INTRODUCTION

1.0 A linguistic theory that attempts to account for language as a means of human communication tries, in effect, to explain how speakers of a language manage to make themselves understood to each other. Such a theory, then, is concerned with a complex network of linguistic processes, as well as the entire array of abilities that a language user controls in order to convey meaning. A model or a grammar that is put forth by a theory of this sort, should ideally be able to reflect the organization of elements within a language as well as the linguistic abilities of a native speaker.

The speaker of a language produces strings of words that are put together in a way which is understood by the hearer. This implies that there is a shared set of rules which operate in a linguistic system. Apart from the production and comprehension of sentences, the speaker of a language exercises an evaluative ability over the sentences that he hears. That this is so is evident from the fact that a hearer understands and tolerates sentences that violate rules only to a certain extent.
Even a superficial examination of the rules violated would reveal that some kinds of violation are more disruptive than others. It is clear that speakers recognise these violations, which suggests that there is a scale of evaluation that is also shared by users of a language.

This scale provides the framework within which a speaker understands, accepts or rejects sentences. Thus, if rules are to be formulated to successfully convey meaning, it is essential that this evaluational ability is investigated.

The study of deviance, as well as the concepts of "grammaticality" and "acceptability" have been associated with Chomsky's Transformational Grammar. Chomsky's view of grammaticality, as shall be seen later in greater detail, is associated with the idea that a generative grammar should generate "all and only" sentences of the language. There are thus sentences which are clearly grammatical, and those which are not. There is, however a set of deviant, semi-grammatical sentences which are understood and accepted by the speakers of the particular language. The terms "grammaticality" and "acceptability" have also been used interchangeably in the literature in this area.
For the purpose of this dissertation, "grammaticality" shall, however, be treated as not associated with any particular linguistic theory, but as constituting the ability of the native speaker to understand and accept a certain scale of deviance. Grammaticality in this sense, overlaps with "acceptability" and "well-formedness" as used by certain linguists. This view is accurately captured by Fodor (1977):

"Grammaticality used to be attributed, in effect, to all and only those expressions actually uttered by members of a speech community. Reasoning from the infinity of a natural language, we can see that this is incorrect, that grammaticality must be explicated in terms of general rules which a speaker 'knows' and which he would in principle employ in the production and comprehension of an infinite range of expressions, most of which he will never in fact either utter or hear. And this conclusion has had as much impact on current theories of language as have specific observations about the kinds of syntactic devices that natural languages employ" (Fodor, Janet Dean 1977: 11).
However, as is well known, linguists were not always concerned with such issues. Linguistics for many years was concerned only with the description of observable linguistic data. This resulted in the exclusion of the study of meaning. Also, any attempt at accounting for linguistic ability would obviously involve a certain degree of speculation about the mind and thought processes that are not observable. And any linguistic phenomenon that was not observable was considered outside the province of linguistics. In fact, before the so called 'Chomskyan Revolution', linguists concentrated on the development of descriptive procedures rather than speculating on the nature of language. "Regardless of what scientific practice may have always been, it is traditional to regard a discipline as scientific just in case it provides rigorous experimental procedures for establishing some class of facts, known as data and perhaps some further class of claims made by the discipline. Such a view of what is scientific has led linguists for some time to direct their attentions to formulating rigorous procedures for discovering and testing facts about the basic technical procedures that they employ" (Rosenberg, J.P. and C. Travis 1971: 3-4)
This attitude to language and linguistic phenomena which has been called 'taxonomic' and 'anti-mentalistic', was to have a far reaching influence on the development of later linguistic theory. This does not imply that there was no awareness of meaning or of linguistic competence. Quite clearly, the concerns were different.

Philosophers, on the other hand, were concerned with meaning to the total exclusion of other aspects of language. "In contrast, the question "are there meanings, and if so, what are they?" would seem a prime candidate for purely philosophic treatment if anything is" (Rosenberg, J.F. and C. Travis 1971: 3).

