ethnographic Interpretations.** University of Colorado publications in American Archeology and Ethnology, 191-204.

Kuhl, P. 1976. "Speech Perception in Early Infancy: The Acquisition of Speech Sound Categories." In S. Hirsh and S. Silverman (eds.). **Hearing and Davis: Essays Honoring Hallowell Davis.** St. Louis: Washington University Press, 265-280.

Kuhl, P. and J. Miller. 1975. "Speech Perception by the Chinchilla: Voiced-Voiceless Distinction in Consonants." **Science** 190, 69-72.

Labov, W. 1966. **The Social Stratification of English in New York City.** Washington, D.C.: Center for Applied Linguistics.

_____. 1969. "Contraction, Deletion, and Inherent Variability of the English Copula." **Language** 45, 715-762.

_____. 1972a. **Language in the Inner City: Studies in the Black English Vernacular.** Philadelphia: University of Pennsylvania Press.

_____. 1972b. **Sociolinguistic Patterns.** Philadelphia: University of Pennsylvania Press.

_____. 1978. **Where Does the Linguistic Variable Stop?** Working Papers in Sociolinguistics. Austin, TX: Southwest Educational Development Laboratory.

Labov, W., P. Cohen, C. Robins, and J. Lewis. 1968. **A Study of the Non-Standard English of Negro and Puerto Rican Speakers in New York City.** Office of Education Cooperative Research Project No. 3288.

Leacock, E. 1982. "Marxism and Anthropology." In B. Ollman and E. Vernoff (eds.). **The Left Academy: Marxist Scholars on American Campuses.** NY: McGraw Hill.

Legum, S., C. Pfaff, G. Tinnie, and M. Nicholas. 1971. "The Speech of Young Black Children in Los Angeles." **Southwest Regional Laboratory Technical Report No. 33.**

Lenin, V. I. 1909 (1968). **Materialism and Empirio-Criticism--Critical Comments on a Reactionary Philosophy.** In V. I. Lenin -- Collected Works, Vol. 14. Moscow: Progress Publishers.

Lenin, V. I. 1960. **Collected Works**, Vol. 1. Moscow: Progress Publications.

Leonard, L., M. Newhoff, and L. Mesalam. 1980. "Individual Differences in Early Child Phonology." **Applied Psycholinguistics** 1, 7-30.

Loch, J. and D. Yakov. 1982. "Speech as Perception: Some Conceptual Effects on Phonological Segments." **Seminars in Speech, Language and Hearing** 3:2, 162-171.

Lyons, J. 1970. **Noam Chomsky.** NY: Viking Press.

Marx, K. 1904. **A Contribution to the Critique of Political Economy.** 1970. Maurice Dobb (ed.) New York: International Publishers

MacKain, K. 1982. "Assessing the Role of Experience on Infants' Speech Discrimination." **Journal of Child Language** 9:3, 527-542.

McDermott, R., and K. Gospodinoff. 1979. "Social Contexts for Ethnic Borders and School Failure: A Communicative Analysis." In A. Wolfgang (ed.). **Nonverbal Behavior.** London: Academic Press.

Michaels, S. 1981. "'Sharing time': Children's Narrative Styles and Differential Access to Literacy." **Language in Society** 10:3, 423-442.

Mohatt, G., and F. Erickson. 1981. "Cultural Differences in Teaching Styles in an Odawa School: A Sociolinguistic Approach." In H. Trueba, K. Au, and G. Guthrie (eds.).

Culture and the Bilingual Classroom: Studies in Ethnography. Rowley, MA: Newbury House.

Navarro-Tomás, T. 1944. **Manual de entonación española.** NY: Hispanic Institute in the U.S.

Nelson, K. 1973. **Structure and Strategy in Learning to Talk.** Monographs of the Society for Research in Child Development 39 (1-2, serial #149)

_____. 1975. "Individual Differences in Early Semantics and Syntactics Development." **Annals of the New York Academy of Science** 263, 132-139.

_____. 1981. "Individual Differences in Language Development: Implications for Development and Language." **Developmental Psychology** 17, 170-187.

Neufeld, G. 1980. "On the Adult's Ability to Acquire Phonology." **TESOL Quarterly** 14:3, 285-298.

Ollman, B. 1979. **Social and Sexual Revolution.** London: Pluto.

Osborne, R. 1959. **Genetic Basis of Morphological Variation: An Evaluation and Application of the Twin Study Method.** Cambridge, MA: Harvard University Press.

Penfield, J. 1983. "Prosody in Mexican-American (Chicano) English: Parameters of Intonation." In J. Ornstein-Galicia (ed.) **Form and Function in Chicano English.** Rowley, MA: Newbury House.

Peters, A. 1983. **The Units of Language Acquisition.** NY: Cambridge University Press.

Poplack, S. 1978. **Structure and Social Function of Syntactic Code-Switching.** Working Paper No. 2. NY: Centro de Estudios Puertorriqueños. Revised Version: In R. Durán (ed.). 1981. **Latino Language and Communicative Behavior.** NJ: Ablex, 169-184.

