CHAPTER II

2.0 GRAMMAR

Grammar, in fact is the code of language. The structuring of this code depends on human perception. All "speech communities" evolve a definite core perception during their own evolution and it is conventionally accepted in these speech communities. A review of the viewpoints of linguists about grammar would be worthwhile before a more explicit definition of grammar can be formulated.

Otto Jespersen sees grammar as an arrangement of linguistic facts\(^1\). He draws a distinction between grammar and lexicon: grammar deals with "General facts" whereas lexicology deals with "Special facts". According to Jespersen grammar must be based on form-function relationship which is inseparable in the life of a language\(^2\).

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1. "When we come to consider the best way in which to arrange linguistic facts, we are at once confronted with the very important division between grammar and dictionary". --Jespersen. 1951. The Philosophy of Grammar, George Allen and Unwin Ltd., London. p. 7.

2. It should be the grammarian's task always to keep the two things in mind, for sound and signification, form and function, are inseparable in the life of language, and it has been detriment of linguistic sciences that it has ignored one side while speaking of the other, and so lost sight of the constant interplay of sound and sense". Ibid, p. 40.
While speaking of Universal Grammar, Jespersen distinguished between linguistic categories and logical categories. If the categories are purely logical then they are universal i.e. they belong to all languages in common and if they are merely linguistic categories they, or some of them, are peculiar to one or more languages as distinct from the rest. It is while discussing the possibility of a Universal Grammar that he links grammar with the analysis of thinking process itself. It is in this respect that the grammar is described as a code based on human perception.

Ferdinand de Saussure defines grammar as a set of rules that state the systems of language. He says:

"The Static linguistics or the description of a state of a language could be called as grammar, in a very definite sense, and in a usual way that we find in the expressions like "Grammar of Chess" or "Grammar of bourse" etc. where it is concerned with a complex and systematic object, operating on co-existing values."

Saussure finds that the conventional definition of grammar which includes morphology and syntax and excludes

4. La linguistique statique ou description d'un état de langue peut être appelée grammaire, dans le sens très précis, et d'ailleurs usuel, qu'on trouve dans les expressions "grammaire du jeu d'échec", "grammaire de la Bourse", etc., où il s'agit d'un objet complexe et systématique, mettant en jeu des valeurs coexistantes" (Saussure, 1919, p.185).
lexicology is not logical and hence is opposed to the viewpoint supported by Jespersen.\textsuperscript{5} Saussure emphasises the hierarchy of phenomenon within the system as the basis of all linguistic description.

Bloomfield advocated a descriptive approach to language in which he stressed the autonomy of language, linguistics and grammatical forms. In Bloomfieldian Linguistics grammar is reduced to morphology and the syntax is studied as an offshoot of morphological studies. He goes on say that it can be conveniently divided into morphology and syntax. According to him,

"Syntax may be roughly defined as the principle of arrangement of the constructions formed by the process of derivation and inflection (words) into larger constructions and of various kinds"\textsuperscript{6}.

It was such a theory of syntax which led to the Immediate Constituent Analysis (ICA). In ICA the forms of language are subjected to a multilevel analysis where one begins with an utterance and reaches to morpheme. Each higher level includes the constituents of the level immediately lower to it. The ICA was proposed by Rulon S. Wells (1974) and further explicated by Charles F. Hockett

\textsuperscript{5} Ibid, p.185.

Noam Chomsky furthered this trend of distributional and structural linguistics and gave it a new direction when he wrote *Syntactic Structures* (1957). He defined the goal of linguistic description as to explain and generate all and only grammatical sentences of a language. Grammar, hence was defined as a finite set of rules which could *generate* an infinite number of sentences. Chomsky also introduced the notion of *competence* and *performance* while discussing grammar. These notions are derived basically from the distinction that Saussure draws between *langue* and *parole*.7.

The grammar for Chomsky now is not only a set of rules which generate infinite and well formed strings, it

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7. Intrepreting the concepts of language and parole chomsky writes "Saussure regards language as basically a store of signs with their grammatical properties, that is, a store of worked-like elements, fixed phrases, and perhaps, certain limited phrase types. He was thus quite unable to come to grips with the recursive processes underlying sentence formation and he papears to regard sentence formation as a antter of pareole rather than language, of free and voluntary creation rather than systematic rule. There is no place in his scheme for "rule governed creativity" of the kind involved in the ordinary every day use of language. Chomsky (1964) p.23.
also becomes a description of intrinsic competence of ideal Speaker-Hearer. He says:

"A fully adequate grammar must assign to each of an infinite range of sentences a structural description indicating how this sentence is understood by the ideal speaker-hearer".

