The claim that some grammatical rules are inherently variable may seem, at first blush, to be so clearly circumscribed and empirically well-documented as to be rather uncontroversial. Why would a linguistic theoretician be interested in debating such a claim when it is made by scholars who seem to be working on the fringes of a grammar of a language, scholars whose empirical, indeed statistical, evidence usually considered in general linguistic argumentation? The reason, of course, is that proponents of the quantitative paradigm have drawn, from their observations, implications which call for a reorganization of basic "traditional" notions like grammar of a language, competence, performance, and linguistic intuition.

The arguments over these basic notions will and should be continued, with linguists of both schools using empirical evidence and logical argumentation to support their claims. But there is another arena into which this debate should be carried, an arena usually and unfortunately overlooked. In this arena, one must discover the "frame of reference" behind the quantitative paradigm and weigh that against the "frame of reference" of "traditional" linguistics. I have borrowed this term "frame of reference" from J. Verhaar (1973:362) who means by it the implicit elements which always lurk behind what is explicit in a theory. While a theory "sums up what a man thinks, the frame of reference is about why he thinks the way he does." Like Verhaar, I suspect that "the 'why' is largely traceable to elements of a cultural nature, and the cultural context becomes understandable (and explicit) in a historical perspective."

In the following pages I will undertake the task of explicating the "frames of reference" of both the quantitative paradigm and of "traditional" linguistics with the ultimate aim of evaluating the claims made by the former. As Verhaar suggests, such an explication will force me into a consideration
of the history of linguistic theory or, more precisely, into what Koerner (1972) calls the historiography of linguistics

Since everyone, including Weinreich, Labov and Herzog (1968) (hereafter WLH), agrees that the roots of "traditional" linguistics go deeper than those of the quantitative paradigm, the brunt of my explication will be devoted to the "frame of reference" of "traditional" linguistics. In particular I will re-examine the roots of modern linguistic structuralism and scrutinize certain developments in post-Saussurean structuralism all with the hope of explicating and demonstrating the importance of the "traditional" "frame of reference." As such this investigation will be an addition to and a continuation of Koerner's excellent historiographical work (1973) in which he traces the origins and development of Saussure's linguistic thought.

The investigation will be arranged in the following order. Section II will explain the concept of inherent variability and will present the evidence supporting it. In this section, I will show that the chief evidence supporting inherent variability is negative evidence, i.e., the failure of "traditional" linguistics to provide adequate criteria to identify the social aspect of language. Since both the "traditional" theory and, in a negative fashion, the quantitative paradigm, rest on an interpretation of the "traditional" approach to language as a social system. Section III will be devoted to an historiographical study of the "frame of reference" of Saussurean structuralism, especially those aspects of that "frame of reference" which pertain to the social nature of language. Section IV will present an evaluation of the quantitative paradigm in the light of that historiographical study. Section V will argue that the concept of inherent variability is without positive or negative support and that solutions to the inadequacies in "traditional" linguistics can be found without departing from the "frame of reference" on which "traditional" linguistics stands.
II The Principle of Inherent Variability

What clearly distinguishes proponents of the quantitative paradigm from advocates of "traditional" linguistics is that the former make a strong claim about the nature of human capability to control language variation. There are, at least four possible claims which have been made about the human capability to control variation (Wolfram & Fasold 1974 106-111). The weakest claim (1) is that humans have little capability to control language variation, or that "human beings are capable only of discriminating which rules are optional and which rules are obligatory" (Ibid, p. 106). A stronger position (2) states that "the language user recognizes that some rules are variable, can identify the factors that favor the operation of the rule, and knows the hierarchial order of constraints." (Ibid, p 107). Still stronger is the claim (3) that the user of a language knows which features favor variability, what the hierarchy of constraint strength is, and also how much stronger a higher order constraint is than a lower-order one (Ibid, p 107). The strongest claim made (4) is that "a speaker can identify variable rules, the linguistic factors which favor rule operation, the hierarchial order in which they are ranked, the extent to which higher order constraints are stronger than lower order ones, and the probabilities toward rule operation contributed by each" (Ibid, p. 110).

The weakest claim (1), if slightly amended to admit that language users can recognize social/situational constraints on an optional rule, is an adequate statement of the "traditional" view. This weak claim allows that human linguistic competence may be represented by multiple systems of rules and that social circumstances will lead a speaker to perform in accordance with one or another system of those rules. A change in social circumstances may lead to a switching of systems, i.e., code-switching. But the rules of each system are invariant rules. Once a particular system or code is selected the speech performance will be generally consistent with that code as long as the external social circumstances remain constant. In other words there are co-occurrence restrictions on code-switching.

Proponents of the quantitative paradigm support at least claim (2) and perhaps the stronger claims (3) or (4), all of which presume a rather highly developed ability to control
language variation. Each of these claims (2-4) assumes that human linguistic competence is not necessarily categorical but may be variable, inherently variable in that the output, for any particular input to which the rule could apply, is unpredictable. Such a variable rule has a structural description which includes the condition that the rule apply with some frequency less than 100%. That frequency of rule applications may be influenced by a number of empirically discernible linguistic and social/situational factors.

The value of such a variable linguistic rule is that a single structural description with varying frequencies of application will account for the heterogeneity of linguistic elements in the speech in an entire community as well as within the individual as he moves about that community. In short, the variable rule and inherent variability have been postulated to solve the problem of representing the language system qua social system.

Representing language qua social system has posed a problem for linguists ever since W.D. Whitney, H. Paul, and F. de Saussure began considering language to be a social institution. The problem is that Language, as a social institution, is the object of linguistic investigation. But if that is so, there must be some empirical criterion for distinguishing the social aspect of language from psychological and purely idiosyncratic aspects of language. The question is what is that criterion which isolates the social aspect of language?

"Traditional" linguists argued that social implies sharing, and sharing implies the distribution of some identical invariant elements throughout the community. The elements shared must be invariant since together they form the homogeneous language state which constitutes language as a socially shared system. The empirical procedure for distinguishing the social aspect of language is to find invariant elements or structures.

WLH have reviewed and evaluated the two major "traditional" approaches which make use of this criterion of invariant structures, American structuralism and generative transformational linguistics. In particular, WLH point out that this criterion has failed in both approaches. It will be worth the while to examine the criticisms made by WLH because those criticisms actually constitute the major motivation for postulating the variable rule and the notion of inherent variability.
American structuralists struggled to find some invariance in the speech of members of a language community. Recognizing the obvious variations in speech, Bloomfieldians saw the need to hold constant all the social factors which masked the homogeneous nature of language. Social variables could be most easily controlled by obviating them. This meant examining the language of one individual interacting with one other individual, all situational factors being held constant. For the purely methodological reason of arriving at invariant speech patterns, linguists studied idiolects rather than trying to directly study the language of a community of speakers. As logical as the solution seems, there is ample evidence that variation of speech appears even within an idiolect (Fries & Pike 1949). No matter how closely the speech situation is controlled, diversity of structural units appears even in one individual’s speech.

Generative linguistics recognized the fact that invariance of structure could never be discovered at the level of speech. Socially shared, homogeneous structures exist, not in actual speech patterns, but in the tacit knowledge or intuitions of speakers of a language. Those structures of language which are socially shared could be discovered only by analysis of speaker competence, not by examining actual utterances. Specifically, a speaker is able to make judgments about the grammaticality of sentences and from those judgments the analyst is able to reconstruct, formally, the nature of the intuitions upon which those judgments are based.

