5. THE GRAMMATICALITY—ACCEPTABILITY DICHOTOMY.

5.0 Having reviewed the theoretical and experimental contributions to the study of grammaticality, we find that a set of issues emerge. As has been pointed out in several contexts, Chomsky's initial formulation of the notion of grammaticality had its impact on theoretical and experimental work to the extent that it provided the basis for these explorations. In this light, it would be useful to consider how much these issues have developed with respect to Chomsky's initial formulation and what has been the experimental finding on these. To put these issues into focus, it might be necessary to refer again to some aspects discussed earlier.

5.1 As has been mentioned earlier, the terms "grammaticality" and "acceptability" tend to be used interchangeably. This is understandable as they do overlap to a certain extent. This overlapping seems inherent in the initial formulation of the problem with Chomsky's statement, "grammatical,
i.e. acceptable to the native speaker". (Chomsky, N. 1957: 13). Even in the light of Chomsky's later clarification that grammaticality is to do with competence and acceptability with performance, a certain amount of overlapping seems inevitable, in the Transformational Generative model. Thus even if one states that grammaticality is part of competence, a part of the grammar that is internalized by the speaker, the fact that the linguistic abilities of a speaker are included, makes a certain amount of overlapping of this nature inevitable.

Grammaticality (which is to do with competence) refers to the ability of the speaker, and the necessity for the grammar to separate "sentences from non-sentences." This requirement is inherent in Chomsky's formulation of the concept of grammaticality. It necessitates that "non-sentences" be further defined and divided into those which are accepted by native speakers and those which are not. The fact that there was an intermediate range of sentences resulted in the setting up of degrees of grammaticalness. As stated by Lees, a scale of grammaticalness has to be developed along which "sentences can lie" corresponding to our intuitive feelings about
how such sentences are constructed and how they are interpreted. Thus the linguist is caught in the situation of trying to account for competence without recourse to performance. Facts about competence have, at the same time, to be validated by the native speakers' intuition. Any attempt to elicit responses would however come under the level of performance.

Experimental work based on this has shown that speakers are capable of separating non-deviant sentences from those that are deviant in any respect, and can even place them in order of the degree of devianace. However, this is controlled by a number of complex factors, as has been discussed earlier.

Though he was to change his stand later, Chomsky stated in *Syntactic Structures* that a search for a semantically based definition of grammaticality is futile. It is useful to recall the findings of the operational tests which showed that meaning is an extremely important factor in a speaker's rating of deviant utterances. A sentence which is syntactically deviant is found having a higher grammaticality value if it conveys an adequate amount of meaning, than the one which does not. Grammaticality ratings do not solely depend on syntactic correctness.
Another important statement made by Chomsky on the nature of grammaticality is that the likelihood of a sentence occurring does not make it more, or less deviant. This statement has many implications. It is true that speakers of a language understand sentences every day which they have not heard before irrespective of the likelihood of their occurrence. Also, as Chomsky has said, if two sentences are different in their degree of deviance and their likelihood of occurrence equally remote, speakers are still able to differentiate the degrees of grammaticalness. This does not take into account the fact that predictability of a type of utterance, or part of an utterance, has an effect on the rating for grammaticality that a sentence receives from a subject or a speaker. Tests like those carried out by MacIay and Sleator, Danks and Glucksberg, discussed in the earlier section have shown fairly conclusively that familiarity with sentences does seem to lower the rating for deviance. It was also seen that frequency of occurrence affects the grammaticality value of sentences.

It has been pointed out in the preceding section that "grammaticality" and "meaningfulness" had been used
as opposite variables. "Grammaticality" thus being equalled presumably with syntactic correctness. This distinction would be clear enough when a test uses both variables, but when only the variable of grammaticalness is used, there is no way of knowing if the subject equates grammaticalness with mere syntactic correctness. This situation is a direct consequence of the attitude to meaning held by Chomsky in the earlier Transformational Generative model.

As has been described in some of the tests in the preceding section, it was found that when test material was constructed using words in combinations produced by a paired association task, the recall of such sentences was greater. By Chomsky's own suggestion in *Syntactic Structures* that recall can be used as a means of testing grammaticality, it can be tentatively postulated that association increases grammaticalness.

It should be noted here that though psycholinguistic research on grammaticality began with the aim of validating Chomsky's theoretical views, the experimental investigations even at this stage were taking into account factors like familiarity, frequency
and association which were outside the Chomskyan framework. The psycholinguists had started conducting tests and experiments on grammaticality with the aim of studying competence but were taking into account variables which were outside the domain of competence. Thus, as has been mentioned before, it can be seen that the interest of the psycholinguist shifted to grammaticality as a dimension in itself and not merely as a means of arriving at certain facts of competence.

We thus see that psycholinguists were not constrained by the ideal speaker-hearer relationship. Though as has been pointed out by Labov, experimental work did not contribute towards solving any of the basic syntactic problems connected with grammaticality, it is evident that a few valuable insights were provided. It has to be borne in mind that the concerns of the psycholinguists were different. At the same time, it is necessary not to lose sight of the fact that Chomsky was responsible for these developments, not only by providing a theoretical base, but by his suggestion that operational tests could be constructed to provide useful results. Chomsky's requirement that deviant but acceptable sentences have to be accounted for by the grammar, provides the opening for more performance oriented
study. It involves investigation which is outside the framework of the **ideal** speaker-hearer relationship.

