Did you say "utter nonsense?" : an examination of the linguistic theories of F. de Saussure and Noam Chomsky

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Did you say "Utter Nonsense?"
An Examination of the Linguistic Theories of F. de Saussure and Noam Chomsky

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[Signatures]
"You will observe the Rules of Battle, of course? the White Knight remarked, putting on his helmet too.

"I always do," said the Red Knight, and they began banging away at each other with such a fury that Alice got behind a tree to be out of the way of the blows.

"I wonder, what the Rules of Battle are," she said to herself, as she watched the fight, timidly peeping out from her hiding place. "One rule seems to be, that if one Knight hits the other, he knocks him off his horse; and, if he misses, he tumbles off himself--and another Rule seems to be that they hold their clubs with their arms, as if they were Punch and Judy--What a noise they make when they tumble! Just like a whole set of fireirons falling into the fender! And how quiet the horses are! They let them get on and off just as if they were tables!"

"Another Rule of Battle, that Alice had not noticed, seemed to be that they always fell on their heads; and the battle ended with their both falling off in this way, side by side. When they got up again, they shook hands, and then the Red Knight mounted and galloped off.

"It was a glorious victory, wasn't it?" said the White Knight, as he came up panting.

"I don't know," Alice said doubtfully..."

-----Lewis Carroll's Through the Looking Glass
One of the most delightful aspects of the works of Lewis Carroll is the humorous extent to which serious intellectual issues are reflected in his characters. For the scholar, it is precisely this quality which gives Carroll's works their value. By seeing key theoretical issues turned on their ears, insight is gained not only into the nature of the problem itself, but also into the nature of human reason. Understanding is achieved through the study of Carroll's topsy-turvy tales, because the relations between the problems and the unusual contexts in which they are placed are observed by the reader. Perhaps it is for this reason that G. K. Chesterton has said, "It is not children who ought to read the works of Carroll," but rather,

"sages and grey-haired philosophers....That we find pleasure in certain language and elaborate stories, in certain complicated and curious forms of diction, which have no intelligible meaning whatsoever, is not the subject for children to play with; it is a subject for psychologists to go mad over."

Gardner 1962: 16

As humans, the fact that we find the mistakes and blunders of others to be humorous at times is indeed a curious phenomena. This is important as it emphasizes the significance of rules in our society. (see Baker and Hacker 1984: 243) Among others, the works of Carroll, with their nonsense rhymes, consistently illogical characters and incorrigible puns, show the fascination we have with linguistic rules in particular. Being one of the few persons Wittgenstein mentions in his Philosophical
Investigations (1953), perhaps it is to Carroll's linguistic humor that Wittgenstein is referring when he asks: "Why do we feel a grammatical joke to be deep?" He explains,

"The problems arising through a misinterpretation of our forms of language have the character of depth. They are deep disquietudes; their roots are as deep in us as the forms of our language and their significance is as great as the importance of our language."

Wittgenstein 1953: #111

While it would be far beyond the scope of this present paper to attempt any sort of complete answer to this question, perhaps some light can be shed on the investigation by a close examination of modern conceptions of language and its study. By answering these questions we may come to see just what it is we know when we say we know a language. This is however, not an easy task. The concerns of language are not only very deep but their far reaching relevance intertwines us in a web of related issues. The problems of language do not only affect the linguist, studying language for its own sake, but they also arise for the philosopher, the mathematician, the psychologist, the anthropologist, and well, everyone. But this is just to restate the problem. How should one approach the study of language? And, an even more difficult question, what is the correct approach? These are questions which contemporary scholars must face. In fact, in the past several decades questions about language and concern over linguistic study have been in increasing academic vogue. The growth of the discipline itself has had an important
effect on the academic community. The recent emergence of
the generative theories of grammar can perhaps best be seen
as an indication of this effect.

The generative movement began with the
publication of Noam Chomsky's *Syntactic Structures* (1957),
where he initially set forward this approach. His promotion
of this theory is most often referred to as "revolutionary"
because of the impact it has had upon the way in which
language is conceptualized. In their introductory text to
generative linguistics, *Modern Linguistics*, Neil Smith and
Deidre Wilson describe the Chomskian revolution in this way:

"One immediate result was that linguistics began
to be of interest to philosophers, psychologists, and
logicians; this was largely because Chomsky was
proposing to draw conclusions from the nature of the
language to the nature of the human language-user—
conclusions which directly contradicted assumptions
currently being made in philosophy and psychology, and
which seemed to warrant consideration by philosophers
and psychologists."

Smith and Wilson 1979: 9

Through the years Chomsky has constantly revised and
refined his theory. Significant portions of several of his
more recent works, including *Rules and Representation*
(1980), and *Knowledge of Language* (1986), deal with the
nature of language in terms of our knowledge of its grammar.
Grammars and their roles in linguistic activity play an
important part in influencing linguistic theory. Later, we
shall explore some of Chomsky's views in detail.

As prevalent as generative theory is however, not all
scholars, even those within the discipline, have been
soundly convinced by Chomsky and his fellow generativists. Roy Harris contends that much present day theorizing about language is based on misconceptions about the nature of language. His works The Language Makers (1980), The Language Myth (1981), and The Language Machine (1987b), are attempts to dispel these beliefs. Specifically, the latter work is his attack on the generative approach and its mechanistic view of language. The differences between Harris' view and that of Chomsky can be explained by recognizing an important fact. One's conception of the nature of language significantly influences the way one approaches its study. Harris takes up the challenge of exposing the basic linguistic assumptions of the generativists. By showing how these assumptions are misguided, he can explain away the problems of generative theory and illustrate the misdirection of that approach. This paper shall take a similar approach in its critique of Chomsky.

Theoretical disputes within linguistics however, are not the only areas in which the nature of language is a controversial topic. Recently, the conception of language put forth by another revolutionary figure, the philosopher Ludwig Wittgenstein, has been central to academic discussion. Oxford philosophers Gordon Baker and Peter Hacker have published a proliferation of works based on Wittgensteinian thinking. Their works include a two volume exegesis of Wittgenstein's Investigations as well as a
defense of their ideas on linguistic rules titled *Skepticism, Rules and Language* (1984b). This work can be seen as a response to an essay by Saul Kripke, *Wittgenstein: On Rules and Private Language* (1982). Kripke gives an altogether different interpretation of Wittgenstein's view of linguistic rules, than do Baker and Hacker. While it is not the task of this paper to delve further into this debate, what is important is that it again emphasizes the amount of time and effort today's academic thinkers are spending dealing with linguistic concerns. Before we begin to look at some of these concerns specifically though, perhaps first some perspective should be gained on how a scholar's approach to language study is influenced by the prior assumptions he makes about what language is and how it should be studied. These assumptions, in turn, influence not only how the study is carried out, but also what is being studied as well.

Alice, the linguist

Turning back to the introductory passage from Carroll's *Looking Glass*, perhaps an analogy could help to guide our inquiry. This passage illustrates the earlier point that the way in which language is approached influences the resulting theory. One can easily see that Alice is in the familiar position of the linguist. From behind her tree she must deduce the "Rules of Battle" which the Knights so obligingly
follow during their joust. Similarly, the linguist must deduce, from behind his "tree," the rules of language which speakers use when they "encounter" one another. Both are trying to give an account of the knowledge the speakers, or in Alice's case, the Knights, use to carry on their "battle". From the White Knight's initial remark, "Will you observe the Rules of Battle?" one can assume that he is referring to an established set of guidelines for fighting that is known by all Knights. A similar case may be seen in language. The collective set of guidelines, or rules, which one observes when speaking a language is called its grammar. Thus when the White Knight asks, "Will you observe the Rules of Battle?" it can be seen as parallel to someone striking up a conversation with a foreigner by asking "Do you speak English?"—or, paraphrased, "Will you observe the grammatical rules of English so that we might have a conversation (i.e.-"do battle")?" One major concern of the linguist is to understand what we mean when we say a speaker knows a grammar.

In more explicit terms, Smith and Wilson have described a grammar as,

"conceived of as a set of rules which have two main functions. They separate grammatical from ungrammatical sentences, thus making explicit claims about what is 'in the language' and what is not. They also provide a description of each of the grammatical sentences, stating how each should be pronounced and what it means....they combine with each other to form a system—a grammar—which gives an explicit and exhaustive description of every sentence which goes to make up a language."

Smith and Wilson 1979:14
This definition of a grammar seems to be analogous to the conclusions Alice could obtain from watching the Battle. She could deduce the Rules of Battle, from the actions of the Knights, by seeing what attacks are performed and the results that then occur. "...if one Knight hits the other, he knocks him off his horse; if he misses, he tumbles off himself..." Presumably the "Rules of Battle" also would state attacks which are not permissible, though it may be impossible for Alice to determine these from watching such honorable Knights. These unfair attacks are not a part of Battle in the same way that ungrammatical statements are not a part of a language. However, should a Knight make an unfair hit, presumably they could appeal to their code as a standard by which they could judge the action and settle the dispute. In language-use, we follow a similar pattern. To correct someone's speech we turn to the grammar to tell us just how a sentence "should be pronounced and what it means." There are other parallels as well, but what this analogy is intended to show is just one approach to language. This approach is one of an observer. The rules which Alice is trying to determine are unknown to her for she has not been trained as a Knight. This is the same as a the task of the linguist studying a language which he does not speak. Given a set of utterances by a speaker of the language, the job of the linguist is to infer the rules with which those utterances are in accord. Merely by observing a set of such utterances, however, the linguist does not have
direct access to those rules. In the end, what he takes to be the relevant rules will depend on his own interpretation of the evidence. Obviously he would interpret the data so that it is in accord with his theory. However, the theory has been based on certain presumptions about what a grammar must be like. And yet, at this point one might wonder if these presumptions really do apply to the data. Perhaps the data ought to be examined first in order to provide the fundamentals of the theory.