But the fact is that judgments based on intuition are not invariant either across individuals and even within one individual. People are quite capable of rejecting a sentence as ungrammatical at one moment and accepting it in the next. The intuitional judgments of just one individual are not invariant and therefore the intuitions upon which the judgments are based are not invariant (Labov 1972 1975). Moreover, if there are variable intuitions within individuals, the social character of language cannot consist in the sharing of some invariant set of intuitions.

Neither the structuralist analysis of idiolect nor the generative analysis of competence reveals invariant patterns or structures either in the community or in the individual. How then, can we call language a social institution if elements we intuitively recognize to be social are neither shared by members,
nor possessed by one individual in an invariant form.

Will argue that the social aspect of language is a problem only if one assumes as H. Paul did, along with most modern linguists, that an invariant language state is a necessary characteristic of language as a social institution. On the other hand, the problem can be solved if the linguist ignores the notion of invariant language state and defines the social aspect of language by the criterion of shared patterns of variation. It may well be that in a community there is no invariant system in equilibrium but rather each individual possesses and shares with others, patterns of variation. Such patterns would of course have escaped the attention of those linguists who looked for invariant shared elements in production or in competence. But they will be observed by one who examines speech for its regularity and predictability, the key empirical indicators of patterns of variation. In other words, quantitativists argue that one can posit a rule of socially shared grammar if one can show that in a sampling of vernacular speech of members of a language community the frequency of occurrence of any unit covaries with the occurrence of specific linguistic and social factors. The criterion of regularity does not require that any one occurrence be predictable from linguistic or social factors, only that there is some statistical regularity to the unpredictable occurrences. The absolute frequency of occurrences of any specific unit is variable within the individual and heterogeneous in the community. What is predictable and shared is the statistical covariation of frequency of speech output with frequency of linguistic and social factors.

The cost of this solution is that we relinquish the long held ideas that language as social phenomena forms a homogeneous language state and that we fall back on the less stringent claim that language consists, at least in part, of shared statistical covariances.

Cedergren and D. Sankoff (1974) have offered some empirical justification for repudiating the notion of homogeneous language state. They observe that the "traditional" notion of invariant rules of competence implies the view that human cognitive processing is categorical. Such a view, they argue, "ignores the extensive psychological literature documenting probabilistic aspects of mental processes such as 'probability matching'".
This citing of 'probability matching' is the only positive evidence offered to support the notion of inherent variability. Yet if the evidence of 'probability matching' is examined carefully, it turns out to be inconclusive and confounding, hardly a strong support for quantitativists' claims.

Briefly, 'probability matching' is an observed characteristic of human decision making such that for a series of varied occurrences of X or -X, the predicted probabilities of X come to equal the actual probability of the occurrence of X (Lee 1971: 144). There are at least two ways of interpreting the results of such 'probability matching' experiments. Mathematical learning theory (read the quantitative paradigm) provides the most direct interpretation, namely, that subjects calculate a probability coefficient prediction for each occurrence of X on the basis of previous occurrences. The nature of the present reinforcement will stimulate a recalculation of a new probability coefficient for the forthcoming occurrence. A less direct interpretation must be made by decision theory (read "traditional" view of linguistic competence). Initially, the results of 'probability matching' would seem to falsify a central principle of decision theory that subjects will select an optimal strategy for maximizing the expected number of correct predictions. Yet a number of intervening variables may be influencing the use of alternative strategies for decision making. The results of the experiments vary with the number of trials, the number of alternative events, the payoffs, and the instructions (Lee 1971: 183). Perhaps if the subject does not realize that the sequence of occurrences is indeed random, he will attempt to discover some strategy behind the series (Lee 1971: 150).

'Probability matching' experiments neither verify nor conclusively falsify either a decision model (categorical competence) or a mathematical learning model (variable competence) which implies probabilistic mental processing. "It cannot be said that either mathematical learning theory or decision theory has proved to be highly successful in accounting for the rich and often bewildering complexity of experimental data. Neither theory has invalidated the other nor is it likely to happen" (Lee 1971: 182).

We are now in a position to summarize the claims made by the quantitative paradigm and to assess the status of those claims.
(1) Proponents of both the quantitative paradigm and "traditional" linguistics agree that language is a social institution yet all "traditional" attempts to document the community-wide sharing of some invariant patterns or structures have failed. (2) A central tenet of the quantitative paradigm is that previous attempts to isolate the social character of language have defaulted because they maintained that shared elements must be categorical elements which together form an invariant language state. The social aspect of language will not be isolated by looking for invariant intuitions or speech patterns, but by discovering shared patterns of speech variation. (3) This criterion denies the "traditional" view that shared linguistic elements are categorical and in its stead postulates the variable roles of grammar. The notion of inherent variability implies that a speaker has a tacit knowledge which can make some sort of mathematical calculation of probabilities of occurrence of linguistic elements. As such the notion of inherent variability is a less easily falsifiable claim about the nature of human cognition than the claim that competence is categorical. (4) The burden of proof must be born by proponents of the less easily falsifiable claim. Therefore, the quantitative paradigm must muster evidence against the claim that competence is categorical. But the only evidence presented to date, from "probability matching", is inconclusive. (5) In summary, the status of the quantitative paradigm is thus it is strengthened by the inadequacy of "traditional" approaches to explicate the social character of language, it is weakened by the fact that it cannot refute the "traditional" claim that linguistic competence is categorical.
III The Impact of Phenomenological Psychology of Linguistic Structuralism

In the previous section we saw that the quantitative paradigm has raised a serious question about the "traditional" linguistic view that shared linguistic structures must be categorical and invariant. In this section we will delve more deeply into that "traditional" notion of invariance and uncover the original motivation for postulating that a language system is an invariant socially shared system. We will then be in a position to assess the "traditional" principle of categorical competence and indirectly to assess the denial of that principle by the quantitative paradigm.

The search for the sources of the principle of invariance of socially shared linguistic structures brings us directly to the task of doing a historiography of linguistic structuralism. As indicated in section I, such an historiography will trace the "frame of reference" behind linguistic structuralism, the implicit principles without which the explicit theory could not have been framed. Circumscribing the task more narrowly, we must focus our investigation on F. de Saussure, the major figure in the development of linguistic structuralism. We must examine Saussure's works to discover his rationale for postulating invariant language states. The results of such an investigation may better enable us to deal with criticisms of that concept.

Before beginning the historiographical investigation we must take a moment to review Saussure's work and to discuss the difficulties in interpreting that work. F. de Saussure (1857-1913) was the father of modern structural linguistics, but it is not the case that he invented the principles of modern linguistics. He did not react to 19th century linguistics by single-nandedly fashioning principles for a new linguistics. Rather, it is the case that Saussure synthesized unconnected strands of 19th century thought which he was heir to. However, that synthesis, reported in the Cours de linguistique générale, 1916, is difficult to interpret being somewhat less than perfectly integrated. Two reasons account for this imperfect integration. (1) The Cours de linguistique générale (hereafter CLG) is a posthumous organization and publication of a summary of Saussure's general linguistic considerations. The editors, C. Bally and A. Sechehaye, based their CLG on students' notes and on Saussure's
own memoranda for three courses in general linguistics which
Saussure taught in (1907) (1908-1909) and (1910-1911). As such
the CLG is itself an interpretation of Saussure's ideas, it bequeaths to us at least two problems. Understanding the ideas of the CLG itself, and distinguishing the aspects of the CLG which are the results of editorial interpretation from those aspects which reflect the real Saussure. (2) A second reason for the imperfect integration of the CLG is that it is really an unfinished work. For most of his academic career, Saussure concentrated his attention on particular issues in historical linguistics. Only in his last years did he begin to work out the details of a general linguistic framework. There are indications in the CLG that at the time of his death in 1913 he was still in the process of formulating his general linguistics. The CLG, then, is not just an interpretation of Saussure's ideas, but an interpretation of Saussure's incompletely developed ideas.