5.2 As has been described in detail, to account for degrees of grammaticalness within the existing Transformational Generative model, Chomsky developed and refined a system of hierarchy of categories which later led to the development of strict subcategorisation rules and selectional restrictions, in the Aspects model. Though the most radical change in the Aspects model was the addition of the semantic component, there were many other shifts in attitude of direct concern to the problems of grammaticality. In Aspects there is also a greater crystallisation of ideas and hence more direct statements made by Chomsky on his conception of the nature of grammaticality with relation to the theory of Generative Grammar.

A basic problem that arises in the attempt to construct rules that can account for deviant utterances, is defining the extent of deviance the rules must account for. As has been mentioned before, linguistic theory does not aim to account for every kind of deviance
produced. It is relevant here to refer to Chomsky's statement reiterating his stand in Aspects that
"Linguistic theory is concerned primarily with an ideal speaker-hearer in a completely homogenous speech community, who knows his language perfectly and is unaffected by such grammatically irrelevant conditions as memory limitations, distractions, shifts of attention and interest, and errors (random and characteristic) in applying his knowledge of the language in actual performance". (Chomsky, N. 1965 : 3). Chomsky's corpus of deviant sentences, then, automatically excludes not only lapses of all types, but any kind of variation. By this requirement, deviant sentences produced by learners of a language are also excluded. Thus, by a process of elimination, the only kind of deviance that should be of interest of a linguist is that which is produced deliberately. This could apply possibly only to deviance as a creative device in poetry. However, this aspect of deviance has not been treated in the theory of Generative Grammar with regard to grammaticality.

However, the variables mentioned above which get excluded belong more to the study of performance. If
competence is the concern of the linguist, the emphasis has been on that part of the speaker's competence which enables him to recognise deviance, comprehend utterances which violate certain rules, and reject others. It would appear that the rejection of deviant utterances hinges on comprehension. Though experimental work on grammaticality has dealt with all these abilities, the focus has been on comprehension. It can be seen that the emphasis has been on the hearer's competence, as far as accounting for deviance is concerned. Not much attention has been paid to factors that might cause the production of deviance. However, as is evident, attempts at testing competence of any type has to be done through performance. According to Chomsky the study of performance is relevant in as much it throws light on "underlying competence". Therefore such factors as have been mentioned earlier, are permissible under the study of performance. Chomsky states that "... there are some suggestive observations concerning limitations on performance imposed by organisation of memory and bounds on memory and concerning the exploitation of grammatical devices to form deviant sentences of various types" (Chomsky, N. 1965 : 10).
It would thus appear that what is meant by grammaticality is the problem of how the linguist can formulate rules such that the grammatical model reflects the comprehension and ranking abilities of the speaker. This is done in a way that the degree of deviance is automatically indicated.

With Chomsky's statement that grammaticality belongs to competence and acceptability to performance, grammaticality and acceptability are no longer used interchangeably. Thus Chomsky argues that it is not possible to test grammaticality, or that we cannot hope to arrive at any useful solutions of the problems regarding grammaticality through experiments. This seems to follow logically as any operation carried out by a subject would be a reflection of his performance. Acceptability on the other hand can be fruitfully studied through devising operational tests according to Chomsky. It then appears that tests which demonstrates the ability of speakers to recognise deviance and degrees of deviance can only prove that these abilities exist.

Grammaticality and acceptability are both multi-valued, but cannot be considered synonymous though they overlap. Grammaticality is only one of the many factors
that "interact to determine acceptability". Sentences can be unacceptable due to a variety of reasons, many of which are not the direct concern of the linguist. According to Chomsky it is not possible to characterise unacceptable sentences in grammatical terms. Acceptability of a sentence is then not parallel to the degree of grammaticality. A sentence that violates a number of grammatical rules might be more acceptable than one which is less deviant grammatically.

Though acceptability involves many factors which are outside the scope of grammar according to Chomsky, a certain amount of investigation into acceptability seems necessary. This is because Chomsky finds it necessary to include deviant sentences in the corpus to be accounted for by Generative Grammar. The deviant sentences which are to be included are those that violate any grammatical rule, but are still understood and accepted by the native speaker. As can be observed from the description of tests in the preceding section, this has been done by the construction of test material which is deviant in a specific way, so that it could be measured to what extent subjects accept a given kind of deviance. Thus we find that psycholinguists have
attempted by their operational tests to quantify deviance to some extent. Results of tests shows us that syntactic and semantic violations coupled with factors like that of familiarity and association are involved in the native speaker's judgement.

An attempt has to be made, therefore to demarcate an area of acceptability, whereby it is then possible to decide which deviant sentences are to be included in the corpus. Chomsky (1965) suggests that we use the term "acceptable" to refer to utterances that are "perfectly natural and immediately comprehensible without paper and pencil analysis". Thus again it is evident that the emphasis is on comprehension—not only on the degree of comprehensibility but the ease with which it is achieved. As been discussed earlier in greater detail, a number of tests carried out by psycholinguists have tried to quantify this aspect. The experiments carried out by Danks (1968) on comprehension are particularly useful in this regard. Ease of interpretation and the time taken for comprehension have also been measured. Danks constructed a test by which latency was measured by asking subjects to indicate the time taken to comprehend the stimulus sentences. Chapman (1971) tested comprehension by
asking the subjects to paraphrase and then indicate on a rating scale the ease with which was possible to achieve the paraphrase. However, it seems difficult, if not impossible to measure every type of unacceptable sentence a speaker may come across. Thus it does not seem that experiments and operational tests can provide a measure of deviance and acceptability which can be formulated into rules such that the grammar produces only acceptable sentences, a number of them which may be deviant.