The reader as linguist

The story of Alice and the Knights can however, be seen from another perspective as well. Anyone at all familiar with the Alice stories will at once recognize the chess theme. Throughout his tales Carroll uses this theme to create his nonsense settings. The area in which Alice is travelling is aligned with brooks and hedges which criss-cross to form the chessboard. The characters which she meets are all parodies of chess pieces, our two knights for example. Alice even alludes to the chess theme by describing the knight's mounts "as if they were tables." The parallels are quite strong. From this perspective then, the "Rules of Battle" can be seen as analogous to the rules of chess, which in turn, are referred to as a parallel of the rules of grammar. What we have is the often used games analogy.
In playing a game we often appeal to the rules when we feel that someone has made an unjust or an incorrect move. We refer to the rules when trying to instruct someone in how to play the game or just when explaining the finer points of the game to a novice. The rules are the standard by which we judge fair play. They define the moves that are appropriate, or allowed in the game, and which are illegal, or not part of the game. Rules guide the way we play the game. In much the same way, we use grammatical rules. We refer to the rules of grammar when teaching the language or in explaining why we used a particular term. Also, as already stated, the rules of grammar tell us which statements are within the language (grammatical ones) and which are not (ungrammatical ones). Some languages even have a version called the "standard version" to which its dialects are often related as variations. Other parallels can, and have been drawn between language and games.

The analogy between the game of chess and the interplay of language-users is quite common in linguistic discussions. Its first prominent use was by F. de Saussure. Saussure is often referred to as the Father of Modern Linguistics because of the lasting influence of his work the Cours de linguistique generale. (1916) (Yet another revolution!) This was the first attempt to establish linguistics as a science. In his forthcoming book, Roy Harris compares Saussure's use of the games analogy with its use by Wittgenstein. In Language: Saussure and Wittgenstein
(1988), Harris characterizes the significance of the analogy by saying:

"The chess comparison would be extremely important in the work of both Saussure and Wittgenstein even if all it did was to illuminate what kind of identity a linguistic unit has. But it does far more than that. It simultaneously throws light on meaning, on the nature of language and linguistic rules and on the relationship between thought and language. In short it represents a radical shift of perspective on language, replacing the nomenclaturist view by one from which the language-user is seen as essentially as the player of a game. For Saussure this is a shift which at one stroke clarifies the whole enterprise of linguistic description and at last makes it possible to place the science of linguistics on a sound theoretical basis. For Wittgenstein, it is the philosopher's antidote to that 'bewitchment of out intelligence by means of language.' (P.I., 109) which it is the business of philosophy to dispel."

Harris 1988: 47-48

Harris' description shows, without a doubt, the numerous parallels that can be gleaned from the games analogy. Certainly Carroll did not intend to illustrate all, or perhaps any, of these parallels, for it was not his intention to put forth a linguistic theory. The analogy is helpful nonetheless, for from the reader's perspective we see yet another approach to language. By seeing the Knights as representations in an analogy, the speaker of a language is seen as a game-player. This is quite a separate approach to linguistic theory than is the one described by comparison to Alice's position. Note that here again, the role that grammars play in theory is determined by assumptions about their nature. Even from this brief preliminary examination one obvious difference is that one view is theorizing about something known and the other about something unknown.
Other such differences shall be drawn out in the body of this paper. By analyzing the approaches of Chomsky and Saussure to linguistic study, their basic assumptions about the nature of language will be revealed. At the center of this discussion will be questions concerning what language is and what it is not, about our knowledge of grammar, and about what it means to say we have such knowledge. Concluding remarks will compare and contrast the answers provided by the Chomskian and Saussurian theorist.

**Saussure's Approach: Linguistics as a Science**

Both Saussure and Chomsky have been referred to as revolutionaries in their field. In fact, at some time, both of their theories have been described as having a "Copernican" effect upon the discipline. (Chomsky by Voegelin 1958--cited in Newmeyer 1980: 19 and Saussure by Harris 1983: ix) This is perhaps not a felicitous comparison, for both Saussure and Chomsky were striving to provide linguistic study with a firm foundation as a scientific discipline. In each case, this was intended to assure the study of language the respect and serious consideration which the sciences accrue in the academic community. As this is an important motivating influence on the theories of both Saussure and Chomsky, it calls for further examination.
Saussure begins the *Cours* with a brief survey of the history of language study describing the work done prior to his generation as unscientific. He notes that the Greeks began the study with the advent of Grammar, but he argues that the problem with this approach to language, which has been "continued mainly by the French," is that it is a prescriptive discipline "based on logic."

"It offers no scientific or objective approach to language as such. Grammar aims solely at providing rules which distinguish between correct and incorrect forms. It is a prescriptive discipline, far removed from any concern with impartial observation, and its outlook is inevitably a narrow one."

Saussure 1916: 1

It must be noted, however, that Saussure does not reject the inclusion of grammar in linguistics. His aim is to establish linguistics as a scientific discipline. It is the non-scientific methodology of traditional grammar to which he is objecting.

Saussure goes on to eliminate from consideration as appropriate approaches to linguistic study the areas of philology and comparative grammar as well. These approaches, while perhaps more rigorous in their meticulous analysis of written texts, are dismissed because of their "neglect of the living language." He argues that these approaches are too historically oriented and do not focus on the social and cultural implications of language. It is with the Neogrammarians that Saussure feels "Linguistics properly so called, ... emerged from the study of the
Romance and Germanic languages." (Saussure 1916: 4) He writes,

"The achievement of the Neogrammarians was to place all the results of comparative philology in a historical perspective, so that linguistic facts were connected in their natural sequence. The Neogrammarians no longer looked upon a language as an organism developing of its own accord, but saw it as a product of the collective mind of a linguistic community. At the same time, there emerged a realization of the errors and inadequacies of the concepts associated with philology and comparative grammar."

Saussure 1916: 5

Nevertheless, Saussure claims that the Neogrammarians left many questions unanswered. It is at this stage in the development of linguistics that Saussure situates his theory.

For Saussure, the goals of linguistics are three:

"(a) to describe all known languages and record their history. This involves tracing the history of language families and, as far as possible, reconstructing the parent languages of each family;

(b) to determine the forces operating permanently and universally in all languages, and to generate laws which account for all particular linguistic phenomena historically attested;

(c) to delimit and define linguistics itself."

Saussure 1916: 6

It is interesting to note, as has Harris, in his critical commentary on the Cours called Reading Saussure (1987), that this is a precise application of "a general paradigm from the philosophy of science" popular at the time Saussure wrote the Cours. The paradigm, as Harris defines it, is:

"For any science S, it falls to that science to describe the phenomena within its domain....to explain that same phenomena as particular instances of the general laws of S....[and] third, the way S
accomplishes these twin objectives defines S as a science."

Harris 1987: 12

It then becomes the goal of the first part of the Cours to define these "phenomena," to give the object of study for linguistics. This, Saussure argues, is an important characteristic of any science. The scientist must have a clear idea what he is studying and what his goals are in undertaking the study. In adopting these scientific standards, Saussure must present linguistics as a discipline independent from those which surround it, with its own autonomous object of study. This may appear difficult for, as Saussure acknowledges, the object of linguistic study is not "given in advance."

"Other sciences are provided with objects of study given in advance, which are then examined from different points of view. Nothing like that is the case in linguistics....The object is not given in advance of the viewpoint: far from it. Rather, one might say that it is the viewpoint adopted which creates the object. Furthermore, there is nothing to tell us in advance whether one of these ways of looking at it is prior to or superior to any of the others."

Saussure 1916: 9

Saussure argues that the duality of linguistic phenomena complicates this difficulty. Oral articulation has its counterpart in auditory reception. Sounds are paired with psychological entities (concepts). Language itself is divided into social and individual aspects. Furthermore, the physical, the physiological and the psychological can all be approached from one of two directions. Any approach to linguistic study which neglects
this fundamental duality of language will, Saussure claims, be misconceived from the very start. Instead, Saussure's solution to this dilemma is to assert that

"The linguist must take the study of linguistic structure as his primary concern, and relate all other manifestations of language to it."

Saussure 1916: 9

The relating of all manifestations of language to linguistic structure is accomplished through the Saussurian analysis of the speech circuit.