The philosophy of language was concerned with the questions "what if anything is meaning? are there meanings? what is it for something to be meaningful? what is it for something to mean such and such? what sort of attribute is the ability to speak a language? how does one learn or acquire it? what is conventionality? what is the relation between meaning and reference? how does one manage to use words with pre-established meanings to refer to, or talk about particular things?" (Rosenberg, J.F. and C. Travis 1971: 3). These, it might be said are philosophical questions about language.
Philosophers are naturally primarily concerned with problems of philosophy as applied to the nature of language and meaning. "General theories of meaning have typically been developed by philosophers than linguists, and it might be wondered whether they have any significance for linguistics at all". However, "if the question "what is meaning" is construed as a question about what constitutes a semantic phenomenon we can hardly shrug it off as irrelevant to linguistics". (Fodor, Janet Dean 1977: 9-10).

As can be seen, the nature of such questions being what it is, it would be difficult to say to what extent these are problems concerning language or philosophy in general. A distinction is made between the philosophy of language, and linguistic philosophy. Insights and techniques gained from the study of language and applied to general problems of philosophy constitute linguistic philosophy.

Various theories of meaning developed by philosophers have attempted to provide criteria for determining "meaningfulness". Some of the major theories are the referential theory, the ideational theory, Wittgenstein's theory of meaning as use, the theories of illocutionary acts, and truth conditions. Needless to say, these theories
have provided a background, and greatly influenced the development of semantics as we know it today. What seems important to note here is that meaning is studied in a "a priori" fashion, and not as a part of the study of language. The theories are entirely devoted to answer the question "what is meaning and meaningfulness?" and not "what is language?".

It is however, as has been mentioned earlier, extremely difficult to separate these questions as belonging to language or philosophy. This is particularly true of areas like propositions, analyticity and necessity, because they enter into truth-functional and inferential relations. Thus we find that although the study of meaning was approached in different ways by linguists and philosophers, their interests overlapped to a considerable extent. "Without too great a distortion, then, we can regard theories of meaning in philosophy as having, at least in part, the same goal as semantic theories in linguistics". (Fodor, Janet Dean 1977 : 12).

As has already been mentioned, linguists at one time were concerned only with observable linguistic phenomena, which would not rely on speculation. This feeling was shared by logicians of the time as well. This resulted in the logicians constructing artificial
languages, and an emphasis on discovery procedures by the linguists. Both linguistics and logic were affected by the prevailing "renascent empiricism". This trend was also the result of the complexity and abstract nature of meaning itself. Describing philosophical and linguistic approaches to meaning, Fodor states that "meaning is vulnerable in many directions. It is a target for those who distrust any or all of abstract entities, theoretical entities and mental entities. It is also true that whatever insights we now have about meaning have been a long time coming and still leave plenty of room for disagreement". (Fodor, Janet Dean 1977: 59).

A closer look at the development of linguistic theory, shows the influence philosophy and logic have had, particularly on semantics, more so today than ever before. This was perhaps, greatly due to the realisation that a semantic representation is similar in function the logical form of a sentence. Logic, though has remained free of any psychological orientation, unlike linguistics. Entailment and presuppositions along with many other logical concepts have been integrated into linguistic theory. Though Generative Grammar as propounded by Chomsky did not include the study of meaning to begin with, it was
greatly influenced by the mentalistic relationalistic tradition, which postulates that there is an underlying linguistic ability that is shared by the speakers of a language that makes it possible for them to communicate.

Thus, it was not grammaticality as is commonly understood that was studied by philosophers. Rather, it was the kind of concern with meaning and finer issues that mesh together forming what we call "grammaticality". What seems to be most important is the acceptance of the linguistic intuition and "recognition competence". The perception of grammaticality is recognition competence of a sort: "we can invoke an argument leading from recognition behaviour of the right sort to the existence of a recognition competence, and hence of something to be recognised". (Rosenberg, J.F. and C. Travis 1971 : 2)

The recognition of grammaticality depends on the questions - what is meaningful, how much meaning does it convey, and how is it meaningful?