Chomsky further defines that nature of acceptability by saying "the more acceptable sentences are those that are more likely to be produced, more easily understood, less clumsy and in some sense more natural. The unacceptable sentences tend to be avoided and replaced in actual discourse". (Chomsky, N. 1965 : 11). It may be recalled here, that Chomsky had stated in *Syntactic Structures* that the likelihood of occurrence of a sentence could not be associated with grammaticalness in any way. Tests using the variable of familiarity, and ordinariness have however shown that these variables do affect the grammaticality rating. According to Chomsky, these ratings reflect acceptability, since they involve performance behaviour.
Thus, if Chomsky's restrictions are followed, an investigation of factors comprising grammaticality is not possible. This statement of Chomsky is significant in that he concedes that frequency of occurrence or the greater possibility of occurrence is an important factor for the acceptability of a sentence. Tests using the variables of ordinariness are an attempt to measure this dimension. Paraphrases and tasks which ask the subject to correct deviant sentences provide an indication of which sentences are more likely to be replaced.

In the Aspects model Chomsky has attempted to separate the dimensions of grammaticality and acceptability by placing them on separate levels of competence and performance, and qualifying the nature of acceptability - "Like acceptability, grammaticalness is, no doubt a matter of degree, but the scales of grammaticalness and acceptability do not coincide. (Chomsky, N., 1965 : 11).

The inclusion of the semantic component and hence the inclusion of meaning in a theory of grammaticality is, as is to be expected, a great contrast to Chomsky's 1957 statement that meaning had
no part to play in a theory of grammaticalness. Operational tests have also reflected the changes in the development of Transformational Generative theory. As has been discussed earlier in 'Aspects', Chomsky makes a distinction between deviant sentences which are purely the result of syntactic deviation and those which are due to semantic deviation. The problem here is to account for sentences which have a "borderline character" how can rules of syntax and semantics be extended to cover these "aberrant" cases? At the same time Chomsky states that "it should not be taken for granted, necessarily that syntactic and semantic conditions can be sharply distinguished". (Chomsky, N. 1975 : 77). The "degrees of grammaticalness" approach formulated by Chomsky provides a schemata for subclassification based on syntactic considerations. However, it does seem clear that an approach which would confine itself to syntactic solutions for syntactic problems and semantic solutions for semantic problems cannot work in the circumstances. What is needed is a combination of the two approach : " ... what is needed is a systematic account of how application of the devices and methods appropriate to unequivocal
cases can be extended and deepened to provide a basis for explaining the status of such expressions"...."and an account of how an ideal speaker listener might assign an interpretation to such sentences where possible, presumably on the basis of analogy to non-deviant cases! (Chomsky, N. 1965 : '77-78).

It is significant that experimental psycholinguists have not devised tests which would show how deviant sentences were interpreted as significantly different from the interpretation of normal sentences. Tests on comprehension demonstrate how violation of rules or some other factors which produce deviance interfere with comprehension. This seems an important omission as this is one common factor that emerges from the theoretical work of Chomsky, Katz, Ziff and other linguists viz. that a promising solution for the accounting of deviant sentences is to try and show it by extending the rules for comprehension of normal grammatical sentences. The assumption is that the native speakers understand certain deviant sentences by analogy with normal sentences. Whether this assumption
can find empirical backing has not been demonstrated by experimenters in the field.

There is a possibility, that data obtained from paraphrase and correction tasks could be analysed, in an attempt to reveal the strategy employed by speakers in carrying out these tasks. This analysis might then provide clues as to how an "ideal listener" comprehends deviant utterances.

However, facts about interpretation, like the ease of interpretation of a deviant sentence and time taken by a subject to comprehend a deviant utterance, are factors which can contribute only to an understanding of acceptability, according to Chomsky. This is because some deviant sentences may be easy to interpret, whereas some totally well-formed sentences may be difficult to interpret.

It does not seem clear here whether Chomsky is identifying grammaticality with "well-formedness"
There is also no precise definition of what Chomsky means here by "well-formed".

Chomsky states that comprehension may provide useful insights into the nature of grammaticality and acceptability, degrees of grammaticality cannot be built on the basis of facts of comprehension.

It would then increasingly appear that grammaticality and acceptability cannot be related to each other in any direct manner.
5.3 In 'Aspects', Chomsky states that it cannot be assumed that syntactic and semantic considerations can be kept apart. However, he contradicts himself as he starts by making a distinction between purely syntactic and purely semantic deviation. According to Chomsky, the problem is accounting for those deviant utterances, which are "borderline cases". From the alternatives available, Chomsky finds that the most promising solution is that of the "degrees of grammaticalness" based on a hierarchy of categories. This approach developed by Miller and Chomsky, was used by psycholinguists as a basis for testing, and for preparation of test material. Coleman (1965) and Danks (1963) used the concept that levels of grammaticalness could be created by grading the relaxation of rules. Thus there would be totally correct sentences at one level, working towards a level which would only contain random strings of words which were then totally deviant. It was found that subjects did rank sentences in the predicted order, and thus were capable of recognising degrees of grammaticalness as postulated by Miller and Chomsky. This approach was refined and developed by them to a highly formalised level, which resulted in the formation of subcategorisation rules.
According to Chomsky, a successful approach would be to combine syntactic and semantic analysis to a point where the hierarchy of categories could be incorporated by both, instead of "relegating this to unanalysed semantic intuition, there being for the moment no other available proposal as to a semantic basis for making the necessary distinctions" (Chomsky, N. 1965: 78).