The Saussurean Speech Circuit

![Diagram of the Saussurean Speech Circuit](image)

Cours de linguistique générale, p. 11

Two individuals are necessary to make a complete speech circuit. The circuit begins when one individual associates a concept, or "fact of consciousness," called the signifié, with certain sound patterns, called the signifiant, to form a linguistic sign. This is a mental process, but the formation of the linguistic sign is followed by a physiological one, the actual articulation of the sound pattern. This, in turn, is followed by a physical process,
the transmission of the sound through the air, from the speaker's mouth to the hearer's ear. The second individual receives the sound and the cycle is reversed. The physiological process begins again and ultimately, the mental process restores the linguistic sign in the mind of the second individual. This though is only half of the circuit. Presumably the second individual will respond by making another association and the circuit will reverse itself until it is completed in the first individual.

Saussure analyzes this circuit and delegates each aspect to its proper area of study. The physical aspect he totally eliminates from consideration, leaving it to the physicist. The physiological belongs to the phonetician. The psychological however, he breaks down further, for he wants to characterize linguistic structure as an abstract mental entity.

The complimentary "two-sidedness" of language is reflected in Saussure's model. He constantly compares what language is with what it is not. The study of language through other disciplines is contrasted with how it is studied by the linguist. Ultimately, even the terminological distinctions that Saussure utilizes in his theory reflect the duality he sees in language. The langue/parole distinction is at the core of Saussurian linguistics. This distinction is reinforced by the separation of the social and individual aspects of language, the synchronic and diachronic views of linguistic study, and
even the division of the linguistic sign into signifié and signifiant.

The Saussurean concept of le langage is language with all of its aspects together as a whole. The component parts of langage are la parole, or speech, and la langue, or linguistic structure, that which linguistics proposes to study. During the speech circuit each individual has access to la langue, which in turn structures their thought and their interpretation of speech sounds. The expression of those thoughts in language is however, an act of parole. The act of association which ties the signifié to the signifiant is also seen from two different perspectives. On the one hand, Saussure distinguishes between an executive aspect, the speaker's act of associating a concept to a sound pattern, and a receptive aspect, the hearer's associating a sound pattern to a concept. The distinction between the executive and receptive act is thus a distinction that belongs within la parole. Notice though, that both these associations are carried on in parole independently by each individual. According to Harris (Harris 1987: 24), the point of the distinction is to lay the ground for the establishment of la langue in society. In la langue, concept and sound pattern are associated independently of individual speaker/hearers and their acts of parole. Saussure describes the situation in this way:

"The individual's receptive and co-ordinating faculties build up a stock of imprints which turn out to be for all practical purposes the same as the next person's. How must we envisage this social product, so
that the language itself can be seen to be clearly distant from the rest? If we could collect the totality of word patterns stored in all those individuals, we should have the social bond which constitutes their language. It is a fund accumulated by the members of the community through the practice of speech, a grammatical system existing potentially in every brain, or more exactly in the brains of a group of individuals; for language is never complete in any single individual, but exists only perfectly in the collectivity."

Saussure 1916: 13

Saussure characterizes *la langue* as something shared by society, and in that sense it is social or collective, although it is only accessed through the individual. *La parole*, on the other hand, is a genuine social activity, requiring two or more individuals for it to occur. Saussure thus describes *la langue* as something collective in nature and yet used by the individual, and he contrasts this to his characterization of *la parole* as individual actions seen collectively as a social phenomena. This is not only confusing to the reader of the *Cours*, but may have even confused Saussure himself.

Perhaps a clearer understanding of Saussure's distinction between *la langue* and *la parole* can be gained by examining a closely related parallel. Saussure's grammatical system of *la langue* takes its place at the interface of thought and sound. It is a social product; although individuals perform the mental associations of thought and sound in each event of *parole*. This interface is the subject of his discussion of the substance/form distinction.
"In itself, thought is like a swirling cloud, where no shape is intrinsically determinate.... The substance of sound is no more fixed or rigid than that of thought.... It is a maleable material which can be fashioned into separate parts in order to supply the signals which thought has need of.... The characteristic role of a language... is to act as intermediary between thought and sound, in such a way that the combination of both necessarily produces a mutually complementary delimitation of margin, where sound and thought meet. The contact between them gives rise to a form, not a substance."

Saussure 1916: 155-157

This description appears in a discussion of linguistic values. Linguistic values arise from these "mutually complementary delimitations of units" that constitute la langue. In other words, la langue is the collectivity of signs and their relational values.

A more vivid illustration will help to shed light on this aspect of Saussure's theory. Each point on one side of the page corresponds to an area on the other side. The two are inseparable. Thus any division or cut we might make on one side is also made on the other. The two-sided piece of paper we may conceive of as the interface of two substances. This is analogous to the meeting of thought and sound in the realm of language. When a circle or other figure is cut out of paper, the substance of the paper takes on the form of a circle. This formal structure is imposed on the substance. At the intersection, both sides of the paper are equally affected by the form. You cannot cut out a circle on one side and a triangle on the other side of the same sheet of paper. Similarly, the formal structure imposed on sound by language mirrors that imposed on thought. From Saussure's
point of view, linguistics should be the study of form, not substance. The sounds are in the field of the phonetician. He studies a different substance than the psychologist, who studies thought. Both of them however, must turn to the linguist to determine the formal structure of what they study. This is how linguistics gains its autonomy. Its object of study is the formal structure referred to by Saussure as "langue."

Finally, in order to have a complete understanding of la langue and Saussure's theory, one must understand the nature of linguistic sign. La langue, as Saussure points out, is not a simple nomenclature, relating names and things. As noted earlier, the linguistic sign is an association between a concept and a sound pattern. It is a "two-sided psychological entity." The two sides, obviously, are the concept, which he refers to as the signifié, and the sound pattern or signifiant. What he means by "psychological entity" is that the linguistic sign is not a thing. That is, it is not a substance but rather a component of formal structure.

The linguistic sign has two major characteristics: that of arbitrariness and that of linearity. The linearity of the sign simply refers to the fact that the signifiant exists in time. Because the signifiant has only one dimension, only one signifié can be presented at one time. They must relate in a linear succession, one after the other. The linguistic sign is also arbitrary. For
Saussure, what this means is that there is no natural connection between the particular pattern of sounds and the individual concept that is associated with it. There is no reason why [k] [a] [t] is associated with a furry, four legged, meowing animal rather than the pattern [b] [l] [I] [k]. The way the signs gain their meaning and value is only in their relations to each other. A particular form is what it is because it is not another form. Sign-1 means what it does because it is not sign-2 or sign-3. Sign-2 means what it does because it is not sign-1 or sign-3, and so forth. Since every assignment of signifiant to signifié is arbitrary, there is no reason for preferring one sign over another. As Saussure says, "Values have no other rationale than usage and general agreement." (Saussure 1916: 112) This once again echoes the importance of the social aspect of la langue. In a given speech community, the collective set of all signs in the minds of all the speakers is the only way la langue exists "perfectly." This description of la langue is confusing for it seems to imply that each one of us has only an imperfect knowledge of linguistic structure in our minds. Perhaps with a more critical eye to Saussure's description of la langue Saussure's theory may come to be understood.
Saussure in Review

The brilliance of Saussure's linguistic theory lies in his identification of _la langue_ as the object of linguistic study. With his characterization of _la langue_ he gives the discipline an object worthy of scientific study, secure in its autonomy and yet relative to allied disciplines. He accomplishes this through his analysis of the speech circuit, but the system of dualities which he creates characterizes the facets of language in constant comparison to each other. This contrast fosters a tension in understanding the theory. Many times Saussure defines his terms negatively, not explicitly stating, for example, that "This is _la langue_...", but rather describing it in contrast to what it is not. This leaves one wondering whether or not _la langue_ can stand on its own. Like a clever illusionist, Saussure seems to direct attention away from some of his basic assumptions leaving them only vaguely explained.

In presenting his contrasts within language (_langage_), Saussure characterizes _la langue_ as something that the individual is powerless to change. This is because _la langue_ is something removed from the individual and from the individual will ("existing only perfectly in the collectivity"). He writes:

"A language, as a collective phenomenon, takes the form of a totality of imprints in everyone's brain, rather like a dictionary of which each individual has an identical copy. Thus it is something which is in each individual, but is none the less common to all. At the same time it is out of reach of any deliberate interference by individuals."

Saussure 1917: 19
Yet the individual must have access to la langue if speech is to be productive and communication is to take place.

On the other hand, la parole has the characteristic of being almost purely individual, for no two speakers talk alike. Then again, speech must also have some social aspects for it to work: it is, in essence, a social activity. The problem then is that the nature of the connection between la langue and the individual act of parole appears to be a mystery. The use of la langue in an act of parole is something performed by the individual, not by the collectivity. This is not unlike someone using a dictionary. We may each have our own dog-earred copied of the OED, but like la langue, what is contained in the OED "exists perfectly" only in some abstract social sense. We are each free to alter the definition of a given word in our own text; but this does not alter the OED definition of that word. Given Saussure's description of the individual signs of la langue as arbitrary and his account of the relational system of values, one wonders how such a system could ever be used in the social act of communication between individuals. Under Saussure's conception of the relational values of the signs that compose la langue, if one speaker knows one more or one less sign than another speaker, a possible circumstance, then they will have different relations among their individual signs and therefore possess two different copies of la langue. Hence, they will not be able to understand one another because the signs used will
have different relational values for each speaker. And yet, this is a paradox, for communication does indeed frequently take place. However, if both speakers possessed identical copies of la langue then they could communicate quite effectively. However, if this were the case then a language would exhibit no social or geographical variation. Not only does the regular existence linguistic variation challenge the idea of identical copies of la langue, but it suggests a methodological dilemma as well. Even if la langue is a collective entity, it may only be studied by observing the behavior of individuals.