This present attempt at reconstructing some aspects of Saussure's thought has an advantage over the 1200 other publications devoted to understanding Saussure's CLG (see Koerner 1971). The advantage is that this investigation follows and makes use of Godel's (1957) analysis of the sources used by editors in constructing the CLG, of Engler's critical edition of the CLG (Saussure 1967) (hereafter CLG/E), including the complete set of Saussure's own notes on general linguistics (Saussure 1971) (hereafter Notes). Furthermore this present study takes advantage of Koerner's (1973) thorough analysis of the origin and development of Saussure's thought.

The principle to be investigated is the principle of invariance of language as a social institution. Such a principle is indubitably evident in Saussure's CLG. He defines la langue as one of the objects of linguistic investigation. La langue is a social fact (CLG/E 172), shared in an identical fashion by all the members of the speech community (CLG/E 57). La langue is an invariant or homogeneous object of study (CLG/E:43), being composed of states in equilibrium. "Un état absolu (de la langue) se définit par l'absence de changements" (CLG/E:229). In short, there is no gainsaying Saussure's position viz. the notion that there is an object of linguistic investigation which is socially shared and invariant. These two key concepts, homogeneous language state and social sharedness, are the distinguishing features of Saussure's la langue. So the task before us is not to decide whether la langue is socially shared and invariant but
why Saussure was convinced that la langue had to have these two characteristics

A Homogeneous language state

The Saussurean notion of homogeneous linguistic state is, by far, more controversial than his notion of social sharedness. Accordingly, that notion has been widely discussed and regularly criticized as an oversimplification. Despite these repeated discussions, homogeneous language state is still a much misunderstood concept, one in need of a more penetrating investigation. The notion of language state forms one pole of the dichotomy language state/language flux. Language states are investigated from a synchronic perspective while language flux is studied from a diachronic perspective. Where most European linguists of the 19th century employed a diachronic perspective to investigate language flux, Saussure emphasized the logical, if not the pedagogical (Koerner 1973:293) priority of the synchronic perspective and the study of language states.

But Saussure's intention went far beyond offering an alternative to studies of language change. His concern went much deeper than the words flux, événements or motus (Notes p 26). Saussure was primarily concerned with the "historical" character of 19th century linguistics. The notion "historical" had a significance in that time from which we are now estranged.

"Historical" in the latter part of the 19th century implied much more than concern with events through time. "Historical" referred primarily to a rigorous attention to empirical detail. "Historical" studies were highly empirical particularistic studies (Koerner 1973:266, Parsons 1947:9). "Historical" defines a set of objectives and methods not only in linguistics, but also in economics and biology roughly after 1825 (Foucault 1970:217ff). The objective of "historical" studies were markedly--Foucault (1970:218) says revolutionary--different from those of the previous century. "The general area of knowledge is no longer that of identities and difference, that of non-quantitative orders, that of universal characterization, of general taxonomies, of non-measurable mathesis, but an area made up of organic structures, that is, of internal relations between elements whose totality performs a function; it will show that these organic structures are discontinuous. We see emerging, as the organizing
principles of this space of empiricities, Analogy and Succession". In the application of these principles there developed the clear
difference between empirical particularistic approaches which
emphasized the discontinuous character of the object of study,
i.e., "historical" sciences, and the less particularistic but
equally empirical studies bent on discovering "internal relation". The term "descriptive" is reserved for these latter

The development of "descriptive" out of "historical" sciences
is the source of interest in systems viewed synchronically. It is
a short step from thinking about systems of internal relations
to positing an abstract state in which such systems exist.
As a result, the notion of unchanging states containing systems
of internal relations appeared in the works of numerous scientists
in the second half of the nineteenth century. F. Brentano
(1973 45, 195) adumbrated the distinction between genetic (read
historical) and descriptive psychology in 1874. In 1887
T. Masaryk distinguished two perspectives in the scientific study
of language, in one perspective data are co-existent data, in
the other the data are in flux. Baudouin de Courtenay as early
as 1868 and his student M. Kruszewski distinguished static and
dynamic perspectives. Perhaps most important, and most influential
over Saussure (Koerner 1973 275) was H. Paul's (1891) recognition
of a "descriptive" grammar of language states as a possible
alternative to a strictly "historical" approach to language
phenomena. What is important to recognize in all this is that
the distinction between synchronic and diachronic perspectives,
between language state and language flux, is implied by the split
between "historical" and "descriptive" approaches in the 19th
century. Far from being original in Saussure's linguistics, this
distinction was "in the air" before Saussure began thinking
about general linguistics.

Saussure's own earliest efforts in linguistics reveal his
inclination toward the "descriptive". His Mémoires sur le
système primitif des voyelles dans les langues indo-Européennes,
1878, published while he was still a student, sought to establish
the original system of Indo-European vowels. The sorts of
internal relations he described were unique and precocious
compared to descriptions by his contemporaries. The vocalic
system which Saussure postulated contained abstract units which
bore no internal positive value, but were negatively defined,
that is, defined solely by their relationship to other abstract units. Such a vowel system was closed, tightly integrated and in a state of equilibrium. Clearly the notion of system in equilibrium presages the notion of language state and of a synchronic perspective (Buyssens 1961:21).

The synchronic perspective was implied by the notion of a system in equilibrium which Saussure developed in 1878, but Saussure was not able to explicate that implication immediately. Only after he had been stimulated by the works of H. Paul, and perhaps T. Masaryk and M. Kruszewski, was he able to finally formulate the synchronic/diachronic dichotomy in 1894 (Notes p. 23). This observation of the "descriptive" character of Saussure's early work and of his having been influenced by his contemporaries is, according to Buyssens (1961) and Koerner (1973), a complete and adequate account of the development of the synchronic/diachronic distinction and of the notion of homogeneous language state in Saussure's thought. Buyssens (1961:23) goes so far as to say that Saussure's notion of the synchronic is entirely based on the notion of system as it was developed in 1878.

Up to this point, there is no debating the excellence of the work of Koerner and Buyssens. However, I am suspicious of the claim that the above account is not only accurate but also adequate. Specifically, there are two elements missing.(1) There is no accounting here for the fact that Saussure was not just a "descriptive" linguist. His linguistics surpassed both the "historical" and "descriptive" approaches. (2) There is no consideration of the role of Saussure's semiological theory, which, at least in my reading of the CLS and of Notes, was an essential ingredient in the development of the notion of homogeneous language state.