As has been described earlier, in the Base component of the Aspects model, strict subcategorisation rules and Selectional Restrictions were incorporated to account for categorial contexts and "restrictions of co-occurrence". The addition of these rules, provide a further category of deviance, that is, some kinds of deviant utterances can be more specifically labelled as violating strict subcategorisation rules or Selectional Restrictions.

Psycholinguists have tested deviance caused by violations of Strict Subcategorisation Rules as well as those caused by Selectional Restrictions (Chapman, R.S. 1974, Davidson, R.E. 1966). The details of these tests have already been discussed in the previous Chapter.

As grammaticality relies on syntactic and semantic well-formedness, a more refined analysis of syntactic and semantic deviance, could provide a further insight into
the nature of grammaticality and acceptability. Semi-grammatical sequences which could be metaphorically interpreted, could be specifically accounted for in terms of violation of Selectional Restrictions. We thus find that more controlled semantic deviation could be tested, with deliberate violations of particular semantic features, instead of semantic deviance being produced by merely scrambling the words. Chapman, however found that subjects did not seem to find any significant difference between Selectional Restriction violations and Strict Subcategorisation violations in terms of deviance or ease of interpretation. There was "slight evidence" pointing to the fact that subjects find SSC violations easier to detect. As has been mentioned earlier, Chapman was able to suggest that violation of features like [+ animate] cause a greater amount of deviance, than features which are lower in the hierarchy like [+ abstract]. Paraphrases of these violations have proved useful insofar as analysing the results in terms of strategy employed by the subjects. This factor has not been directly tested as we have mentioned earlier. Chapman's conclusion is interesting as it supports the theory put forth by
Chomsky, Katz, etc. that deviant sentences are understood on the basis of non-deviant sentences. However, this generalization cannot be made on the basis of Chapman's results, as in a paraphrase test situation, the subject is being made to produce non-deviant sentences on the basis of deviant stimulus sentence. Chapman concludes this on the basis of the fact that paraphrases of deviant sentences are rule governed, and follow the pattern of the deviant stimulus sentence to some extent.

5.4 Thus it is seen that at every stage, psycholinguists have attempted to test most of the theoretical claims, and followed the changes in the theoretical standpoints of the Transformational Generative Grammarians.

Since theoretical formulations were not made with the intention of being tested empirically, psycholinguists had to devise their own methods for testing these. With the result, we find that small parts or a few specific statements get tested by psycholinguists at a time. Since the interpretation of the
the theory for the purpose of empirical testing is left to the psycholinguist, there may be differences in interpretation. We have already discussed the problems that are involved in devising operational tests that would accurately reflect competence. We find thus that psycholinguists testing the same variables have arrived at conflicting results.

As far as testing on grammaticality is concerned, we have pointed out that psycholinguists have at certain times included variables which were considered outside the Transformational Generative framework. There are also instances of testing linguistic constructs for problems more of interest to psychologists.

All these factors seem to have been responsible for reducing the impact of psycholinguistic testing on theoretical developments in Transformational Generative Grammar.

We thus find that, as regards the issue of grammaticality, there is no influence of psycholinguistic findings on theoretical developments. There is no mention, or evidence that suggests that Chomsky attempted to account for deviance in semantic as well as syntactic terms, because the empirical findings of the
psycholinguists.

On the other hand, as we have discussed in the earlier sections, it was increasingly clear that semi-grammatical utterances that were acceptable to a native speaker could not be accounted for merely by restricting co-occurrence. The need for a semantic component in a theory of semi-sentences was put forward by Katz, Ziff and Putnam. Chomsky dealt with semantic deviance only in the Aspects model as we have seen.

The crux of the matter then is that empirical findings have not resulted in changing the course of theoretical development. It has been the existence of problems within the theory that has necessitated alteration in the theoretical framework.

As we have discussed earlier, there is resentment on the part of psycholinguists at the linguists' refusal to accept or incorporate empirical evidence of operational tests, although linguists admit that operational or behavioral tests could be useful. There is also a constant emphasis on the importance of reliance
on a native speaker's intuition. Inspite of this, empirical attempts at eliciting facts about the native speaker's intuition were not accepted by Chomsky.

What made it increasingly difficult for the psycholinguist to function successfully was the fact that linguistic theory was in a constant state of flux due to the many controversies among linguists in the field. It was felt by psycholinguists that Chomsky and other Generative Grammarians were trying to protect their model from testing, by constantly relegating any empirical data to the domain of performance.

The psycholinguist while trying to test grammaticality as a dimension is caught in the linguist's arguments about the nature of grammaticality and acceptability on the one hand and the performance : competence dichotomy on the other. Though psycholinguists validated Chomsky's claim about the ability of the speaker's ability to recognise degrees of deviance, Chomsky stated that grammaticality cannot be tested, and only acceptability can be tested successfully.

The failure of the psycholinguist, then seems to be in his inability to successfully get at the
intuition of the native speaker. Though, according to Chomsky, the "introspective judgement is not sacrosanct"; he demands that data from operational tests should "meet the condition of correspondence to introspective judgement" (Chomsky, N. 1965).