Chomsky's main concern in syntactic structure was to provide a formal basis for the construction of a grammatical theory. In doing so he thought that meaning could be marginalised. However, in 1963, Katz and Fodor underlined the importance of meaning. They found that the syntactic component proposed by Chomsky in "Syntactic structures" could become the basis of Semantic component that would provide semantic interpretation of certain ambiguous structures.

It was this renewed interest of linguists in semantics that lead Chomsky to revise his theory in Aspects of the Theory of Syntax (1965). Semantics became a part of the linguistic description although it still has only an interpretative function. What was important in all these theories of syntax was that they moved away from morphology.


and in later development included, though partially, semantics as a component in their syntactic analysis. If the neglect of the Syntax in morphological grammar led to the development of syntactic theories, the attempt to study syntax in purely formal way led to the development of semantically based grammars.

It is precisely this period when we find that several grammatical theories are proposed as a reaction to the Chomskian framework. One of the major challenges to the standard theory of Syntax came from the Case grammar. C.J. Fillmore argued that the most satisfactory grammatical analysis of a sentence was one in which the constituents of each clause, at the deepest level of syntactic analysis, were cases, e.g. Agent, Instrument and Place. The tradition of case grammar existed even before Chomsky and it was enriched by scholars like Hjelmslev and Tesnière.

The verb occupies a central and pivotal place in a sentence and it governs a set of obligatory and/or optional deep-structure cases which are filled by expressions that may occur as a subject. Objects or prepositional phrase at a more superficial level. The verb 'open', for example, might be classified in lexicon associated with a case grammar of English as one which governs an Agent, an Entity
and optionally an instrument. Despite many attractions, case grammar is no longer seen by the majority of linguists working within the general framework of transformational generative grammar as a viable alternative to the standard theory. The reason is that when it comes to classifying the totality of verbs in a language in terms of the deep structure cases that they govern, the semantic criteria which define these cases are too often unclear.

However, Fillmore's *The case for case* has certainly influenced the development of extended standard Theory as Chomsky attached more importance to what he called thematic relations. It would be worth noting that another major contribution of Fillmore's paper was the emergence of Valency-grammar which are formalised as dependency grammars.

Another major development after Chomsky's standard theory is the emergence of Relational Grammar which lays considerable emphasis on the grammatical relations of subject, object and indirect object of the sentence. It is due to this increasing emphasis on semantics that lead to the use of the conceptual and terminological apparatus of modern formal logic and formal semantics. It was an American logician, Richard Montague, who thought that the semantic structure of natural language could, and should, be
analysed like the semantic structure of formal languages. He was not alone in taking this view. But Montague's grammar appears to be the lone theory which won the support among other systems which are strongly influenced by the works in formal semantics. The difference between Montague grammar and Aspects is that it establishes a close correspondence between syntax and semantics by adopting a particular kind of categorial grammar.

After all these post-Chomskian alternatives, Chomsky himself with his associates proposed extended standard theory which has been in a state of continuous development for the last twenty years. Chomsky in 1972 accepted that presuppositions are parts of grammar and supplemented the lexicon with an additional dimension. The changes in his standard theory are also marked. He says:

"Only surface structures undergo semantic interpretation, though our surface structures are no longer those of the standard theory, by virtue of the trace theory of movement rules."


He now distinguishes between the 'sentence grammar' and a general theory of grammar. In his *Lectures on Government and Binding* (1981), Chomsky discusses the theory of Universal Grammar. The Universal Grammar has interacting subsystems. The subsystems are rule systems on one hand and subsystems of principles on the other hand. Rule system includes lexicon, syntax, categorical and transformational componant phonetic form and logical form components. The subsystems of principles include bounding theory, government theory, B-theory, binding theory, case theory and control theory.

Halliday, on the other hand, proposed a socio-semantic approach to language and the speaker's use of language. He points out the set of options in meaning that are available to speaker-hearer. The social theory determines behaviour options (what the Speaker can do) which are translated linguistically as semantic options (what he can mean) which are encoded as options in linguistic form (what he can say). The meaning potential proposed by Halliday is not very different from the notion of communicative competence of Dell Hymes. Dell Hymes points out that Chomsky's notion of competence does not provide any place for competence for language use, nor his notion of performance which has been equated with language use.
Dell Hymes defines competence as the communicative function of language when he says "There are rules of use without which grammar would be useless".¹² He emphasises on studying the rules of speech acts, discourse units, as they enter as a controlling factor for linguistic form as a whole and suggests that the key could be provided by the notion of competence itself which he calls communicative competence.

Communicative competence includes the ability to use linguistic forms to perform communicative acts, and to understand the communicative function of sentences and their relationships to other sentences. Hence, one arrives at a stage in the development of linguistic theory where the focus is on the use of an utterance in its context i.e. communication itself.