Harris notes that Labov raises this problem in descriptive linguistics and calls it the "Saussurean paradox." (Harris 1987: 198, Labov 1972: 267) The problem as Harris explains it is that:

"If la langue is stored inside every speaker's head, the testimony of a single individual in principle suffices as data for the linguist's description of la langue (even if - and perhaps ideally if - the witness and the linguist are one and the same person). By contrast, data for the description of parole can be obtained only by observing speech events as and when they occur in social interaction, because such events are not already stored in the heads of the individuals, even the participants themselves. This conclusion is said to be paradoxical because it reverses the basic Saussurean characterization of la langue as social, as opposed to la parole as individual ([30]): for it turns out that to study la langue it will suffice to study the individual, whereas to study la parole will require collecting evidence from the community."

Harris 1987: 198

Once again this problem can perhaps more easily be seen in terms of the Carrollian example discussed previously.
Wonderland Revisited

Alice's position in relation to that of the Knights would allow her to collect data for a description of parole. By watching and recording the actions of the Knights she will have a list of moves and interactions appropriate for doing Battle. However, in an interview with one of the Knights she could also gather information about the "Rules of Battle." This sort of data could be evidence for her description of la langue. One problem she might face is that in her discussions with the two Knights she may obtain two different descriptions of the "Rules of Battle." This is the same as a linguist obtaining two different descriptions of English grammar from interviewing two speakers of English. The paradox arises when we try to explain the fact that though the Knights use different rules and the speakers have different grammars, battle takes place and understanding is achieved through communication. How can Alice even be sure that the Knights are following the same set of Rules except by the very fact that they do Battle? If each Knight has his own set of Rules, Alice would not want to study either individual set, but rather the set of Rules "shared" by them. That is, she would really want to understand the system (the set of rules) that exists in the collectivity between them.

In order to understand Saussure's position it is perhaps instructive to turn to the alternate interpretation
of the Carrollian passage which focuses on the language game analogy. As previously mentioned, the language game analogy does much work for Saussure. In Language: Saussure and Wittgenstein, Harris points out that the chess analogy in particular is effective for illustrating the "institutional character of language, its regularity and its autonomy." (Harris, forthcoming 1988) Each of these aspects is supported by similarities between the rules of chess and grammatical rules. The analogy and the similarities also support Saussure's langue/parole distinction. The playing of games is a social activity performed by individuals, just as is speech. Yet the rules of chess exist independently of any individual, although they are grounded in the playing of particular games, just as la langue is grounded in a community's parole. Still, an individual move in a game is the act of one person, not of a collectivity. It is the application of a rule. Saussure wants to think of the individual's access to la langue as similar to one's knowledge of the rules of a game. However, understanding how one gains access to the rules still doesn't explain their nature as a commonly shared system. Even though this mysterious connection can be seen through analogy, the question remains as to how la langue should be described.

Regardless of how one attempts to solve the problem, Harris argues that the paradox does not even arise for Saussure because his basic assumption is that la langue is both "a social institution and an individual cognitive
system." (Harris 1987: 198) Without this claim Saussure would never be able to satisfy the goals he had set for himself with regard to establishing linguistics as an autonomous science. To adopt but one of those views is to reduce linguistics to the realm of social anthropology or psychology respectively. Without postulating an autonomous langue, linguistics fails to be a science at all under Saussure's conception. And yet, without distinguishing between the "individual initiative" and the "collective usage" Saussure leaves himself open to difficulties in determining whether or not evidence belongs to la parole or to la langue (Harris 1987: 235). He seems to be balancing on the proverbial fence between a theoretically postulated langue and a methodological distinction of the data. As Harris concludes:

"Saussure is thus ensnared in a theoretical trap of his own making. Proclaiming on the one hand that in linguistics it is the viewpoint chosen which creates the linguistic object, he fails on the other hand to demonstrate that his recommended viewpoint creates any scientifically identifiable object at all."

Harris 1987: 235

Philosophical Concerns

This conclusion leads Harris to yet another criticism of Saussure. Harris argues it is because of his scientific approach to linguistics that Saussure adopts the speech circuit as his model of communication. Harris observes however, that Saussure has built his model "not based upon
contemporary findings in psychology, physiology and physics," of Saussure's time, but rather he has borrowed "a psychological explanation of oral communication of the kind propounded in its classical form in the seventeenth century by John Locke." Harris writes:

"Saussure simply takes over two basic claims of this old psychological theory and incorporates them as premises in his model. These are: (i) that communication is a process of "telementation" (that is, of the transference of thoughts from one human mind to another), and (ii) that a necessary and sufficient condition for successful telementation is that the process of communication, by whatever mechanisms it employs, should result in the hearer's thoughts being identical with the speaker's." Harris 1987: 205

One obvious problem that results from such a theory is that Saussure must explain how it is that the individuals in the speech circuit will encode and decode exactly the same thoughts. Clearly if everyone shared identical copies of la langue then this would be guaranteed, provided the physiological and physical aspects of the circuit functioned correctly. The exact one-to-one correspondence of the signifié to signifiant in the minds of each individual would result in precisely the same associations being made in the hearer's mind as in the speaker's. However, as the evidence of social and geographical variation shows, it is not the case that all members of the same linguistic community share identical copies of la langue.

An interesting twist to this problem can be illustrated by asking whether or not one could "talk to oneself". Harris argues that under a Saussurean account this is not
possible. He says that there must be a difference between "B's hearing what A says" and "A hearing what A says." Otherwise, A would not know what he was saying until after he had said it. As Harris emphasizes, two individuals are needed for a complete speech circuit. (Harris 1987: 209)

Saussure's position here is supported by his discussion of the substance/form distinction. He uses the surface of the ocean as analogous to the interface between thought and sound. Both the substances of water and air are "amorphous masses." Thought is "chaotic by nature" and it is only by a "somewhat mysterious process by which 'thought-sound' evolves divisions" and "is made precise by this process of segmentation." He also writes:

"Philosophers and linguists have always agreed that were it not for signs, we should be incapable of differentiating any two ideas in a clear and constant way. In itself thought is like a swirling cloud, where no shape is intrinsically determinate. No ideas are established in advance, and nothing is distinct, before the introduction of linguistic structure."

Saussure 1916: 155-157

It would seem then that under Saussure's conception, rationality is only present once one has learned a language. Even if one is only thinking to oneself, thought would be incomprehensible unless ordered by linguistic form.

However, even though Saussure adopts this attitude towards the relation of thought to language, his conception of la langue presents other philosophical difficulties in this area. The skeptic could argue that one could not be assured one was even using the same system each time one
accessed one's own langue. How can one be sure that the
signifié that is associated to a particular signifiant is
the same signifié that was associated to it the last time it
was expressed. A speaker only knows what a sign means by
his individual access to la langue. What assures him that
this access is also the same? Saussure correctly denies that
his theory is a nomenclature, but the very same argument
applies here as well. Even if meaning is conceived of as a
correspondence between mental entities (signifiant and
signifié), then the problem of the constant identity of such
correspondences still arises. This argument shall be
explored further in relation to Chomsky's theory.

Considering that the assignment of signifié to
signifiant is entirely arbitrary, Saussure cannot guarantee
that each assignment shall be the same not only from
individual to individual, but for each assignment by a
particular individual. Yet, from another perspective it
might be argued that this problem never actually arises for
Saussure because for him the system of la langue is given in
advance for every member of the community, handed down by
the previous generation. As Taylor argues:

"...the link between signifiant and signifié is not
guaranteed by our common biological origins but rather
by society's imposition of arbitrary linguistic
structure on the mind of the individual. From
Saussure's perspective, there is no worry that two
individuals might not attach the same signifié to the
same signifiant. For linguistic structure itself
determines both the set of signifies which the
language-user has available for communication as well
as their connections to particular signifiants."

Taylor, forthcoming, p. 13
Although Saussure never recognizes these difficulties for his theory, it would seem that his postulation of a mental entity such as \textit{la langue} creates unnecessary confusions and problems. He seems to be correct in his analysis of speech as a social activity, but perhaps needlessly looks within the mind for the resolution of how it is that we know and use language in parole for the purposes of communication. Even though Saussure's conceptualization of language never took a strong hold in the linguistic community, his structural methodology would remain influential for generations. In discussion of Chomsky's theory we will see many Saussurean reflections. Perhaps unfortunately, not only are there theoretical parallels, but analogous criticisms as well.