The preceding discussion should not lead to the assumption that the concepts of deviance and grammaticality were thought of only by generative grammarians. The problem of semantic deviance is a traditional one. Apollonius Dyscolus of Alexandria wrote about it in the 2nd century A.D. Thomas of Erfurt mentioned sentences
that could be unacceptable even if they were formally correct. His example "lapis ūmāt filium" (the stone loves the boy)\(^1\) is a classical example. Sibawaihi of Iraq distinguished semantic deviance from grammatical deviance. The views of Sanskrit grammarians like Panini and the Bhartrhari and the logicians of the Nyāya school are dealt with separately in the Appendix.

Within the framework of Transformational Generative Grammar, interestingly enough, the notion of "grammaticality" or "grammaticalness" did not develop as a part of the theory of meaning, as might be expected. This was because the 1957 model of Transformational Generative Grammar did not have a semantic component. However, the theory of generative grammar as formulated by Chomsky gave rise to problems that drew attention to the notion of grammaticality.

Chomsky's statement that a grammar should generate "all and only" sentences of a given language, was the most dominant factor that was to influence thinking on grammaticality. The grammar was also required to separate sentences from non-sentences. This division

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\(^1\) Robins, R.H. 1974 : 82.
did not refer to the difference merely between well-formed and ill-formed sentences. A range of sentences which were not necessarily fully grammatical had to be accounted for by the grammar, in the event they were acceptable to a native speaker.

Another important factor was the view of language as a human ability, and the need for accounting for the linguistic intuition of a native speaker. The introduction of, and emphasis on introspective data brought the problem of grammaticality more sharply into focus. Introspective data being considered as a valid source for postulating linguistic hypotheses had far reaching consequences on the development of linguistic theory generally, and in particular on the theory of grammaticality. The need for a grammar to account for intuitions as part of linguistic competence generated and sustained interest in grammaticality.

The relationship of acceptability and grammaticality has been the source of much controversy. This was greatly due to Chomsky's requirement that a sentence be considered grammatical only if it is acceptable to a native speaker. This principle also paved the way for empirical validation of what a speaker considers acceptable. Psychologists had been concerned, like linguists
at one time with observable data that did not rely on speculation. However, attempts had been made by psycholinguists to arrive at some methods of quantifying meaning. Coupled with an interest in linguistic competence, and the possibility of acceptability responses being observed, psycholinguists were drawn to this aspect of the problem and contributed a great deal of empirical work in this area. The contribution of psycholinguists in this regard have been dealt with in considerable detail at a later stage in this dissertation (See Chapter Four).

With the publication of Chomsky's "Aspects of the theory of Syntax" (1965) and the addition of the semantic component, the concept of grammaticality also came into its own. As shall be discussed later, the notion of grammaticality developed as a part of the study of meaning. The necessity of arriving at a theory that would reflect this ability of a speaker became apparent. To quote Katz ".... a theory that characterizes the set of ungrammatical strings that the speakers' knowledge of linguistic structure enables him to understand and explains why the members of this set are comprehensible, is, therefore to be regarded as an integral part of the
description of a language, not as a bonus it is nice but not necessary to have" (Katz, J. 1963 : 400).

Though the problem merits independent attention, there has been no attempt to develop what might be termed as a "theory of grammaticality". However, the problems that constitute the concept have been defined in various ways, and dealt with by as many methods.

The main issues centre around the realisation by most schools of linguistic thought, that a theory concerning natural language must be able to account for a certain degree of deviance.

The crucial issue is that if a model or a grammar is going to reflect linguistic behaviour or account for linguistic intuition, it has to adequately explain that part of a speaker's ability which recognises and evaluates the deviation from the rules of the language. This capacity of the language user is an integral part of the underlying competence, and operates in his roles both as a speaker and as a hearer.