When we look at the notion of grammar from the point of view of the structuralist and functionalist scholars of communication theory, communication gets a radically new perspective in relation to the TG grammarians. The new dimension of grammar includes psychological and social parameters of sentence formation. The set of rules along with the system of signs is viewed as the socially

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accepted code and the signs are arranged in a particular order in the mind which not only reflects the social conventions but the psychological make up as well.

The notion of grammar for the purpose of this research includes the positive aspects of the linguistic tradition though the emphasis remains on the communicative function of language structures.
2.1 VERB PHRASE

The traditional grammar analyses a simple sentence as a combination of nouns and verbs where the nouns are assigned their places as subject, object and indirect objects and the verb establishes a relationship between them. Major task of the traditional grammars, especially in Hindi, is to explain the morphological processes as what participates in a sentence is a 'pada' instead of a non-inflected word 'shabda'.

With the increasing use of transformational generative models, we have started analysing a sentence into its binary opposition and have pastulated new formal categories of syntax. A sentence, thus, has a noun phrase and a predicate phrase, the predicate phrase in its turn can be divided into a verb phrase and a noun phrase. This can be formally written as

\[
\begin{align*}
S & \rightarrow \text{NP}_1 + \text{PP} \\
\text{PP} & \rightarrow \text{VP} + \text{NP}_2 \\
\text{NP} & \rightarrow \text{Det} + (\text{Adj}) + \text{N} \\
\text{VP} & \rightarrow \text{Aux} + \text{V}
\end{align*}
\]

The \text{NP}_1 is classified as subject and the \text{NP}_2 as object.
In a sentence the part which is different from the nominal phrase functioning as subject is called the predicate phrase. The verb phrase is the major component of PP and hence the PP itself is called the verb phrase.

The verb is the main component of verb phrase. The verb itself can be further analysed as an auxiliary verb and the main verb.

Chomsky describes the way a traditional grammar analyses a sentence. He picks up a simple English sentence to do so. He then continues to find solution of presenting the given information in a formal structural description.

He suggests the following sequence of rewrite rules as contained in the base component:

\[
S \rightarrow \text{NP} \text{ Aux VP} \\
\text{VP} \rightarrow \text{V} \text{ NP} \\
\text{NP} \rightarrow \text{Det N} \\
\text{NP} \rightarrow \text{N} \\
\text{Det} \rightarrow \text{the} \\
\text{Aux} \rightarrow \text{M}
\]

After establishing categorization, he deals with Functional notions and talks about subject, predicate, object and calls them *grammatical functions* as distinct from the notion of *grammatical category*. The nodes of the trees are hence labeled with g.p. and g.c. both. Chomsky gives more re-write rules where the same grammatical function may be defined by several different rewriting rules of the base.\footnote{Ibid, p. 72}

\begin{itemize}
  \item[i)] $S \rightarrow$ Adverbial NP Aux VP \hspace{1cm} (Naturally, John will leave)
  \item[ii)] $S \rightarrow$ NP Aux - VP \hspace{1cm} (John will leave)
  \item[iii)] $VP \rightarrow$ V NP \hspace{1cm} (examine bill)
  \item[iv)] $VP \rightarrow$ V \hspace{1cm} (leave)
  \item[v)] $VP \rightarrow$ V NP Sentence \hspace{1cm} (Persuade Bill that John left)
  \item[vi)] $VP \rightarrow$ Copula Predicate \hspace{1cm} (be President)
  \item[vii)] Predicate $\rightarrow$ No \hspace{1cm} (President)
\end{itemize}

The load of Semantic burden gets transferred to *strict subcategorization* in Chomsky's *Aspect* in the case of
verb subclassification, the following rule is found to be a better approximation.16

NP

Adjective

Predicate - Nominal

V --> C S /

like Predicate Nominal

(Strict subcategorization rules)

Prepositional-Phrase that S'

NP (of Det N)S' etc.

the lexicon could contain the items

eat + V, + - NP

elapse + V̈, + - #

grow + V, + - NP, + - #, + Adjective)

become + V, + - Adjective, + - Predicate Nominal

seem + V, + - Adjective, + - like Predicate Nominal

look + V, + - Prepositional Phrase) # = - Adjective + - like Predicate - Nominal

believe + V, = -NP, = - that 'S

persuade + V, = -NP (0 l Det N) S' and so on

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16. Alternatively, if we conclude that the Semantic component should carry the burden of accounting for these facts, we can allow the syntactic component to generate the sentences... with no distinction of grammaticalness, but with lexical items specified in such a way that rules of semantic component will determine the incongruity of the sentences..." ibid. p.78.
for the purpose of selectional restriction which assigns features of the subject and object to the verb the rule 39 can be rewritten as