5.5 There is also the problem that when a psycholinguist asks a subject to rank stimulus sentences in order of their grammaticality or deviance, is his rating a reflection of his competence or performance. The subject may well be only displaying his attitude which might not be correspondent to his own ability. There are also the factors of varying levels of tolerance, and the fact that there is likely to be an appreciable amount of difference between actual and elicited behaviour.

Another problem faced by psycholinguists is that there is no clear statement from the linguists as to what deviance has to be accounted for. This has probably kept the psycholinguists from being able to construct significant contribution to syntactic and semantic theory. As has been stressed earlier, there has been no mention made of production of deviance,
and of what kind of deviance an ideal speaker-hearer would face, and which is of concern to the linguist. Examples of deviance given by linguists which are hypothetical and generally illustrate violation of a particular rule, do not explicate what kind of deviance is to be accounted for. Grammaticality then, it would follow, is concerned with the ability of the speaker of the language, who is capable of making distinctions which must be reflected by the grammar. It appears then, that what Chomsky and other linguists are concerned with is not the forms of deviance which a speaker comprehends or rejects, but his ability to do so, if required. This would be possible only in a testing situation, or a specific context like the comprehension of deviance in literature. The study of performance is justified, according to Chomsky, only as far as it leads to an understanding of competence. But as long as linguistic theory does not specify the type and extent of deviance, the psycholinguist is not able to contribute a clearer understanding which would reflect factors involved in the speaker's intuition. This has led psycholinguists to feel that "presumably the continued failure to find correspondence between
introspective judgement data and empirical test data would ultimately cast doubt on some of the intuitive notions of language processes". (Davidson, R.E. 1966 : 7).

There were other reasons why data from operational tests did not have any significant impact on linguistic theory. These stem from the fact that the Transformational Generative model was not a 'behavioristic' one. As Chomsky had constantly iterate, the solution he was offering was purely schematic and needed much more development and refinement. Thus it did not provide sufficient guidelines for the construction of tests. With a few exceptions, a review of test materials dealing with grammaticality shows that they were not constructed in a sufficiently controlled and rigorous manner. On the other hand, it is also likely that the testing situation does not lend itself to more than a certain amount of control.

Thus, if the major factors constituting grammaticality are to be specified and isolated, it is the experimenter's perception of grammaticality that comes into play. A set of deviant stimuli might at the same time contain more or other dimensions of deviance than the experimenter intends. For example,
even using psycholinguistic variables, an experimenter who is testing for degrees of semantic deviance might not be in a position to know when the variables of familiarity and association are influencing the rating of the subject.

Even when a particular strategy of producing deviance is being employed by the experimenter, it might give rise to other forms of deviance than intended, thus interfering with the quantifying of one kind of deviance. Therefore, in a controlled set of deviant utterances which are constructed by a given fixed strategy, a range of deviance can result. For example, from a given set of deviant sentences, all of which contain one violation of the same type (for examples SR violation in this case), it is possible that they could be ranked on different levels:

"Continuous fraud frightens implied sincerity"
"Incandescent zink startles molten copper"

There seems to be evidence that psycholinguistic data has not always been procured by constructing tests which stem directly from linguistic theory. Coleman's test was used by other psycholinguists to test the
"degrees of grammaticalness" hypothesis formulated by Miller and Chomsky. Coleman constructed four levels of deviant sentences from the fully grammatical to ungrammatical. The two intermediate levels were constructed by "cutting a phrase structure tree" at two points which resulted in differing levels of grammaticalness (See Chapter 4 for discussion of Coleman test). However, this cannot be equated to a systematic violation of a particular hierarchy of categories as postulated by Miller and Chomsky. Intermediate levels of grammaticalness have also been produced by "intuitively" placing a level of grammaticalness.

It is thus seen, that for a variety of reasons, psycholinguistics testing cannot provide the solutions to problems that arise around the notions of grammaticality and acceptability in Generative Grammar. As we have seen, many of the reasons why this is so, are inherent in the formulation of the concepts of grammaticality and acceptability as developed within Generative Grammar.
6. CURRENT PERSPECTIVES ON ACCEPTABILITY

6.1 Having evaluated the problems of grammaticality and acceptability with reference to Transformational Generative Grammar, and psycholinguistic research in this area, it becomes necessary to examine alternative viewpoints in linguistic theory.

This is necessary so that we can determine to what extent, the problems concerning grammaticality and acceptability, that remain unresolved are due to the nature of Transformational Generative Model.

This examination is also carried out with the intention of demonstrating the importance of the issue of grammaticality and acceptability in controversies which led linguists to seek alternatives in linguistic theory.

In this way we can see where the development of the theory of grammaticality had culminated in Chomsky's model of Generative Grammar and how this led to alternative proposals even within Generative Grammar.

At the end of Chomsky's discussion on deviance and grammaticality in 'spects' he finally suggests
that the sole function of Selectional Restrictions could be described as that of preventing deviance. Further, that it might be useful to limit the accounting of deviance to only that, as which is caused by violation of Selectional Restrictions. These Restrictions, in turn might be more "appropriately assigned" to the Semantic Component.

Thus, as has been pointed out in several places, the scope of Transformational Generative Grammar in terms of accounting for degrees of grammaticalness is now severely curtailed. It would appear that Chomsky abandoned his earlier aim of accounting for deviant sentences (accepted by the speaker) in a way that would show the extent and manner of deviance.