\textbf{Rejection and Revolution}

Among other reasons, the rise of behaviorist psychology in the 1930's, with its rejection of mentalist explanations of human behavior, severely hindered the adoption of Saussure's linguistic theory by academia. Instead, a similar approach, by American Structuralist Leonard Bloomfield, began to take hold in the intellectual community. Whereas for Saussure "the mental association of the signifiant with signifié is a postulate of linguistics," and not in need of any further explanation, Bloomfield appears to go one step further and "provide a mechanistic
explanation in behavioristic terms of the relationship between la parole and the signs of la langue." (Harris 1981: 98-99)

Holding an empiricist view of science, Bloomfieldian structuralists approached language hoping to "'discover' the grammar by performing a set of operations on a corpus of data. Each successive operation was one step further removed from the corpus." Ultimately, this methodology produced a grammar based on several "levels of description." (Newmeyer 1980: 6)

However, as behaviorist psychology grew less and less severe in its attitude toward "cognitive behavior," the interdisciplinary area of psycholinguistics evolved. (Newmeyer 1980: 11) The rise of this new view of language study, as well as emerging philosophical concerns with empiricism and the "unresolved problems of structural linguistics" left the discipline ripe for revolution. (Newmeyer 1980: 15)

Having examined Saussure's attempt at modeling linguistics on the sciences, this section of the thesis shall discuss the specifics of Chomsky's scientific approach. Then, some similarities in the two theories will be brought out. These similarities include the parallel between Saussure's langue(parole distinction with Chomsky's notions of competence and performance. Finally, before beginning a critical examination of Chomsky, their shared mentalist assumptions shall also be discussed.
Chomsky's Scientific Approach

Chomsky's two major works *Syntactic Structures* (1957) and *Aspects of the Theory of Syntax* (1965), as well as many subsequent works, present an intriguing view of the study of language as a scientific endeavor. In a more recent work, he gives the following reasoning for undertaking such a study.

"By studying language we may discover abstract principles that govern its structure and use, principles that are universal by biological necessity and not mere historical accident, that derive from mental characteristics of the species. A human language is a system of remarkable complexity. To come to know a human language would be an extraordinary intellectual achievement for a creature not specifically designed to accomplish this."

Chomsky 1975: 4

Indeed, as Chomsky says, a language is something remarkably complex. And, equally as true, it would be a major accomplishment for someone, or something, to be said to have learned language without some sort of natural predisposition for this task. Appropriately then, one would want to say that humans have such an ability. Part of the motivation for Chomsky's linguistic rationalism stems from a long-standing philosophical tradition which points to this ability as the characteristic separating man from the animals (Harris 1987b: 9, Smith and Wilson 1979: 33, Chomsky 1975: 40). Chomsky himself points out that his interpretation of human linguistic ability as based upon "psychologically apriori principles" is strikingly similar
to the doctrine of innate ideas upon which most rationalism
is based. (D'Agostino 1986: 61) It would seem then that a
complete scientific characterization of this ability would
bring about great insight into the nature of our own being
as humans. This is the task which Chomsky sets for himself.

In the second chapter of his book Linguistic Theory In
America (1980), Newmeyer discusses Chomsky's "scientific
perspective" which he sees as Chomsky's "gift to the field."
(Newmeyer 1980: 20) He writes:

"Chomsky attacked the structuralist-empiricist
concept of a linguistic theory for imposing conditions
on theory formation which were incompatable with the
 provision of an insightful picture of the workings of
human language. Chomsky argued that in fact NO science
demands that a theory be literally extractable from the
primary data....In his view, the most linguistic theory
can realistically hope to construct is an EVALUATION
procedure for grammars--a mechanical way of deciding
between alternative grammars within a particular
theory. And, as Chomsky pointed out, even an
evaluation procedure is more than most sciences would
hope to accomplish: 'There are few area of science in
which one would seriously consider the possibility of
developing a general, practical, mechanical method of
choosing among several theories, each compatible with
the available data (Syntactic Structures, p. 53)""

Newmeyer 1980: 21

Like Saussure, Chomsky models his linguistic theory on
theories of natural science. Chomsky though often also
likens the task of the linguist to that of a child learning
language. As the child observes the world around him, he
collects a set of linguistic data, from the utterances of
his parents and siblings, for example. This is parallel to
a scientist collecting observations of a phenomena. The
child must then determine how the utterances he has heard
are created. Likewise, the scientist hypothesizes the reasons for the occurrence of the particular event he has observed. These causes then form the basis for his theory explaining the phenomena. Similarly, the child's reasoning becomes a part of his grammar. For the Chomskian linguist, however, the problem is to explain how a finite set of data, which represents an infinite possible set, can be used to determine the finite set of rules which would generate them. From a philosophical point of view this raises the skeptical problem of induction. By adopting this method of reasoning, not only must Chomsky explain which sentences would result from the finite set of rules, but also why only those sentences are created and not others. Chomsky, however, does not see this as an objection, but merely an obstacle to overcome. Given his assumption that the mind has a cognitive structure of language built in biologically, then it must have some sort of "pre-programming." (Baker and Hacker 1984: 287) Thus, an explicit description of this programming would yield a successful characterization of the structure itself. A fuller description of what Chomsky means by grammar is necessary before examining his reasoning for these assumptions.

In contrast to Saussure's notion of la langue, Chomsky's notion of linguistic competence involves a very different conception of grammar. In one sense, Chomsky defines grammar as "a theory of the psychological structures and processes which provide the basis of manifestation of
competence." (D'Agostino 1986: 66) Yet, in another sense, one's grammar is the mental structure which provides one with linguistic ability. Chomsky writes:

"Its [generative grammar] standpoint is that of individual psychology. It is concerned with those aspects of form and meaning that are determined by the "language faculty," which is understood to be a particular component of the human mind. The nature of this faculty is the subject matter of a general theory of linguistic structure that aims to discover the framework of principles and elements common to attainable human languages; this theory is now often called "universal grammar" (UG), adapting a traditional term to a new context of inquiry. UG may be regarded as a characterization of the genetically determined language facility. One may think of this faculty as a "language acquisition device," an innate component of the human mind that yields a particular language through interaction with presented experience, a device that converts experience into a system of knowledge attained: knowledge of one or another language."

Chomsky 1986: 3

These two very different senses of grammar can be confusing. On one level Chomsky can speak of the grammar in one's head and be referring to the mental structure, the language acquisition device. On another level, he can speak of grammatical rules, or the "abstract principles" he mentions, but be referring to part of the theory of UG, rather than something actually in the brain. This ambiguous meaning for "grammar" is the source of many theoretical questions as it leads to the reevaluation of many other related terms.

Chomsky's technical term "competence" can be defined very broadly as "knowledge of language." (Smith and Wilson 1979: 271) When one is said to have competence in a language, one has knowledge of the grammar of that language.
More specifically though competence can be defined as the "ability to impose perceptual structure on linguistically unstructured acoustic sensations." (D'Agostino 1986: 65)

Parallel to Saussure, Chomsky contrasts competence, that which a speaker knows, to performance, that which the speaker does, just like the langue/parole distinction.

Notice however, that while the executive and receptive association of signifiant to signifié was an individual act of parole for Saussure, the same association as Chomsky sees it, is solely an aspect of competence, not of performance. The implications of this solve the methodological problems inherent in Saussure's theory, although from Saussure's position, Chomsky is failing to realize the distinction between substance and form. For Chomsky, it is psychological substance which is prior; for linguistic competence is said to impose perceptual structure on previously unstructured sound. For Saussure however, the psychological substance and the physical substance are both structureless before they come into contact with each other. They only achieve form through contact. Their meeting is arbitrary, neither imposing form on the other but gaining it simultaneously. Given his attribution of structural priority to psychological substance, one can see why Chomsky views linguistics as an aspect of psychology rather than an autonomous discipline.

The Saussurean paradox and the difficulties resulting from Saussure's social/psychological fence-balancing are
thus only "solved" only by Chomsky's jumping down unambiguously on one side of the fence: the psychological. This move results in the allowance of the intuitions of individual speakers as primary linguistic facts. Whereas for Saussure there was a problem determining if such facts belonged to la langue or parole, this is not a problem for Chomsky because he views structure as a result of the psychological. The intuitions of speakers are viewed as directly reflective of their linguistic competence.

Fundamental Assumptions of Generativism

In his text Chomsky's System of Ideas (1986), D'Agostino argues that Chomsky presents a coherent package of several philosophical assumptions. (D'Agostino 1986: 62) It is these assumptions and their consequences for methodology that distinguish Chomsky from Saussure. In keeping within the "unity of the system of his ideas," D'Agostino argues that in adopting a intuitionist view, several other philosophical assumptions made by Chomsky are made manifest. (D'Agostino 1986: 63) D'Agostino defines a belief in subjectivism as the opinion that "language-users give linguistic entities the properties which they have, and according to which the scientific identification and explanation of ...[them]... is psychological. (D'Agostino 1986: 4) Indeed, as evidenced from the discussion on the
association of concept to sound, Chomsky and Saussure do not agree on this issue.

Saussure would view Chomsky as profoundly misinterpreting the nature of linguistic structure. To recall the substance/form analogy, Saussure would accuse Chomsky of misattributing the forms which are imposed on the interface of thought and sound to some aspect of thought. Instead, it was the point of Saussure's distinction to show that linguistics, the study of forms, is independent of both psychology, the study of mental content, and phonetics, the study the other substance, that of sound.