_____. 1980. **'Sometimes I'll Start a Sentence in Spanish and TERMINO EN ESPANOL': Toward a Typology of Code-Switching.** Linguistics 18, 581-618. First published in 1978 as Working Paper No. 4. NY: Centro de Estudios Puertorriqueños.

Reisman, K. 1974. "Contrapuntal Conversations in an Antiguan Village." In R. Bauman and J. Sherzer (eds.). 1974. **Explorations in the Ethnography of Speaking.** NY: Cambridge University Press.

Remez, R., P. Rubin, D. Pisoni, and T. Carrell. 1981. "Speech Perception Without Traditional Speech Cues." **Science** 212, 947-950.

Rosaldo, R. 1982. **Beyond the Rules of the Game.** Ms.

Salmond, A. 1974. "Rituals of Encounter Among the Maori: Sociolinguistic Study of a Scene." In R. Bauman and J. Sherzer (eds.). **Explorations in the Ethnography of Speaking.** London: Cambridge University Press, 192-212.

Sankoff, D. and W. Labov. 1979. "On the Uses of Variable Rules." **Language in Society** 8:2, 189-222.

Sankoff, D. and S. Poplack. 1980. **A Formal Grammar for Code-Switching.** Working Paper No. 8. NY: Centro de Estudios Puertorriqueños.

Sankoff, D., P. Thibault, and H. Bérube. 1978. "Semantic Field Variability." In D. Sankoff (ed.). **Linguistic Variation.** NY: Academic Press.

Sapir, E. 1921. **Language.** NY: Harcourt, Brace Inc.

Schane, S. 1973. **Generative Phonology.** Englewood Cliffs: Prentice-Hill, Inc.

Schieffelin, B. 1979. "Getting it Together: An Ethnographic Approach to the Study of the Development of Communicative Competence." In E. Ochs and B. Schieffelin (eds.). **Developmental Pragmatics.** NY: Academic Press, 73-108.

Schultz, J. 1976. **It's Not Whether You Win or Lose, It's How You Play the Game: A Microethnographic Analysis of Game Playing in a Kindergarten/First Grade Classroom.** Working Paper No. 2. Newton Classroom Interaction Project. Cambridge, MA: Harvard Graduate School.

Scollon, R. 1982. "The Rhythmic Integration of Ordinary Talk." In. D. Tannen (ed.). **Analyzing Discourse: Text and Talk.** Washington, D.C.: Georgetown University Press, 335-349.

Seddon, D. (ed.). 1978. **Relations of Production: Marxist Approach to Economic Anthropology.** London: Cass.

Shuy, R. et al. 1977. **Carnegie Project: Functions of Language in the Classroom.** Washington, D.C.: Center for Applied Linguistics.

Sommerstein, A. 1977. **Modern Phonology.** Baltimore: University Park Press.

Stockwell, R. and J. Bowen. 1965. **The Sounds of English and Spanish.** Chicago: University of Chicago Press.

Studdert-Kennedy, M. 1976. "Speech Perception." In N. Lass. (ed.). **Contemporary Issues in Experimental Phonetics.** NY: Academic Press, 243-293.

Trehub, S. 1976. "The Discrimination of Foreign Speech Contrasts by Infants and Adults." **Child Development** 47, 466-472.

Trudgill, P. 1972. "Sex, Covert Prestige and Linguistic Change in the Urban British English of Norwich." **Language in Society** 1:2, 179-195.

_____. 1974. **Sociolinguistics - An Introduction.** Baltimore: Penguin.

Tyler, S. (ed.). 1969. **Cognitive Anthropology.** NY: Holt, Rinehart.

Vygotsky, L. 1934 (1962). **Thought and Language.** (Edited and Translated by Eugenia Hanfmann and Gertrude Vakar). MA: M.I.T Press.

Wagner, R. 1981. **The Invention of Culture.** (Revised edition). Chicago: University of Chicago Press.

Wallace, A. 1962. "The New Culture - and - Personality." In T. Gladwin and W. Sturtevant (eds.). **Anthropology and Human Behavior.** WA: Anthropological Society of Washington, 1-12.

Weeks, T. 1974. **The Slow Speech Development of a Bright Child.** Lexington, MA: D.C. Heath Co. Lexington Books.

Weinreich, U., W. Labov, and M. Herzog. 1968. "Empirical Foundations for a Theory of Language Change." **Directions for Historical Linguistics.** Austin: University Texas Press, 96-188.

Wells, G. 1981. **Learning through Interaction: The Study of Language Development.** NY: Cambridge University Press.

Wolf, E. 1982. **Europe and the People Without History.** Berkeley, Los Angeles, London: University of California Press.

Wolfram, W. 1969. **A Sociolinguistic Description of Detroit Negro Speech.** (Urban Language Series 5). Washington, D.C.: Center for Applied Linguistics.

_____. 1973. "On What Basis Variable Rules?" In C. Bailey, R. Shuy (eds.). **New Ways of Analyzing Variation in English.** WA: Georgetown University Press, 1-12.

Yarseva, V. et al. 1977. **Theoretical Aspects of Linguistics.** (Social Sciences Today Editorial Board). Moscow: USSR Academy of Sciences.