Chomsky's theory of grammaticality has come under attack from within Generative Grammar, as well as from psycholinguists and socio-linguists. The concept of grammaticality that has been central to Chomsky's model has been labelled 'absolute' because it is based on a sharp distinction between sentences that are grammatical and those which are not. It is this distinction with which the theory has come to be associated. The notion of semi-grammaticalness also belongs to this view of
grammaticality. Sentences can be called semi-grammatical only when a clear distinction is made between "grammatical" and "ungrammatical."

This distinction has been considered sharp and unrealistic, and Chomsky's concept of grammaticality has been dismissed as a useless "theoretical construct", set up to cover the inadequacies of the model.

The reasons for this rejection were manifold. In terms of the actual accounting of deviance by the Transformational Generative Model, the serious drawback was that though the status of autonomous syntax was retained, there was no way of distinguishing between so-called ungrammaticality and semantic anomaly.

The idea of an ideal speaker - hearer operating in a homogeneous speech community was also under attack in the face of empirical evidence. The position of Transformational Generative Grammar was made more vulnerable at this point by its failure to develop an adequate theory of interpretation.¹ The importance of

psychological testing and sociolinguistic studies of variation, was highlighted at this point. The data provided by these studies underlined the fact that there was a range of linguistic phenomena which could not be accounted for by the existing Transformational Generative Model.

It appeared to be increasingly clear that the 'rationalistic' viewpoint held by Chomsky in trying to account for linguistic competence was not fully viable; the problem of arriving at an understanding of competence without recourse to performance, has inherent contradictions, as we have discussed earlier. Thus a more empirical alternative was sought by linguists even within Generative Grammar. A view of grammaticality which was based on a clear distinction between grammatical and ungrammatical sentences was found contrary to linguistic experience. According to Bever, Katz and Langendoen (1978), grammaticality is the "central notion in linguistic investigation" and an empirical interpretation of Generative Grammar must first "undermine fully Chomsky's notion of explication and absolute formulation, which provide the basis for his conception
of grammaticality". For example, "If sharp categorizations are not explicit in linguistic experience, then they have to be contributed by the principles the mind uses to organize experience" (Bever, J.J. Katz and T.D. Langendoen 1976 : 29).

6.2 These contradictions along with other factors were responsible for the development of Generative semantics. Along with these developments, acceptability as a notion clearly developed and emerged as a concept which took into account not only well-formedness of sentences but other connected factors.

This formulation of acceptability was not based on Chomsky's definition which stated that grammaticality was concerned with competence and acceptability with performance. The Generative Semanticists' concept of acceptability is closer to Harris' contention that there is a "sliding scale of acceptability" in language.

The chief difference between Harris and Chomsky on this issue is that Chomsky views the corpus as consisting of clearly grammatical and ungrammatical sentences and an intermediate set of sentences ranging from the
grammatical to the ungrammatical. Whereas, according to Harris "there is no well-defined set of sentences in a language. Rather some word sequences are sentences, some are odd or even undecidable as to sentencehood in one or other way, and some are entirely impossible" (Harris, Z. 1965: 370). The inability of a linguist to account for 'deviant' sentences reflects inadequate knowledge, or an incomplete theory from Chomsky's viewpoint. Harris views it as "the inherent gradient in the language".

The transition to this view on the nature of grammaticality and acceptability is endorsed by Robin Lakoff, representing the Generative Semantics view - "The change in emphasis from grammaticality to acceptability was forced upon us by 1967 or 1968, by our recognition of a whole new range of data and our consequent search for a more sophisticated explanation for the occurrence and nonoccurrence of sentences where grammaticality judgements were determinable by purely linguistic criteria, acceptability judgements invaded the realms of psychology and sociology, greatly increasing the range of facts one had to look at as well as range of

1 It is significant to note that though Chomsky was influenced by Harris's views on meaning, and the concept of Transformational, he was not influenced by Harris's views on acceptability.

Generative Semanticists, notably George Lakoff and J. Ross, developed the notion of graded acceptability. This concept did not only mean that a hierarchy of acceptability was set up. Acceptability would now include all sorts of underlying factors that form a speakers intuition. In Chomsky's view of grammaticality, a sentence was analysed only in connection with the grammar. According to the Generative Semantics framework, acceptability of a sentence will depend on factors like presuppositions, and inferential relations. A speaker finds a sentence acceptable in relation to his knowledge of the world, his belief, as well as inferences and implications that he is able to draw. The concern however is not to separate the unacceptable sentences. The concern is to reveal a hierarchy of acceptability. This concept is part of a larger theory of "Fuzzy concepts" and "Fuzzy Grammar". This is based on the idea that "natural language concepts have vague boundaries and Fuzzy edges and that consequently, natural language sentences will very often be neither true, nor false, nor nonsensical, but rather true to a certain extent, true in certain respects and false in other respects". (Lakoff, G. 1973 : 183).
The claim made in Fuzzy grammar is that speakers recognise hierarchies of a category. For example, given a list of nouns including names of birds, animals, etc., a speaker can rank a category hierarchically in terms of 'birdiness' or 'vegetableness' and so on. It is expected that a fairly consistent hierarchy will emerge among speakers. It is assumed however, that the "acceptability thresholds" would differ.

It can be seen, that in Generative Semantics, the concept of grammaticality is replaced by that of "well-formedness". The concept of well-formedness depends on the belief of the speaker being consistent with the presuppositions and entailments.