The second assumption that D'Agostino argues Chomsky makes concerns the related issue of individualism. Individualism is the view that "all social phenomena, such as language, are to be explained, ultimately, in terms of the individual." (D'Agostino 1986: 11) Again recalling the confusion of Saussure's description of la langue, it would at first seem difficult to determine Saussure's position on individualism. However, if la langue exists only perfectly in the collectivity, it would appear Saussure is arguing against individualism. Repeatedly he says that language is social and that the individual is powerless to change it. He also points out that though it is arbitrary, language is inherited from the previous generation. Because of this the social institution of la langue and its characteristics are logically prior to those of the individuals and their minds. (D'Agostino 1986: Ch. 1, Sec. 7) As we have seen, this
leaves Saussure in a compromising position from which he refuses to budge. Chomsky however, takes a stand and, as stated, the results of this are methodological. In order to study linguistic competence, it suffices to study the individual speaker/hearer.

In contrast to the Bloomfieldian structuralists, Chomsky relies on the intuitions of native speakers. Intuitionism is another fundamental assumption of the generativists. Newmeyer characterizes the intuitionist model that Chomsky adopts as:

"an axiomated system generating an infinite set of sentences with their associated structural description, and is to be judged for empirical adequacy by its ability to handle the primary linguistic data—the judgements native speakers can make...about certain aspects of their language."

Newmeyer 1980:21

Chomsky himself even describes intuitions as the "ultimate standard that determines the accuracy of any proposed grammar, [or]...linguistic theory." (Chomsky 1965: 21) This seems to be a reasonable step, for who else but the native speakers of a language would have utmost authority on that language given his assumptions of subjectivism and individualism? This model also seems plausible in that it makes sense of the assumption that grammar, for Chomsky, is something internalized. It is this internal knowledge, this grammar or system of rules, known by all speakers of a language, that the Chomskian linguist hopes to describe. It stands to reason that sentences predicted as grammatical by such a linguistic description would have to be subjected to
a speaker's intuitive analysis for verification. This is related to what Chomsky means by his notions of grammaticality and acceptibility.

Acceptability is an issue of performance. It refers to those sentences that are most likely to be uttered. (Chomsky 1965: 11) Perhaps one way of describing what Chomsky means by an acceptable sentence is to say that they are those sentences which appeal to a speaker intuitively as one which they themselves might conceivably produce or hear. In addition to performative limitations, one of the main criteria for a sentence to be acceptable is that it also be grammatical. It is criteria for grammaticality which are part of one's linguistic competence. They are internal considerations and therefore intuitive, as well. As mentioned, this is one of the characteristics of the rules of a grammar, that they define which sentences are part of the language. For Chomsky, what this means is that only a grammar which produces all and only those sentences that are acceptable to speakers could be a possible grammar of that language.

Presumably, the ultimate goal for Chomsky would be to give an account of the set of "abstract principles" that govern the structure, acquisition, and use of languages. Chomsky's scientific way of thinking leads him to adopt a mentalist view of linguistic ability. Analogizing from the spectrum of animal to man, he compares the mental to the physical in the same vein. He says:
"But human cognitive systems, when seriously investigated, prove to be no less marvelous and intricate than the physical structures that develop in the life of the organism. Why then, should we not study the acquisition of a cognitive structure such as language more or less as we study some complex bodily organ?... The idea of regarding the growth of language as analogous to the development of a bodily organ is thus quite natural and plausible."

Chomsky 1975: 10-11

This is one plausible explanation for man's superior linguistic ability over the animals. Such an explanation also helps to explain how these "abstract principles" could be universal. A biological explanation does not however, necessarily rule out other explanations, divine endowment, for example. In any event, simply to say that linguistic ability is something natural is not to explain its character fully. One still wonders what the specific characteristics of these "abstract principles" might be.

Finally, there is one other characteristic of Chomsky's theory that should be brought out for a complete understanding of it. Not only does Chomsky describe competence, a speaker's linguistic knowledge, as something innate, he also describes it as a state of the mind. In Knowledge of Language (1986) he writes,

"We should, so it appears, think of knowledge of language as a certain state of mind/brain, a relatively stable element in transitory mental states once it is attained; furthermore, as a state of some distinguishable faculty of the mind—the language faculty—with its specific properties, structure, and organization, one "module" of the mind."

Chomsky 1986: 12-13

It is appropriate that he should describe the mind in terms of modules for that is the way he describes linguistics.
Each different aspect of linguistics can be viewed as a module itself. At the core of these modules is grammar, the object of study of linguistics proper. Again this is very similar to the approach which Saussure took in viewing his *la langue* as the core of linguistic study and relating all other aspects to it. In this respect, the synchronic/diachronic and internal/external distinctions seem to accomplish the same objective as the modular approach of generative linguistics.

**Chomsky's dual meanings**

In presenting the views of Chomsky many distinctions have been made. Among those are ones like his dual meaning for the term "grammar." There appear to be several other such dualities in Chomsky's theory, even though many are well obscured by his technical use of the terms. By taking a critical look at the way Chomsky uses terms such as "grammar" as well as "knowledge," "rule," and "ability," this section shall attempt to expose some of those hidden dualities.

One objection that has been raised against Chomsky is that in theorizing about grammar, he confuses (albeit intentionally) statements which are only attributable to his theory (UG), with claims about the structure of language in the mind/brain. This may be seen as a criticism of his dual meanings for the term "grammar." However, in his most recent
text, *Knowledge of Language* (1986), he argues that the interpretation of generative grammar as a theory is not appropriate. Instead, he suggests that it be thought of in comparison to other sciences. "It is not a theory any more than chemistry is a theory. Generative grammar is a topic, which one may or may not choose to study." (Chomsky 1986: 4) Presumably what he means here is that generative grammar is simply a way of looking at the world, understanding certain events in a certain way. He says that one could adopt a view that what chemistry explains is really done "by angels with mirrors." A similar view of the nature of linguistic explanation could be adopted, but, according to Chomsky this would be a difficult view to uphold.

Recognizing the confusion surrounding his use of "grammar", he responds by saying that all such a grammar as his UG would be, is a description of linguistic events. In an earlier work, he specifically states that it is "not a model for speaker or hearer." (Chomsky 1965: 9) The question of how a speaker might actually formulate utterances is a question of performance. Therefore, presumably, it would be a task for psychology proper, not linguistics. Linguistics tries to characterize the knowledge that speakers rely on in order to perform.

In addition to his split conception of grammar, Chomsky also seems to profess a dual conception of knowledge. For Chomsky, one does not have to know or be aware that one possesses this innate knowledge of language. Though this
may appear contradictory (how can one not know what one knows?) Chomsky attempts to clarify the issue by introducing the term "cognize." (Chomsky 1980: 69) In short, what is known is cognized, but not all cognized material is known. Cognized material is presumably in the mind or brain, but we may or may not be explicitly aware of it being there. "Thus cognizing is tacit or implicit knowledge, a concept that seems to me unobjectionable." (Chomsky 1980: 70) Granted, for Chomsky, this would not seem difficult to accept given his scientific approach. If there is such an organ as a linguistic cognitive structure, then there are bound to be facts about it that we don't know. This is true just as we don't know all the facts about the heart or brain. This idea does still raise problem however, specifically because one does not normally speak of "cognizing" something.

One reason that this seems inconsistent is that Chomsky relies on the intuitions of native speakers for his data on their knowledge of language. What seems strange is to deny them the awareness of this knowledge. If one keeps in mind the distinction between cognition and knowledge just discussed, then one realizes that Chomsky's theory is not one of linguistic knowledge at all. It is instead a theory of linguistic cognition. This seems to suggest that Chomsky's original quest for a characterization of linguistic knowledge has altered slightly and resulted in a separate theory. Instead of speaking of someone as knowing a language one should talk of them cognizing a language.
Instead of saying "John knows English," if we wish to be generative grammarians, we should say "John has a cognition of English." And yet, even Chomsky does not usually speak of his quest as a search for cognition, but rather of knowledge.

"Linguistic theory is concerned primarily with an ideal speaker-listener,..., who knows its language perfectly and is unaffected by such grammatically irrelevant conditions of memory limitations, distractions, shifts of attention and interest, and errors... in applying his knowledge of the language in actual performance."

Chomsky 1965: 4

Perhaps we can look more closely at what Chomsky means by "applying his knowledge" by understanding his use of the term "ability." In spite of the fact that he often refers to competence as an ability, nevertheless he treats the use of language as the result of a mental state, not an ability. This is explained in his work, Reflections on Language (1975). He models the learning theory for language acquisition by a human on a psychological learning theory. He says that for rats learning to run a maze:

"The input to LT(R,M) [where R stands for rats, M stands for maze running, and LT is the learning theory] is whatever preliminary analysis of data is used by rats to accomplish this feat [maze running], and the output is the relevant cognitive structure, however it should be properly characterized as a component of the state achieved by the rat who knows how to run a maze."

Chomsky 1975: 14

Note however, that identifying an ability with a certain mental state changes the discussion. No longer is the discussion about how abilities explain performance, but rather we are talking about mental states. The philosopher
Wittgenstein has argued however that abilities are not mental states. In fact, his beetle-in-the-box analogy shows that language use can be explained without reference to what goes on in the mind at all.