The aim of the following discussion will be to show that Saussure surpassed "descriptive" linguistics primarily by reason of his semiological theory. Moreover, I will show that Saussure's notion of language state and his synchronic/diachronic dichotomy are founded on the same principle as is his semiological theory. It will follow from this that if Saussure's notion of language state depends in part on his semiological theory, as I propose, then it is a rather different notion from the concept of language state which was "in the air" elsewhere at the end of the 19th century.
Saussure went beyond "descriptive" linguistics by laying the foundation for "human" linguistics. Accounting for the rise of the "human" sciences at the end of the 19th century is the main objective of Foucault's Archeology of the Human Sciences (1970). Specifically Foucault argues that out of, and as a result of, the historical sciences of the 19th century, there developed radically new sciences of linguistics, economics and biology in the 20th century. These new sciences are distinguished by reason of their object of investigation, unique in the history of science, i.e., man himself. Linguistics, as a model of the newly emerging "human" sciences is concerned with systems and signification represented, not in consciousness, but in the unconscious (1970 361ff). A human science of language "exists not just wherever man is in question, but wherever there is analysis—within the dimension proper to the unconscious—of signifying totalities which unveil to consciousness the condition of its form and contents." "The object of human sciences is not language, it is that being which, from the interior of language by which he is surrounded, represents to himself by speaking, the sense of the words or propositions he utters and finally provides himself with a representation of language itself (1970 353).

I not only concur with Foucault's description of the "human" science of language, but I also suggest that Saussure had a heavy hand in fashioning that "human" science. We can reconstruct Saussure's movements toward "human" linguistics by a careful reading of his Notes.

Until 1894, Saussure could conceive of only one object of linguistics, the language spoken by men. Two possible perspectives could be taken with reference to that object (1) Language can be treated as an empirical reality, a mass of lingual debris from diverse sources, something like a glacial moraine to which different rocks and materials have been dragged through the ages (Notes pp. 5, 16). With that empirical perspective, only the methods of "historical" linguistics were acceptable.

"Tout dans la langue est histoire, c'est-à-dire qu'elle est un objet (d'analyse) historique et non (d'analyse) abstraite" (Notes p. 5)

Everything in language is history, that is, it is an object for historical analysis and not for abstract analysis.
In such an "historical" atomistic view the units we call language and dialect are fictions.

"Les dialectes ne sont pas en réalité des unités définies, qu'il n'existe pas géographiquement des dialectes" (Notes p 13) "Ainsi la langue qui n'étais pas, nous l'avons vu, un notion définie dans le temps, n'est pas davantage un notion définie dans l'espace" (Notes p 12)

Dialects are not well-defined units in reality, geographically dialects do not exist. Thus language, which we saw is not a notion which is temporally defined, is neither a notion which can be spatially defined.

(2) Alternatively one might adopt a perspective characterized by a methodological abstraction. That is, the linguist can, for heuristic purposes, ignore the empirical diversities and concentrate on the imaginary language states in which systems are to be found.

"Il n'y a que des états de langue qui sont perpétuellement la transition entre (l'état de) la veille et celui du lendemain, (vouloir) réunir un certain nombre de ces états sous un nom comme celui de latin ou de français représente la même (opération, offre exactement la même valeur) que si nous opposons le 19e siècle au 18e (ou au 12e). Ce sont de vagues points de repère sans prétention à évoquer l'idée d'un ordre de choses." (Notes p 11)

There are only states of a language which are always the transition between the state of yesterday and that of tomorrow, seeking to unite a certain number of these states under a name like Latin or French represents the same sort of operation, has exactly the same value, as if we were to oppose the 19th century to the 18th or the 12th. These are vague starting points without pretense of doing anything but offering the idea of the order of things.

By either perspective, Saussure's linguistics was perfectly in
line with the "descriptive" character of the work of empiricists like Kruszewski and Paul.

However after 1894, Saussure not only talked of language states, but he talked of them as realities, not as methodological abstractions. The key to the hypostatization of language states was the notion of la conscience des sujets parlants.12

"Grande principe: ce qui est réel dans un état donné du langage, c'est ce dont les sujets parlants ont conscience, (tout ce dont ils on conscience et rien que ce dont ils peuvent avoir conscience)" (Notes p. 19).

Major principle: What is real in any given state of a language is that about which the speaking subjects have a consciousness, everything about which they have a consciousness and nothing about which they could have consciousness.

"Que le langage soit, a chaque moment de son existence, un produit historique, c'est ce qui est évident. Mais qu'a aucun moment du langage ce produit historique représente autre chose que (le compromis le dernier compromis) qu'accepte l'esprit avec certain symboles, c'est là une vérité plus absolue encore, (car) sans (ce dernier fait) il n'y aurait pas de langage. Or la façon dont l'esprit peut se servir d'un symbole -- (étant donné d'abord) que le symbole (ne) change (pas) -- est toute une science, laquelle n'a rien à voir avec les considérations historiques. De plus (si le) symbole change, immédiatement après il y a un nouvel état, nécessitant une nouvelle application des lois universelles. Nous nourrissons depuis bien des années cette conviction que la linguistique est une science double, et si (profondément irrémédiablement) double, qu'on peut (à vrai dire) se demander si il y a une raison suffisante pour maintenir sous ce nom de linguistique une unité (factice)" (Notes p. 23).

It is certainly evident that language at each
moment of its existence is an historical product. However it is also quite true that at any moment of a language this historical product appears as something other than the arrangement, the most recent arrangement, which the mind receives with certain symbols, for without this last fact there would be no language. But the manner in which the mind makes use of a symbol—granting that the symbol is not changing—is a science in itself which has nothing to do with historical considerations. Moreover, if the symbol changes, immediately there arises a new state requiring a new application of universal laws. We have been fostering for some years now the conviction that linguistics is a double science, so profoundly double that one might well ask if there is any real justification for continuing to maintain the name linguistics for this artificial unity.

If the linguist concentrates on la conscience des sujets parlants, what was previously abstract and imaginary suddenly becomes real, and what was previously real, now becomes nonexistent. In this "human" linguistics, language states are real and language processes and changes are unreal. As far as "human" linguistics is concerned, changes and flux do not exist.

"En linguistique, les états ont un raison organique (interne). La connaissance des antécédents historiques n'aide pas à comprendre (ou à fixer à aucun moment la) relation intérieure du signe avec l'idée. Il (reste) essentiellement faux de croire que la langue soit (pas plus d'un certain côté un object) historique" (Notes p. 23).

Knowledge of anterior events does not help one to understand how to establish, at any moment, the internal relationship of a sign and an idea. It remains essentially false to believe that la langue is, except from a certain point of view, an historical object.
"La première chose qui frappe quand on étudie les faits de langue, c'est que pour le sujet parlant leur succession dans le temps est inexistante, il est devant un état" (CLG/E 181).

"The first thing that strikes us when we study the facts of language is that their succession in time does not exist as far as the speaker is concerned." (Saussure 1959 81).

Changes do not exist in "human" linguistics because there are no processes and no changes in the minds of speakers, only language states. A language state is, more precisely, un état conscient (Notes p. 40).

This conclusion that language states are real is not arrived at through either methodological abstraction or idealization. Language states become real only when a linguist shifts his attention from language to the consciousness of speakers. This shift of objects is not to be overlooked as slight or insignificant. The new object of investigation, provides the foundation for a new science, radically distinct from either the "historical" or "descriptive" science which preceded it, a science which Saussure himself calls semiology, the science of conventional signs.