The study of "hedges" within Fuzzy grammar is principally concerned with speakers hesitations, and other factors which had so far been considered outside the scope of grammaticality. Acceptability is relativised and includes all manner of performance factors that might have a bearing on the well-formedness of a sentence. The theory of acceptability is based on the assumption that there are "shadowy areas" in natural language. Acceptability is based on "degrees of truth"
and "degrees of category membership". Lakoff feels that it is necessary to include a theory of stereotypes so that a clearer picture of category membership emerges.

This concept of graded acceptability was a result of the conviction that the well-formedness of a sentence could not be considered in isolation without taking into account the psycholinguistic or sociolinguistic context.

We thus find that the concept of well-formedness aims to account for a far wider range of facts than the Chomskyan notion of grammaticality. The domain of competence also is considerably extended, and altered. According to George Lakoff "The study of the relationship between a sentence and those things that it presupposes about the nature of the world by way of systematic rules is part of the study of competence". (Lakoff, G. 1971: 329).

Chomsky has accused Lakoff of "blurring the distinction" between competence and performance, by his interpretation of competence. This charge has been denied by Lakoff by his claim that a distinction is made between extralinguistic factors that enter into speakers'
judgements about well-formedness and "the linguistic
competence underlying this" that is, "the ability of a
speaker to pair sentences with the presuppositions rel-
ative to which they are well-formed". (Lakoff, G.
1971 : 327).

We thus find that it is not that a set of extra-
grammatical features are being introduced into grammar,
but that the grammar is now trying to account for a
greater number of facts.

This theory of graded acceptability has not only
the linguistic intuition of the native speaker as its
input, but also the speaker's judgements.

It can be observed that this concept of well-
formedness does not have to merely conform to the spe-
aker's intuition and judgement as in Transformational
Generative Grammar but incorporates these notions. The
corpus is not viewed as a set of strings which the gram-
mar must separate into distinct classes of grammatical,
ungrammatical and semi-grammatical. According to Bever
and Katz, "Lakoff's criterion leads directly to a re-
introduction of Harris's conception of acceptability,
in which the sentences of the language form a gradient
from clearly impossible strings on up to clearly well-formed ones, since well-formedness is made a function of parameters that may vary in any way from speaker to speaker and to any degree in the same speaker over time". (Katz; J. and T. Bever, 1978 : 33).

However, as has been stated earlier, it is claimed that the hierarchy of categories or "ordering relations" will be constant, to an appreciable extent. Lakoff reports an experiment carried out by Eleanor Heider (Lakoff G. 1973 : 183) in which she asked subjects to rank species of birds as to their degree of "Birdness" (That is, the degree to which a particular bird matched the subject's idea of a bird). Heider's results showed that a fairly conclusive hierarchy emerged.

Further justification for the inclusion of the knowledge and belief of the speaker is, that since linguistic intuition and the speaker's judgements have to be accounted for, it is necessary to investigate the factors that underlie or constitute intuition.

This concept of graded acceptability with possibilities of including empirical factors provided a basis for more context oriented research. "The acceptance of an utterance, moreover, is not merely based on syntactic
and semantic rules/strategies but also on pragmatic rules, conditions and structures" (Van Dijk, T. 1977 : 42).

The theory of Speech Acts, based on the theory of J.D. Searle, analyses speech segments on this assumption. A criticism of the Chomskyan notion of grammaticality in this respect is that sentences were always considered for grammaticality in isolation. Many utterances would be considered grammatical, though not acceptable, when they are presented out of context. Question-Answer sequences are a typical example of this. To quote J.L. Morgan's well-known example - the sentence "I think with a fork" would be considered deviant in isolation, but not if it was in answer to the question - "How does Nixon eat his tapioca?" If a grammar is to account for acceptability of sequences, or capture the generalisation that there is a sliding scale of acceptability, it must make a provision for rules that apply to sequences. A speech act may consist of one or many sequences or sentences, but one sentence cannot generally consist of more than one speech act. If the acceptability of sequences is to be considered in context, it might be necessary to consider them as a part of a discourse or text as well.
A pragmatic context is "defined primarily in terms of sets of propositions and rules characterising the internal structure of speaker and hearer: their knowledge, beliefs, wishes, etc. Semantic models are in this way contextualized with respect to speaker and hearer and some other properties of the (fragment of the) possible world in which they are communicating". (Van Dijk, T. 1979 : 48).

The concept of pragmatic context in this respect makes provision for incorporating all manner of contextual features. It should however be noted that these make provision mainly for providing the psychological context. Thus there is scope now for examining all manner of factors which affect the well-formedness and acceptability of sequence.

However, we find that Generative Semanticists are trying to account for the underlying intuitions of native speakers of a language. Factors like belief, knowledge of the world, intentions etc. are all part of linguistic intuition. The possibility of incorporating all these factors in a statement of well-formedness reduces the importance of ensuring the validity and integrity of judgements given in a testing situation.
To quote Levelt in this connection—"Where do grammaticality intuitions come from? ....such intuitions are highly dependent on our knowledge of the world and on the structure of our inferential capacities. So the general question should be: what sort of process underlies the formation of a grammaticality judgement? The only way to approach this question is to ignore all a priori linguistic restrictions and to regard it as a problem in human processing" (Levelt, W.J.M. et al. 1977:89). Such an attitude extends the scope of this problem beyond the domain of grammatical and linguistic problems to include issues considered as being in the purview of social and psychological studies.