"Suppose everyone had a box with something in it: we call it a "beetle." No one can look into anyone else's box, and everyone says he knows what a beetle is by looking at his beetle.--Here it would be quite possible for everyone to have something different in his box. One might even imagine the thing constantly changing.--But suppose the word "beetle" had a use in these people's language—if so it would not be used as the name of a thing. The thing in the box has no place in the language-game at all: not even as a something, for the box might even be empty."

Wittgenstein 1953: 293

In order to understand how this relates to Chomsky's position, compare the "beetle" to Chomsky's proposed mental states. If the use of a word or sentence is the result of a certain mental state, then it is quite possible for every individual to have a different mental state occur in their mind and still use the same word in the same way. It is even conceivable, as Wittgenstein suggests, that this mental state could be constantly changing, say from one use of the word to another, and still be using the word correctly, in the same way that is, because the mental state has nothing to do with the linguistic use of the word. Take for example the word "pain". Each of us have our own pain sensations. We can never feel another's pain sensation, and yet we make use of the word "pain" quite regularly with no difficulties in understanding. We could even be correct in our use of the word to apply to someone who had no pain sensation at
that moment at all, say an actor for example. Thus it would seem that the mental state one may or may not be in, or even whether that mental state exists in anyone, has no bearing on one's use of terms purportedly referring to that mental state.

Apparently then it seems as if Chomsky has turned the discussion on to a side-track by bringing in mental states. In contrast to Chomsky's view, Baker and Hacker point out in their expositions of Wittgensteinian ideas, that linguistic competence "can mean no more than the ability to speak and understand a language and/or perhaps to the ability to learn a new one." (Baker and Hacker 1984: 282) In other words, what they are rejecting about Chomsky's theory is the way in which he "remodels" the use of the term "ability". For, put simply, an ability is being able to do something. If one can continue an action in the same manner as it was begun then one is said to have the ability to perform that action. Such an attribution has nothing to do with the state of the actor, mind or brain. Perhaps this distinction will become clearer after discussing the dual interpretation of the term "rule."

The term "rule" has been often used throughout this paper. Indeed, it enjoys frequent use in everyday language as well. We speak of following rules, breaking rules, doing things in accord with the rules. But all of these uses can be confusing. The meaning of "rule" is very ambiguous for it
has at least two senses, a prescriptive one and a descriptive one. Chomsky has already been seen as characterizing rules as descriptive. In that sense a rule is simply a generalization. We speak of things happening as a rule. Baker and Hacker on the other hand adopt a prescriptive notion of rules. For them a rule tells the way a linguistic act should happen. It is normative in function. Under this conception

"...rules determine (logically) what is to count as correct applications of them, i.e. we use rules (though not 'hidden' ones) together with a method of projection to fix what is to be called 'following a rule'."

Baker and Hacker 1984: 283

Thus when we utter a grammatical sentence we are exercising our linguistic ability. Then we turn to the rule as a justification or to show that the utterance is correct. It is not the rule which makes the choice for us or which somehow gives us the sentence. Rules can be seen as limitations on performance. One is free to move the pieces on a chessboard however one wishes, but only moves allowed by the rules of chess are called "playing the game of chess." Similarly, in language, rules impose the bounds of sense. It is not the case that rules come about from or are descriptions of our mental states. Nor do they have a hand in the way our sentences are created. Instead, it is the language-user who appeals to rules to explain, teach, correct, or judge the sentences we choose to utter.
The view that the sentences we utter are derived from grammatical rules is an example of what Anthony Kenny calls the Homunculus Fallacy. (Kenny 1984: 125-136) It is a typical mistake made by those who view language on a mechanistic model of the mind. (For a history and criticism of this view see Harris 1987b.) Kenny argues that postulating a mental mechanism makes the mistake of explaining how humans use language by postulating the existence of something within us which actually operates the language. Chomsky's description of grammar as a "device" which "generates" sentences indicates he adopts this view. Kenny contends that it is a faulty argument when human actions are predicated on non-human things or things that are only part of what a human is (i.e.- the brain/mind).

This can be seen as another way of rejecting the same point which Baker and Hacker rejected in interpreting competence as meaning no more than an ability. Chomsky argues that linguistic ability consists in a cognitive or mental structure. Kenny suggests that it is not mental structures that have linguistic ability but humans and that ability is not a something which the human possesses (like a watch or a heart). It is the whole being that uses language. (Kenny 1984: 138)

This simple confusion leads to difficulties which demand explanation. It is these difficulties which Chomsky's theory has attempted to explain, but his chosen approach has altered the intent of the investigation. His
approach has led him to adopt a mental mechanism which demands conceptions of linguistic rules, grammar and competency fundamentally different from those we ordinarily employ. Therefore, can his solutions really be said to really solve the problems of linguistics?

Structuralism and Generativism

This thesis has examined the efforts of two linguists to illuminate the nature of language and linguistic knowledge. Along the way the theories of Saussure and Chomsky have been shown to have many similarities both in theoretical structures, the langue/parole and competence/performance distinction, as well as in conceptual assumptions, their shared mentalist and scientific approaches. These similarities have arisen despite the fact that the historical traditions from which the theories arose are quite different. Further, even though the two theories share specific differences concerning the precise conceptualization of language, the fact that they are both a part of a larger philosophical tradition is what has influenced them to be so much alike. It is the assumptions of this larger tradition that this paper has called into question.

Perhaps the most basic of these shared assumptions is that of mentalism. Most of the problems and difficulties that arise for both Saussure and Chomsky are a result of
their positing language as a manifestation of something
within the mind or brain. The dilemma which plagues
Saussure over the characterization of *la langue* as social or
individual, as well as Chomsky's confused notion of grammar
as a "mental organ", are both connected to this shared
mentalism. As Saussure pointed out, language does appear to
be dualistic in nature. Neither he nor Chomsky would want
to emphasize one pole of this dualism over the other. As
Saussure sees it, to view *la langue* as something individual
is to delegate the study of linguistics to the field of
psychology. On the other hand, to approach language as
merely an aspect of social interaction is to enter the field
of anthropology. As we have seen, in order to uphold his
goal of establishing linguistics as a scientific discipline
Saussure is forced to posit *la langue* as an entity which has
aspects of both interpretations but which is the possession
of neither. Similarly, Chomsky attempts to conflate another
distinction, one between a psychological explanation and a
purely biological account of language. This can be seen as
an attempt to avoid the same dilemma as well. Although
reacting against behaviorist psychology, Chomsky is
reluctant to explain language as totally due to a person's
mental faculties. On the other hand, at times, he appears
to shy away from an account of language as the social
manifestation of a biological organ. Chomsky's reticence is
confusing for such an explanation would be the ultimate
application of his theory. Under this view, a complete and
accurate description of the UG would be an account of the mechanics of the language faculty. Chomsky is more agreeable to a psychological view of language than is Saussure, and yet he is forced to posit grammar as a specific mind/brain entity so that linguistics may remain separate from other psychological fields and yet not be reduced to biology either. Giving linguistics its own "object of study", this language mechanism, at the same time gives it autonomy from other psychological fields and in that way, keeps it from the biologist as well.

What the theories of Saussure and Chomsky do is attempt to define an object for linguistics to study. In each case, the objects so defined are viewed as mental entities. The arguments presented above against "telementation" and against the view of language as a "state of mind" reveal the difficulties with this approach. As we have seen though, the creation of these mental entities is a result of their having chosen to approach the study of language as an autonomous science.

The basic requirement of any science is that it has a clearly defined object of study. Given their mentalist preoccupations however, both Saussure and Chomsky are hard pressed to find one. Acknowledging the dual nature of linguistic phenomena, neither linguist wishes to choose one aspect over another, and so the linguistic object is characterized as having both. The theories however, focus only on the mental, the unobservable side. Characterizing
their objects as such, they therefore encounter not only the difficulties of describing and establishing the existence of such an object, but also the dilemma of how such an object is to be accessed for use by an individual speaker. Additionally, there is the problem of how the object is to be studied, given that it is not directly observable. These are the criticisms that have been specifically addressed to Saussure's theory. However, while Saussure never acknowledged these criticisms as problems, it must be said that at least Chomsky does recognize and attempt to deal with them.

Having defined their objects, each theory then develops a picture of linguistics which accords with fundamental "objects". Saussure "relates all other manifestations of language" to linguistic structure. Likewise, Chomsky builds his theory of linguistics on the foundations of his concept of a mental organ. These divisions of linguistic facts however, only fall into their respective positions if the basic object is defined first. Once the object is defined as something internal, all the manifestations of this object can be seen as external. This tidy division works well for defining linguistics as the study of this internal object. But, not only do both Saussure and Chomsky define their science around this object internal to the discipline, but the object is also characterized in another sense as internal, i.e.-as internal to the human mind. This however, is where the mentalism of the theories begins to cause
methodological problems. Most scientific theories attempt to describe events external to the human mind: that is, the scientist adopts the role of the observer. This is Alice's position behind her tree. When the scientist begins to study something internal to the mind, he becomes both an observer and observed. In most cases, as with the linguist too, the scientist can turn to other humans besides himself for observation, but when reporting linguistic observations he himself must use language. Not only is he using language at this point but those with whom he is communicating also use language to interpret his findings. At this point it is very easy to confuse what is internal with what is external. This is again, precisely the same difficulties which Saussure faces in determining whether his data belongs to la langue or to la parole. On the one hand he says that la langue is something that is internal to the individual, in that each of us has access to it, and yet, on the other hand, he states that it is only perfect as something external, i.e.-as a social object. Again, however, Chomsky acknowledges this distinction and attempts to deal with it. His answer however, is based upon his mentalism.