An investigation is also needed to examine the constructs "grammaticality", "acceptability" and "well formedness" with a view to defining the relationships
between them, and also to examine as to what extent these are rooted in the various theoretical frameworks, and to what extent these could be considered pre-theoretical. According to Lyons, "There is an obvious pre-theoretical correlate of semantic well-formedness: namely the intuitive notion of making sense or being comprehensive.... What we are after is some intuitive notion of grammatical acceptability which native speakers have by virtue of their recognition of principles that are immanent in their own language behaviour; and this is something that we cannot get at directly by asking them whether a putative sentence is or is not grammatical. Nor does there seem to be any other way of formulating the question that it is not open to similar objections". (Lyons, J. 1977 Vol II : 379).

Against the background of this brief review, several issues that emerge have to be considered. Some of these have wide ranging consequences for linguistic theory.

Unless a grammatical theory is able to clearly extent and type of deviance that can be accounted for within its framework, the corpus remains undefined. Thus what a particular linguistic theory considers
deviant, outside the scope of the grammar, forms the basis of the theory.

Another broad issue that would gain clarity by an explanation of the concept of grammaticality is that of comprehension. If a theory cannot explain how deviant or semi-grammatical utterances are understood, a valuable and basic insight into the process of how meaning is conveyed will be lost. If comprehension is viewed as a result of a shared set of rules between the speaker and the hearer, it is necessary to take into consideration how these rules can deviate. A theory of comprehension that does not take this issue into consideration remains incomplete.

This dissertation intends to show that the linguistic theories that have dealt with the concept of grammaticality have not been successful in their attempt to provide solutions to these problems. The manner in which the notion of grammaticality has been dealt with by various models, does not constitute a direct treatment of the problems involved. It is intended to reveal that although the issue of grammaticality has influenced the trend of major development in recent linguistic theory, it remains inadequately treated, and unsolved to a great degree.
Chomsky's contribution to the understanding of the notion of grammaticality has been treated as a separate unit in this dissertation. This is because Chomsky has dealt with the concept of grammaticality directly and in considerable detail. His views have had a significant impact on the notion of grammaticality. An attempt has also been made to provide detailed review of the notion of grammaticality within the framework of generative grammar.

The problem of grammaticality in generative grammar seems to have arisen out of a need to reconcile two major requirements that were placed on the grammar. One was that a grammar should generate "all and only" grammatical sentences of a language, and the other, that a sentence is grammatical if it is acceptable to a native speaker. It is intended to show, in this dissertation, that the issue of grammaticality as formulated by Chomsky was instrumental in forcing certain developments within the theory of generative grammar.

A consequence of the introduction of the acceptability criterion was the possibility of empirical validation. This, as well as other factors attracted the attention of psycholinguists. A review of psycholinguistic
testing on the nature of grammaticality and acceptability has been attempted in this dissertation to show that psycholinguists tried to empirically validate claims made on the nature of grammaticality at every stage.

It has further been attempted to correlate important issues which arise from the empirical findings with the theoretical claims made by linguists. The insights gained, as well as the problems that remain unsolved, are discussed in the light of this background. It is also attempted to reveal to what extent these problems are due to the manner in which the constructs of grammaticality and acceptability have been formulated.

It might appear that the treatment of grammaticality is dependent on the notion as developed in Transformational Generative Grammar. This is merely because of the importance given to this notion in Chomsky's models of generative grammar, which represents a major trend in recent linguistic thought. It is however felt that the questions that have been raised by generative grammarians remain unanswered by them.

These questions and issues have been evaluated with reference to more recent theoretical views and developments.
This dissertation aims to show that grammaticality has been a pivotal issue in the theoretical standpoints taken by linguists, especially in Transformational Generative Grammar and Generative Semantics. It is also intended to show how these issues form a basic difference in the position taken by Generative Semanticists.

The production and comprehension of deviance in actual speech occurrence in various contexts has opened up an entire line of enquiry in sociolinguistic studies of variation. These present a distinctly different position, since they do not rely on introspective data and the concept of a homogenous speech community. These viewpoints while offering an alternative set of solutions provide a different set of criteria against which "grammaticality" and "acceptability" can be evaluated.