Though Generative Semantics does not exclude factors of performance as we have discussed, it relies greatly on introspective data. As has been mentioned earlier, the dependence on introspective data grew in Generative Grammar with the need to account for the native speaker's intuition. Though Generative Semanticsists recognised the need for including psychological and social contexts, the reliance on introspective data remained.  

1 Generative Semantics does not reject the use of elicited judgements as valid linguistic data. For example refer—Heider's experiment as reported by Lakoff, experiments on Fuzzy grammar by Mohan (1977) and Snow and Meijer (1977) experiment which aimed to show that syntactic judgements are secondary to other kinds of linguistic intuitions.
An alternative model to the ones discussed above is a sociolinguistic one, based on the views of William Labov. Labov's views are discussed here as they influenced the study of variation to a great extent. He is also responsible to a great extent, for the direction taken by acceptability studies later on.

William Labov attacked the concept of a homogeneous speech community. If social context had to be included, the existence of variation within a speech community became necessary. Labov found that studies of introspective judgements revealed that "variation in this field is widespread, uncontrollable and chaotic". (Labov, W. 1977: 86).

Labov quotes Langendoen and Lehiste as reporting a great scale of variation in responses, in studies which relied on introspective judgements.

A more important reflection on the validity of introspective data is made by Spencer's (1972) study entitled "Differences Between Linguists and Non-linguists in Intuitions of Grammaticality-Acceptability. To quote Spencer at length - "Since linguists are members of the speech community, they have used their own intuitions
to differentiate linguistic levels, and to decide upon and differentiate descriptive problems ... "But in recent developments in linguistics, the intuitions have become more and more subtle, and more difficult for nonlinguists to intuit themselves or to accept. This disturbing development has led to the question of whether or nor linguists' intuitions can be uncritically accepted as being valid and basic to the speech community". (Spencer, N.J. 1972 : 86-87).

In Spencer's experiment, stimuli sentences were taken from the works of well-known linguists¹ the sentences were presented to one group of naive subjects, and to another group of non-naive subjects. The results showed that the between-subject consistency was far greater than the index of agreement with the linguists.

These results, coupled with other data according to Labov, constitute a wholesale rejection of linguists' intuitions. It would appear that the linguists' involvement with their theoretical viewpoint interferes with the native speaker's intuitions. This makes a stronger case for studies which would look for consistency among speakers of a particular speech community.

¹ The sentences chosen by Spencer were those which linguists had clearly stated as being acceptable or unacceptable.
This does not mean that intuitions should not be referred to, but an intuitive feeling cannot be regarded as a fact. Intuitions can "serve as a guide" according to Labov, but cannot be considered as indisputable evidence.

As we have mentioned in earlier discussions, there is the likelihood of a lacuna existing between elicited and actual behaviour. As reported by Labov, many sociolinguistic studies show a "great disparity" between what people think they say, and forms they are observed using, when not answering a direct questionnaire. Study of intuitive judgements also shows that the views of the experimenter have a considerable effect on the results. To quote Labov "It seems most likely that idiosyncratic dialects proposed so far are artifacts of the testing situation. Idiosyncratic dialects may exist, but the burden of proof is clearly on those who would propose them". (Labov, N. 1977 : 98).

6.4 In summary, it needs to be asserted that it is necessary to look for a consensus within a speech community, and that disputed judgements should be investigated with a view to revealing a pattern of variation in a speech community. Also, judgements of speakers who are conversant with the issue involved should not be taken as evidence without further investigation.

It is possible to study judgements of grammaticality, and investigate differences in semantic interpretation
through sociolinguistic and dialectical studies. This could be done by observation as well through elicitation.

It is here that the advantage of a model of graded acceptability can be seen. Variation studies can be used to construct a gradient of acceptability, incorporating psychological as well as sociological factors. Hierarchies of Fuzzy grammar could also constructed on the basis of such sociolinguistic studies.

We thus find that the scope of acceptability has been greatly broadened and the range of issues is no longer restricted to directly grammatical issues. Acceptability is concerned with reactions of speakers of a language, to psycholinguistic as well as sociolinguistic variables.

Acceptability studies in recent times, have been concerned with an increasingly wide variety of linguistic situations, some of which are considered below.

Learner intuitions of grammaticality and acceptability can be studied for a number of reasons. Acceptability judgements of learners can be compared with those of native speakers. An analysis of the differences
would provide an index of acquisition. This would be true of both child and adult learners of a language.

Violations created by adult learners and bilingual speakers can be analysed to reveal first language interference of grammatical rules. Acceptability judgements or ratings of such learners would also provide an insight into the semantic and cultural differences between the native and target language. These differences would be revealed through certain violations that may or may not be perceived. However, a wide section of subjects would have to be tested for such a study to be meaningful.

Acceptability of forms which are restricted to certain socio-economic groups would form a useful part of attitude studies. Acceptability of linguistic forms used by minorities or cultural groups are also important in this respect.

Acceptability in pidgin and creoles would prove a fruitful field of study. Acceptability criteria in these languages might offer fresh insights into the problem.
We thus see that the study of grammaticality, acceptability has moved away from the strictly competence oriented study, in which performance factors were meaningful, only as far they contributed to a understanding of competence.

In spite of the many apparent differences it can be asserted that at a fundamental level the problem of grammaticality and acceptability remains the same. Current studies of acceptability are still addressed to the problem of how speakers of a language can communicate inspite of the many kinds of deviance that exist in everyday speech. The underlying quest of these studies is still to try and reveal the scale of evaluation that is shared by speakers of a language, and to uncover what these factors are.