"Dans la langue, c'est aux états, et a ceux-ci seuls, qu'appartient le pouvoir de signifier,... la langue hors de ce pouvoir signifier cesserait d'être quoi que ce soit...Tout fait statique est par opposition aux faits diachroniques accompagné de signification (et par là d'un autre caractère fondamental)" (Notes pp. 27,28).

In la langue, the power of signification pertains to states and to states alone, la langue outside of this power of signification would cease to be what it is...Every static fact is by opposition to diachronic facts accompanied by signification and by that has a fundamentally different character,
We can understand the nature of Saussure's semiological linguistics only after we understand why he shifted his attention from language to the speaking subject. First, language states remain fictions until we investigate the mind of the speaking subject. There language states are the only linguistic realities. Secondly, signification pertains only to language states. Therefore semiological linguistics, which seeks to understand the power of signification, must begin with the proper locus of real language states. That proper locus is not language but the speaking subject's consciousness of language. In Saussure's words, the distinct science of semiological linguistics seeks to discover "la façon dont l'esprit se servir d'un symbole" (Notes p 23).

The first principle of semiological linguistics is that human consciousness of a semiological object is categorical. Saussure is making a very strong claim here, not about language, but about the nature of human consciousness. Obviously he cannot support this claim by turning to other linguists, because none of his contemporaries recognize "la conscience des sujets parlants" as an object for study. Instead he turns to philosophers and psychologists to support his semiological theory.

"Il reste essentiellement faux de croire que la langue soit un objet historique. La cause? Elle est bien simple. Des philosophes, des psychologues ont peut être pu nous apprendre quel était le contrat fondamental entre un symbole conventionnel et l'esprit" (Notes p 23)
It remains essentially false to believe that language is an historical object. The reason? It is very simple. Philosophers, logicians and psychologists may be able to teach us about the fundamental tie between a conventional symbol and the mind.

Summarizing the development of the notion of language state, I suggest that Koerner and Rayssens are quite correct in observing that the notion of language state is implied by the notion of language system which Saussure developed in 1878. Furthermore, they are correct in noting that other "descriptive" linguists had discussed the distinction between synchrony and diachrony, between the study of states and the study of flux. The study of language states was "in the air" and Saussure certainly made use of this concept developed by his "descriptive" contemporaries. But this account is incomplete in that it fails to explain how Saussure surpassed the "descriptive" science of linguistics. Therefore, I have added to the above account the observation that Saussure recognized that language states are realities, and not just idealizations, in the consciousness of speakers of a language. He fashioned his synchronic linguistics as a science of the minds of speakers. This new object of linguistics is the foundation for Saussure's semological linguistics, the goal of which is to discover the manner in which human consciousness accepts and makes use of conventional signs.

The history of the development of the Saussurean notion of language state is now almost complete. What remains is to discover the sources of Saussure's semological theory and especially of the fundamental focus on the speaking subject. Not much can be said with certainty about the sources of Saussure's semology beyond tracing the notions of arbitrariness and conventionality of signs to W.D. Whitney. The reason is that Saussure treated the nature of a semological science in only a few scattered passages. Koerner (1973 330) sums up the situation by saying that "where the semological nature of language in general is concerned, we are not yet in a position to give an adequate picture of the evolution of this idea in Saussure's linguistic thought."

The only hint which Saussure offers as to the source of his semology is his suggestions that "philosophers, psychologists, and logicians have taught us about the fundamental contract between
the mind and conventional signs" (Notes p 23, 48) There is no saying precisely who these philosophers, psychologists and logicians are, the way is open for conjecture. Given this uncertainty of our knowledge, it may be helpful to point out some remarkable resemblances between some of the most essential principles of Saussurean linguistics and some of the principles of Franz Brentano's phenomenological psychology. I do not intend to claim here that Brentano's Psychology from an Empirical Standpoint actually influenced Saussure, though such a claim is plausible on three counts (1) T Masaryk, who Koerner argues (1973 270) may well have stimulated Saussure to explicate the synchronic/ diachronic distinction, was close to Husserl and was strongly influenced by F Brentano (Jakobson 1970 14) (2) G Hegel, who may be the ultimate source of Saussure's notion of structure as composed of negatively defined elements (Koerner 1973 5), developed a "phenomenology" which was analogous to, though more abstract than, Brentano's It is plausible to suggest that Saussure was interested in Hegel's "phenomenology" and was led by that interest to examine the phenomenological psychology of Brentano (3) "phenomenological" approaches to the study of human behavior were "in the air" at the end of the 19th century as much as were "descriptive" approaches. These three observations would render plausible the claim that Saussure was influenced by Brentano, but I will sidestep such a claim for want of a firm historical corroboration. I will rather disregard the actual historical events and even chronology and will be satisfied instead to explicate a few major similarities between the phenomenological psychology of Brentano and Husserl and the general linguistics of F de Saussure My aim is thus to lay a ground work for some later attempt to discover the actual historical link between Saussure and Brentano.

Very briefly the phenomenological psychologists, Brentano and Husserl, share with Saussure the following principles (1) Psychology/linguistics must be a rigorous empirical science. Re phenomenology, this characteristic distinguishes Husserl's phenomenology from Heidegger's hermeneutics (Palmer 1969 127). Re linguistics, this principle accounts for the formal and impersonal character of Saussurean and post-Saussurean linguistics noted by Hymes (1974 147) (2) The object of scientific investigation lies in the natural attitude of the speaker. For Husserl, the world as naively experienced constitutes the starting point for investigation (Natanson 1973 9) We have already illustrated the import-
ance of the mind of the speaking subject as a grounding for Saussure's notion of language state. (3) The psychologist/linguist makes no judgments about the ontological status of the content of that natural attitude. Just as Brentano (1973 77-97) took mental phenomena to be realities to be investigated, so Saussure accepts the consciousness of the speaking subject as the real object of semiological linguistics. (4) Mental phenomena lack temporality. Husserl came to "deny the temporality of being itself and assert a realm of ideas above the flux" (Palmer 1969 127). Saussure, of course, argued (CLG/E 181) that as far as the speaking subject was concerned, change was non-existent. (5) Science proceeds by description, description constitutes new knowledge by "unfolding elements so far implicit and below the level of awareness or consciousness yet within experience" (Verhaar 1973 380). For Husserl and clearly for Chomsky, description is explanation. (6) Psychology/linguistics is "anti psychological". More precisely, while behavioristic psychology is constantly looking for the external stimuli which determine behaviors, phenomenological sciences look to describe and explicate just what is within the natural attitude of the subject. (7) Psychological/linguistic descriptions regularly explicate structures (Verhaar 1973:386), structures which lie below the conscious awareness of the subject.

I have listed these traits to show how closely Saussure's object and method of linguistic research parallel the object and method of a phenomenological psychology. By reason of this parallel we can recognize in Saussure's linguistics at least an analogue to phenomenological psychology. Saussure's linguistics is clearly "phenomenological" though not necessarily directly derived from Brentano's phenomenological psychology.