In his most recent work (Chomsky 1986), he discusses the fact that his view of language is a shift from thinking in terms of language as external to one that is internal. As he describes it, it is a move "from behavior and its products to the system of knowledge that enters into behavior...." (Chomsky 1986: 28) As previously discussed,
there have been criticisms of Chomsky's concept of knowledge. Also, this seems to be nothing more than trying to explain how people use language by saying that it's something in the mind/brain. The argument provided by Kenny rejects this as an appropriate move. The suggestion that one not look within the brain for an object of study in the end may lead one to question the search for an object at all.

Conclusion

Saussure seems rightly to acknowledge the opinion that "the object of linguistics is not given in advance," and that "it is the viewpoint adopted which creates the object" (Saussure 1916: 9). Having examined these two theories of the nature of language, perhaps we ourselves should take heed of this statement. As the King of Hearts told Alice "If there's no meaning in it, then that saves a world of trouble, you know, as we needn't try to find any." Perhaps if there is no predefined object of study for linguistics we need not search for one. If the object only arises once the method for its examination is determined then to some extent at least, one already knows what one will find when one selects a methodology. How can the linguist hope to find out what language is really like if his methods already determine what he is going to find?
Perhaps if we are to use the notion of object of study in a strict scientific sense, linguistics has no object. But of course the linguist would not be happy with this answer, for he knows that he studies a something. What is that something? In the broadest sense of the term it could be said that he simply studies "language." But then this leads us right back to the beginning with the question, "Well, what is language?" And furthermore, as the analysis of the theories of Chomsky and Saussure show, how one answers this question will direct the way one studies the so-called object: language. As we have seen, this is a very difficult task if one adopts a scientific and a mentalist view together. Since we have examined arguments against both of these views separately, and now question them together, let us briefly examine how a linguistic theory not based on either view might be structured.

To begin, let us examine one other criticism of theories such as Saussure's and Chomsky's. Harris argues that the approaches of both these linguists are too abstract in that they deal with language only known by an "ideal speaker-hearer" in a "homogenous speech community." (Harris 1981: 32) This move he sees as problematic in that it ignores many contextual influences that seemingly ought to be factors considered in an account of the linguistic event. For Saussure and Chomsky these influences are ruled out of consideration as parts of parole or performance. However, as Harris asserts, the ordinary use of the terms "speaker"
and "hearer" seem to imply much more than one would be lead
to believe from their technical use by a linguist. He
writes:

"For the layman, speaking is usually understood to
involve a whole gamut of skills and activities, varying
according to the demands of the occasion. It is
certainly not something which is confined to vibrations
of the vocal cords and configurations of the vocal
tract, but involves such features as appropriate facial
expression, gaze, body posture and gesture. It also
involves choice and relevance of what is said. 'He
spoke convincingly' is not usually a comment on
someone's articulation. Hearing likewise is taken to
involve much more than the mere aural reception of
sound waves."

Harris 1981: 33

Note here, however, that this is not merely another
confusion over definitions of terms. By abstracting to an
ideal situation, thanks to the adoption of a scientific
viewpoint, Saussure and Chomsky can be seen as ceasing to
talk about language in the way that most of us ordinarily
do. By taking the scientific object 'language' out of its
situational contexts and idealizing it (recreating it as an
abstract or biological object of science), one passes by the
question what language itself really is and instead attempts
to answer another question: what is linguistic knowledge?
Answers to this question are conceived as knowledge of the
postulated scientific object, language. No longer is the
linguist describing aspects of a linguistic event; he's not
concerned with what the speaker and hearer do. Rather, he's
trying to analyze the characteristics of some object,
language, knowledge of which is said to be required for the
speaker and hearer to do what they do. There thus appears to be a confusion over what "language" means. In their search for a scientific object, Saussure and Chomsky assume that "language" means the thing that linguistics studies, and forget about its ordinary meaning: what goes on between a speaker and a hearer and which they themselves often refer to with the term 'language'. It should be the point of the games analogy to illustrate the fact that the position of a speaker/hearer is that of a game player, not that the players have knowledge of some mysterious thing called "a game." Language is not a mysterious entity. To view it as such is to suggest that ordinary speakers and hearers do not know what they mean when they use the term "language." Language is commonly known by us all in the same way that we know games.

Both Saussure and Chomsky make reference to the games analogy, yet neither realize its full implications. If the rules of a language are viewed as similar to those of a game, then the nature of a rule is quite different from the way that Chomsky conceptualizes it. Knowledge of generative linguistic rules is different from knowledge of the rules of a game, and further, what it means to say that we have such knowledge is not the same as what Chomsky means when he speaks of knowledge of language. To say that one knows the rules of chess ordinarily means that one knows how to play the game, how to explain the game, how to teach the game, and/or how to referee a game, etc. Thus, in saying that one
knows chess, one simply means that one can play the game of chess. No object (of knowledge) is presupposed by the statement that "He knows chess." Similarly, in language, to know the rules of a given language is to know how to use the words of that language. If one knows the language, one can play its game: that is one can speak the language correctly, one can listen to a speaker of the language, one can understand the language, and all the various other linguistic activities that involve doing things with the language. Thus, to say one knows a language is not the same as to say that one's mind or brain is in a particular state or that one partakes in a common shared consciousness of a abstract social object. But it is these sorts of attributions that Chomsky and Saussure, in order to make the study of language into an autonomous academic discipline, take to give meaning to claims of linguistic knowledge. But nothing suddenly appears in our brains once we have learned chess and can be said to know it; and it would certainly be queer to say that we all know chess innately. To say so, we would also have to say that we have innate knowledge of all other games, even those not yet invented!

So finally, what does this conception of the nature of language say about the way that it should be studied? What would one study if one studied games? Clearly one could not abstract out of the playing context to determine why players make the moves that they do. Instead, the context is vital. The reason a player makes a particular move is because of
the previous moves made in the game. A gaming session is far from ideal also. In fact, many times, it is the mistakes and errors of players which bring interest to the game. How the other players react, how the player corrects himself, what other rules, or even other players are brought into the game as a result of this infraction are all a part of what is important in a game. So too, for the linguist, are the various aspects of a linguistic situation important. If a speaker uses a word incorrectly then the results of this use are only some of the considerations that linguists should study. For instance, if a speaker uses the term "knowledge" incorrectly, the linguist must examine previous uses of the term to see if this move is a valid one. How a hearer reacts will give insight into his or her own use of the term. But not only do situational factor influence one's use of language, a speaker's past linguistic experiences with the hearer, the formality and other characteristics of the situation also influence a speaker's use of language. The linguist, it appears, must take the whole context of the situation into account in his or her study of the language used during that linguistic event. Just as a game player cannot make a move without knowing the whole context of the game, a speaker cannot make a move in language without knowing the language. Similarly, the linguist cannot study a single dimension of language without taking all of language into consideration.
But what of the intellectual respect of the sciences to which Chomsky and Saussure aspired? As mentioned at the start of this paper, rules have great significance in our society. In one form or another games, especially athletic ones, have a place in almost every human life. Their importance is so great that billions of dollars are spent on the playing of single sessions of particular games, and the players of such games are held in very high esteem. Games have come to such prominence in our society that the playing of them has almost become a science. The analysis of statistics of play, the development of strategies, and the technology that has developed for the execution of some games have all become such highly developed and exacting practices that they are strong contenders for the ranks of the sciences. Similarly, the linguistic aficionado could also take an academic position of high esteem with the development of his theory of language. The study of language can be just as precise in its methods as any science and yet not forget the other side of game playing. The execution of the moves of a game can be seen as a creative art form, and likewise, it is perhaps no coincidence that one refers to the art of speaking. Under this conception, theories of linguistics would take into consideration such context-dependent phenomena as style, vocal intonation, individual creativity, and the like. What this means is that no longer is linguistics an autonomous academic discipline, a science like chemistry, but rather an
interdisciplinary study of a variety of different but related activities and events. There are many different things called "games", yet there is no one aspect which they all share. Indeed, some games are quite different from one another, so much so that a comparison of two might lead one to say that they both couldn't be games. Linguistics can be thought of in a similar way. The different aspects of language studied by linguists are as different as one game is from another, and yet all are related, for they are all parts of language. However, one must be careful not to draw the analogy too far. Although language is like a game, it is itself not a game. One must remember that this is only an analogy, a context from which to learn. By using the games analogy, we can come to recognize this context and gain insight from this. Like the stories of Carroll, taking things out of context can lead one into nonsense. It has been suggested that the the idealization of language leads one to similar conclusions. One who wishes to study language seems to be left in a dangerous position. On the one hand he does not want to "utter nonsense", and yet, he doesn't want to hear it either.
Bibliography