This observation of the "phenomenological" "frame of reference" of Saussurean linguistics is controversial, but hardly unprecedented. H. Pos (1939, 1957), M. Merleau-Ponty (1960 105-15), R. Jakobson (1970 102), and J. Verhaar (1970, 1973) have all pointed out the "phenomenological" character of post-Saussurean linguistics. For example, Pos comments on the nature of "human" linguistics by saying

"Remarquons qu'en général les sciences humains ont intérêt particulier à l'application du point de vue phénoménologique. Cet intérêt repose sur le fait que l'homme est déjà l'objet d'un savoir avant toute science par le fait de la conscience qu'il a de lui-
meme et par la facon dont il se conçoit la science qui vient se surajouter rencontre chez lui une connaissance déjà présente"

It can be said that in general the human sciences have a special interest in the application of the phenomenological perspective. This interest lies in the fact that man is already the object of knowledge before the advent of any science by reason of the consciousness which he has of himself and by the manner in which he conceives of himself the science which adds itself to the situation finds in him a knowledge already present.

It is primarily by developing a linguistics with a "phenomenological" "frame of reference" that Saussure surpassed "historical" and "descriptive" linguistics. His linguistics was a "human" science and in that it shared certain characteristics with other budding "human" sciences. Saussure himself recognized that affinity of his "human" linguistics to "human" economics even in his own day

B Language as Social Fact

By way of re-orientation our objective has been to uncover the motivation which led Saussure to postulate language states and social sharedness in order to evaluate the criticisms of the "traditional" linguistics by members of the quantitative paradigm. We have just concluded the analysis of the Saussurean concept of language state. To complete our evaluation of these criticisms we must also examine the notion of social sharedness. In this section we will explicate this notion of social sharedness and reveal some of the stumbling blocks hidden within it. This treatment of the concept of social sharedness will be rather abbreviated in comparison to the treatment of the notion of language state since it has been discussed adequately and in detail elsewhere (Washabaugh 1974, Koerner 1973 224-237)

(1) "Il faut une masse parlante pour qu'il y ait une langue. Contrairement à l'apparence, qu'elle est une phénomène sémicoogue. Sa nature sociale est
"For the realization of language a community of speakers is necessary... Contrary to all appearances, language never exists apart from the social fact, for it is a semiological phenomenon. Its social nature is one of its inner characteristics" (Saussure 1959 77).

(2) "La linguistique synchronique s'occuper des rapports logiques et psychologiques relatifs des termes coexistant et formant systemes, tels qu'ils sont aperçus par la même conscience collective." (CLG/E 227).

"Synchronic linguistics will be concerned with the logical and psychological relations that bind together coexisting terms and form a system in the collective mind of speakers" (Saussure 1959 100).

(3) "La langue existe dans la collectivité sous la forme d'une somme d'empreintes déposées dans chaque cerveau à peu près comme un dictionnaire dont tous les exemplaires, identiques, seraient répartis entre les individus" (CLG/E 57).

"Language exists in the form of a sum of impressions deposited in the brain of each member of a community, almost like a dictionary of which identical copies have been distributed to each individual. Language exists in each individual yet it is common to all" (Saussure 1959 19).

In whatever passage you examine, Saussure's \textit{la langue} is socially shared. But the notion of the sharedness seems to vary in each. Quotations (1) and (2) suggest a superorganic sharing\textsuperscript{16}, that is, the social sharedness of \textit{la langue} is in
some way prior to the realization of la langue in each individual. The terms social fact and collective mind bend the reader's mind to Durkheim and to his notion of the sharedness of "social facts." Durkheim says that "the objection may be raised that a phenomenon is collective only if it is common to all members of a society, if it is truly general. This may be true, but it is general because it is collective and certainly not collective because it is general."  (1938 9)

On the other hand, quotation (3) would lead us to believe that la langue in the consciousness of each individual has some priority and that the sharedness is the result of the pooling of the "deposits" in each individual. In that case, as Wells (1947 29) has accurately observed, "one language, like a perfectly pure chemical, is nowhere to be met with in experience, but is an idealized construct designed to make explanation practicable." In other words, language states really exist in individuals, but one can question whether they really exist in social groups, since always and everywhere, groups are heterogeneous. It would seem that if we accept the notion of sharedness in (3) then we are ultimately led to deny the reality of socially shared homogeneous language states.

The confusions will not be erased by protracted hermeneutical arguments. Let us face the fact that Saussure's words are confusing and his ideas about sharedness must still have been developing. There is good reason to believe that Saussure's concept of la langue, particularly the nature of the sharedness of la langue, was an unfinished concept. For one thing, Saussure began to deal with sharedness when he taught his first course in general linguistics (1906-07). It is therefore a much more recent concept than language state which dates from at least 1894. Secondly, in each of the three courses he taught, Saussure revised his notion of sharedness. In the first course he stressed the psychological reality of la langue, in the later two courses he emphasized its social sharedness with increasing strength. If Saussure had taught a fourth course he would probably have altered his notion of social sharedness of la langue again (Koerner 1973 237).

Saussure left his notion of social sharedness in an uncertain and shaky condition. That uncertainty is particularly apparent when Saussure's discussions of sharedness are contrasted with his discussion of language states, the older
former concept. My aim here is not to revise that notion, but only to point out that if there is a problem in Saussurean linguistics, it is likely to be a problem with the weaker concept, sharedness, not with the stronger one, language state.
IV Evaluating the Notion of Inherent Variability in the Light of the History of Linguistics

Labov and other proponents of the quantitative paradigm have indicated, on a number of occasions (WLM, Labov 1972), that it is their intention to revise the Saussurean paradigm. We have seen, in Section II, that those revisions have led to the formulation of the principle of inherent variability. In this section I will pay close attention to those aspects of the Saussurean paradigm which have been taken to task by quantitativists. More exactly, the aim of the following discussion is to examine the quantitativists position with regard to the issues of sharedness and language states, Saussurean principles about which we now have a rather clear understanding. The conclusion of this discussion will be that quantitativists have criticized the wrong concept.

Quantitativists have repeatedly emphasized their concern with representing language as a social system. "It is difficult to avoid the common-sense conclusion that the object of linguistics must ultimately be the instrument of communication used by the speech community, and if we are not talking about that language, there is something trivial in our proceeding" (1972 187, see also Labov 1971 109). Given this concern, they are rightly puzzled by the "traditional" view that the social aspect of language can be investigated in a rather small sampling of individuals of a society. It is, they say, "paradoxical" to claim that the social aspect of language can be satisfactorily described by examining either the utterances or intuitions of a few individuals. But precisely what is paradoxical in this "traditional" view? According to quantitativists the problem lies in claiming that language consists of invariant structures shared by all when in fact every language community is heterogeneous and full of variation. Invariance of structure is a fiction, languages are inherently variable and that accounts for the heterogeneity of the community. Since the community is inherently heterogeneous, the social character of language must be investigated by examining large representative samples of a community. In other words, the problem with the "traditional" view lies, not so much in what is or what is not shared in the community, but with the notion of language state as a set of categorical rules.
They argue that social language states are unreal because language states are unreal. This is the nub of the Saussurean paradox in the quantitativist's view.

Accordingly, quantitativists have rectified the Saussurean paradox by pursuing analysis consistent with the notion of inherent variability. "The application of probability theory to variable rules by Cedergren and Sankoff represents a dramatic success for those who would treat the speech community as a coherent entity and confront linguistic variation directly instead of adjusting data to an older categorical model" (Labov 1973 85). It is primarily the notion of inherent variability which enables quantitativists to adequately describe language as a social fact.

But in repudiating the notion of invariance and of language states, quantitativists are departing from the "phenomenological" "frame of reference" upon which the notion of language states is based. Recognizing this departure from a "phenomenological" linguistics requires a reading between the lines of the work of quantitativists. For example, WLB (p. 121) do not recognize that language state in Saussure's thought is qualitatively different from language state in the thinking of "descriptivists" like H. Paul. They fail to see that while Paul's notion is a methodological abstraction, an "average," language state for Saussure is a reality viz. the consciousness of the speaking subject. If they did recognize this, they could not have so easily ascribed variability of competence to the speaking subject, at least not without responding to the phenomenologists' claims that human cognition is constituted of invariant structures. If quantitativists did recognize the natural attitude of the speaking subject they would know, along with Buckerton (1975 184), that "choice of style is governed, not by any inter-subjective and objectively perceptible features in a situational context, but by autonomous and fluctuating feelings of the speaker himself or herself...It is not the situation as objectively perceived by the observer, but the situation as subjectively perceived by the actor, which constitutes the operant factor." From these evidences, we conclude that the quantitative paradigm departs from not only the principle of language states, but also from the "phenomenological" "frame of reference" on the basis of which language states were originally posited.
Quantitativists argue that "traditional" linguistic theory is paradoxical in that it attempts to find shared invariant structures where there are in fact shared patterns of variation. They have criticized the "traditional" notion of language state but have accepted the "traditional" notion of sharedness without much ado. That "traditional" notion of sharedness says that identical copies of a variable rule, though applied at different frequencies in the community, are nevertheless distributed in basically the same fashion as any categorical rule. And in fact a language boundary is said to exist at that point to which a variable rule cannot be extended. The language community is defined as that collection of individuals who share a set of identical rules, that collection of individuals among whom there is some "replication of uniformity." 20

Quantitativists reject the "traditional" view of language states and accept the traditional view of sharedness, this situation itself appears to be a paradox in the light of our historiographical investigation. Quantitativists have rightly observed that there are problems in Saussurean linguistics, namely that a socially shared language state is a fiction. But this observation led them to revise not the weaker Saussurean concept of sharedness, but the former Saussurean concept of language states. In so doing, quantitativists have departed from the "phenomenological" "frame of reference" of "traditional" linguistics which is in fact the foundation for the major advances of "traditional" linguistics over "historical" or "descriptive" approaches. Quantitativists have tried to remedy the weaknesses in "traditional" linguistics by repudiating its most essential features. They have cured the illness by executing the patient.

V Conclusions

The notion of inherent variability, and therefore the quantitative paradigm itself, is suspect. It assumes a less easily falsifiable view of the nature of human cognition without first having falsified the stronger claim that cognition is categorical. It points out a weakness in "traditional" linguistics but resolves that weakness in a paradoxical fashion. It revises the solid concept of language state but ignores the unstable one, social sharedness. Moreover, in revising that solid concept, it deviates from the "phenomenological" "frame of reference" of "traditional" linguistics. All these
observations are reason to be suspicious of the validity of inherent variability though not to discard the notion. Quantitative analyses are, after all, descriptively adequate. The variable rule is able to represent accurately the variability of phenomena in the speech community.

Inherent variability should only be discarded when there is available a right-minded revision of "traditional" linguistics which is also descriptively adequate. We already have an inkling as to what such a revision should look like, it should maintain the notion of language state but revise the notion of social sharedness. Such a revision should, like the quantitative paradigm, see a paradox in the claim that the social aspect of language can be investigated in a small sampling of a language community. But such a revision should argue that homogeneous social language states do not exist because there is no society in which a language state is socially shared by being present in an identical fashion in all the individuals of the community.

Such an alternative to a quantitative paradigm which I have been describing is not just hypothetical, it has been proposed more than once by more than one linguist. In the following pages I will briefly outlining two examples of such a revision, Lieb (1968) and Buckerton (1975).

The first such revision is Hans-Heinrich Lieb's attempt to resolve some of the confusion about the synchronic/diachronic perspectives through a reformulation of the axioms of a linguistic theory. This particular reformulation is interesting in that it is one of the few revisions of Saussurean linguistics which has taken into consideration the precise nature of the Saussurean distinctions (Lieb 1967). Lieb's "language stage" is consistent with Saussure's notion of language state and so with the notion of a synchronic study of language. However Lieb finds it necessary to revise the Saussurean notion of sharedness which together with language stage defines the object of linguistics. It is an empirical fact that language as "la somme des tresors de langue individuelles" does not form a language stage in which there are no changes. "It can be shown that de Saussure was aware of the (this) problem without, however, having solved it (Lieb 1967:34).

Lieb's resolution of this problem is to recognize that
is not a homogeneous unity but a complex of sub-stages each of which may have a Saussurean system, i.e., an invariant system. The relationship of diachrony to synchrony is resolved in recognizing that the succession of sub-stages through time is qualitatively the same as the juxtaposition of sub-stages of a complex at one point in time. As a result of this revision of the axioms of linguistic theory, a synchronic analysis is accomplished by a direct consideration of the heterogeneity of language in the community.

Bickerton’s Dynamics of a Creole System (1975) is a second revision of the Saussurean notion of sharedness. That revision is, in the end, similar to Lieb’s though arrived at through analysis of empirical data rather than by logical manipulation of theoretical axioms. Bickerton (1975 180) rejects the view that there are "large, stable, quasi-homogeneous language communities with monoglot speakers" which constitute the object of linguistic descriptions. In other words, the linguistic knowledge to be represented by a grammar is not shared in identical forms throughout the community. Rather, any speech community is an organization of multiple linguistic competences, a grammar of a language must represent this heterogeneity by being polylectal. More specifically, the linguistic variation in such heterogeneous speech communities as Guyana, Jamaica, and Hawaii demand that each individual in these communities must possess a polylectal competence, such individuals have internalized multiple implicationally arranged sets of categorical rules. A complete description of the social language system of these communities will require a juxtaposing of all the distinct polylectal grammars in the community.

Both Lieb and Bickerton have recognized difficulties with Saussure’s linguistics, they have attempted to revise that linguistics by refashioning Saussure’s concept of sharedness while maintaining the notion of language state. To the extent that their revisions are empirically adequate—in that they can handle the variable and heterogeneous phenomena described by the quantitative paradigm—they are more acceptable than the quantitative paradigm. Their revisions require no alteration of the rather long standing, not-yet-falsified view that human cognition is categorical.

In conclusion, the quantitative paradigm has repudiated the
"phenomenological" "frame of reference" of "traditional" linguistics and completely ignores the natural attitude of the speaking subject. It has revised, without having falsified, the view that human consciousness categorizes conventional signs in place of that "traditional" view of cognition, it has described cognition as a probabilistic processor, a sort of device consistent with the notion of inherent variability of linguistic competence. It has rejected the notion of categorical language state, a firm Saussurean concept, but it has accepted the rather unstable view that language must be socially shared by being distributed in an identical fashion among all members of a community. These deficits would not automatically require the rejection of the descriptively adequate quantitative paradigm were it not for the fact that there are alternative less paradoxical revisions of "traditional" linguistics which are descriptively adequate.

NOTES

1. The term quantitative paradigm is used here to refer to that set of linguistic principles, and/or that group of linguists who espouse that set of linguistic principles, outlined by G. Sankoff (1972), Labov (1972), and Wolfram and Fasold (1974).

2. "Traditional" refers to the Saussurean-Chomskyan paradigm. There is a precedent and rationale for treating these two schools of linguistic thought as a unit (Koerner 1973 13).

3. I could just as well have borrowed Koerner's (1972 259) term "climate of opinion" which "denotes the particular intellectual atmosphere prevailing at a given period of time."

4. Variation here means alternation between phonological variants, morphological variants, or syntactic variants. For example, in American English, variation is commonly found between first and first, and between not...any and not.. none. "Traditional" linguistics has usually treated these alternations as arbitrary, that is, as either free variation or as dialectical differences.

5. In fairness to generative linguistics it should be pointed out that Labov's criticisms of Chomsky are somewhat off the mark. Labov, Yaeger & Steiner (1972 269) claim, for example, that Chomsky's object of linguistic investigation is "the speaker's
introspective judgments." But Chomsky has stated clearly enough that the object of linguistics is "the linguistic intuition of the native speaker (1965 26). Dore (1971) has pointed out that there is a world of differences between intuitions --- immediate and non-discursive knowledge --- and introspective judgments which are in fact new behaviors, independent of, but supposedly based on, intuitions. For Labov to show that introspective judgments are variable is to show nothing about the nature of linguistic intuition, it is only to point out weaknesses in the method of explicating linguistic intuitions (cf. Greenbaum 1973).

6. According to WLH (p. 167) V. Mathesius of the Prague School is a notable exception to this generalization. Mathesius (1964) whose linguistic objectives if not methods are emulated by WLH, recognized the variability or potentiality of linguistic phenomena in a community. But what WLH do not mention is that Mathesius proclaims his study of the potenti- ality of linguistic phenomena to be individualistic and not sociological. Mathesius considers it to be part of his task in describing variability to overcome the "anti-individualistic" bias of linguists and "the one-sided emphasis that they laid on the social character of language" (1964 26). Such an objective is hardly in line with the quantitativists' aim to describe the social character of language

7. This implication can be debated, though I do not have the space to give the issue fair shrift here. To indicate the lines of the debate I would simply point out that Saussure, in discussing the speaker's consciousness of a semological object which is arbitrary and conventional. He claims that human knowledge of that object is homogeneous, he makes no claims about the character of human knowledge of any other object

8. Specifically, the test employs a binary series of "two discrete events with constant probability over trials. The event occurring on any trial is independent of events occurring on other trials in the series" (Lee 1971 145)

9. Where the occurrences of X and -X are random and where X occurs more than half the time, the optimal strategy should be to select X on every trial.
10. See my review of Notes (Washabaugh 1975).

11. Both Lieb (1967) and Koerner (1973:273) find Brentano’s distinction too vague to have had any influence over Saussure.

12. Koerner (1973:264) is a bit unfair in his criticism of Stephen Ullmann's statement that "synchronic linguistics is more akin to the attitude of the ordinary speaker." Koerner ignores the grande principe (Notes, p.27) and claims instead that the le sujet parlant never became a concept in Saussure’s theory. Admittedly the concept of le sujet parlant remains implicit in much of Saussure’s theorizing, he avoids using the term when it would seem to be most appropriate, e.g., when discussing why linguistics and economics are divided into synchronic and diachronic sciences while other sciences are not (CLIG/E 177). Saussure relies instead on the role of valeur in the two sciences to account for the division. I suggest that the notion of valeur is, as part of Saussure semiology, intimately bound up with and dependent upon the notion of le sujet parlant. That notion remains implicit in, but certainly not absent from all the other semiological notions discussed in the CLG.

13. At the same time as Brentano was developing his phenomenological psychology. Dilthey was developing his "phenomenological" hermeneutics (Palmer 1969:98). The motivation for both approaches was a recognition of a need for a science of the human which was qualitatively from a science of the natural.

Dilthey’s "phenomenology" had an impact on the social sciences, particularly on M. Weber (Parsons 1947.9) though Saussure’s linguistics shows no symptoms of having been influenced by that history-oriented "phenomenology".

14. Saussure could not, of course, have been influenced by Husserl whose work was largely published after Saussure’s death. Jakobson (1970.14) argues, however, that Husserl’s phenomenology did have a strong influence on the development of the various post-Saussurean schools of linguistics,
Merleau-Ponty's (1964 216) notion of speaking subject is somewhat different from, but certainly related to Saussure's notion of speaking subject. "From the phenomenological point of view," says Merleau-Ponty, "for the speaking subject who makes use of his language as a means of communicating with a living community, a language regains its unity." Merleau-Ponty is describing an object of investigation requiring an explication of the mind of the speaking subject, not just as the locus of a system of signs, but as a participant in a living community. Ricoeur (1967) rightly points out that such a notion of speaking subject is not apparent in Saussure's rigid distinction between la langue and la parole. Saussure sets aside the subject as a living speaker and examines human consciousness only insofar as it supports a system of signs. Ricoeur's observations are accurate but deceptive, implying that the notion of speaking subject is a refinement which phenomenology has contributed to post-Saussurean linguistics. However, Saussure's explicit theory is built on the implicit recognition of the speaking subject as the object of investigation. The "phenomenological" "frame of reference" of Saussurean linguistics is not to be gaussed by pointing out that he was not concerned with the speaker in the living community. Saussure's followers give evidence of Saussure's "phenomenological" "frame of reference" in the sorts of revisions they suggest. G. Guillaume (1973 64-72) and A. Sechehaye (1969) are certainly trying to elaborate the concepts of la langue and la parole to include the study of the speaking subject as a living functioning subject. But in so doing they see themselves to be explicating what is already in the Saussurean framework rather than making a radical alteration of that framework or contributing a new basic concept.

There is no evidence, however, that in emphasizing sharedness, Saussure rejected the psychological reality of la langue. In other words, no clear support can be found for interpreting Saussure's sharedness as akin to or derived from Durkheim's notion. The terminological similarities between Saussure and Durkheim lay a red herring in the path of our understanding of Saussure's concept of sharedness (Washabaugh 1974 27).
17. I think that Saussure had a goal in quest of which he was refashioning his notion of sharedness. That goal is implicit in quotation (2) above. He was struggling with the social processes, involving a community of speakers, which account for the inter-subjective character of language, a necessary part of his semiology. Not only did Saussure not arrive at a clear understanding of processes which account for the inter-subjectivity of language, but philosophers, linguists, and anthropologists are still struggling with the problem (Garfinkel 1967, Wallace 1961:26).

18. T. Luckmann (1973:181) discusses the invariant character of the natural attitude of the speaking object "Measurement of human actions and their objectivations must be based on a two-level account of the invariant structures underlying typifications of social reality and of the invariant structures underlying linguistic articulation of historically variant concrete typifications of human action in human experience."

19. Initially, Labov's notion of sharedness had all the earmarks of Durkheimian superorganicism. He suggested that systematic relations could be found only in a community of speakers not in individuals. In other words, like Durkheim, Labov was claiming that a language is general because it is collective (Washabaugh 1974:28). This superorganic view of sharedness has since been repudiated (Cedergren & Sankoff 1974, G. Sankoff 1972). It seems to have been replaced by a view which is close to Saussure's, i.e., an identical copy of a rule must exist in the mind of each speaker of a language.

20. D. Hymes (1974:75) points out that A.F.C. Wallace's notion of "replication of uniformity" is an apt characterization of the "traditional" notion of sharedness. However, I intend to show that this is not the only notion of sharedness available to structural linguistics as Hymes implies (1974:79).
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