42 Selectional rules + V --> CS/ + Abstract Aux -
- Abstract Aux -
- Det + Animate
- Det - Animate

Apart from the discussion on syntactic placement of verb, its strict subcategorization and selection rules, the category of Aux needs a careful consideration. The standard theory of syntax by Chomsky as well as other models of Transformation Generative Syntax describe the category of Aux as having a group of verbs that work as auxiliaries to the main verb, but it need to be stressed here that the grammars of Hindi based on these models do not take into account that the category of aspect in many languages, including Hindi, is generally not always the concern of Aux. Moreover the compound verbs and conjunct verbs are not explained by these grammarians.

While describing the verb phrase Brown and Miller say that "the main verb may be preceeded by one or more other verbs"17 These verbs are described by them as the

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auxiliary verbs. The node AUX dominates one or more auxiliary verbs while the node V dominates the main verb. According to them the principle function of the main verb is to introduce the appropriate lexical content while the function of auxiliaries is to relate the sentence to 'temporal' and 'aspectual' distinctions.

The temporal distinctions are often related to a grammatical category of 'Tense'. The temporal distinctions refer to the location of an event etc. i.e. time before, after or concurrent with the moment of utterance. 'Aspectual' distinctions are often related to grammatical category of 'Aspect' and refer to the distribution of an event over time.

They further state that

"the obvious difficulty about the analysis of auxiliary verbs in English is that each auxiliary requires that the verb, auxiliary or main, that immediately follows it should take a particular form". 18

Such auxiliary verbs which require that the immediately following verb should be in its 'base' form are called 'model' auxiliaries because one of their principal

18. ibid. p.106.
semantic functions is to mark the 'modal' distinction such as probability, likelihood etc. It is for this reason that the category of Aux is written in the following manner for English:

\[
\text{Aux} \rightarrow \text{Tense} (\text{model}) (\text{Perf}) (\text{Prog}) (\text{Pass})
\]

where

\[
\text{Tense} \rightarrow \begin{array}{l}
\text{past} \\
\vdots \\
\text{non-past}
\end{array}
\]

This description of verb phrase is appropriate for the English language but is not adequate for many other languages, as morpho-syntactic structures of English and other languages are not the same. It is here that the contrastive studies can help in evolving a Universal description of languages.

The verb phrase from a purely structural point of view includes auxiliary verbs, main verb and a Noun Phrase functioning as Object and prepositional Phrase. The main verb and auxiliary verbs contain the information about tense, Aspect, Mood, Number, Gender and Persons.

The English Verb Phrase may have been going to Cinema contains the elements which could at first sight be given the structure

\[
V_1 + V_2 + V_3 + V_4 + PP
\]
Where the $V_1$ is a Modal verb $V_2$ is auxiliary in present tense $V_3$ is auxiliary in Perfective Aspect and $V_4$ is the Main Verb in Progressive aspect.

In contrast the verb phrase in Hindi contains different elements. In the Verb phrase the structure is:

$$MV + Aux_1 + Aux_2 + Aux_3$$

Where the MV is in its root form the aux$_1$ is in perfect participle form aux$_2$ is in present participle form and aux$_3$ is in present form. Hence the Verb phrase in its cumulative structure represents present, progressive and continuous form of the main verb i.e. the category of tense and Aspect are dually marked in the main and the auxiliary verbs.

The verb phrases like "ja raha hoga" or "jata raha hoga" again contains different verb forms to indicate the modality i.e. the possibility in this case. The phrase "ja raha hoga" contains the verb root of main verb, the past participle of auxiliary functioning as progressive operator and the future form of the auxiliary for tense. While in the phrase "jata raha hoga" the main verb is in the present participle form the auxiliary functioning as progressive operator in past participle and the tense auxiliary in future form. Both these verb phrases having different
structure show the same modality, the difference being that the first is situated in present time and the second is in past time. The notion of Aux can be taken as Universal though the realisation of Aux in English and in Hindi are not identical.

In French the verb phrase is still different. Consider a verb phrase like parlait in "Il me parlait de l'université" the categories of both the tense and the aspect are realised in the main verb itself and hence the need of auxiliary verb is not felt, though in a verb phrase like a parlé in "Il m'a parlé de l'université" the category of tense (in past) is expressed with the help of auxiliary verb. However we would have to establish that in French the category of Aux can be written as:

\[
\text{Aux} \rightarrow \text{Tense (M) (Aspect)}
\]

Where

\[
\begin{align*}
\text{Tense} & : \text{past} \\
& : \text{non-past} \\
\text{Aspect} & : \text{perfect} \\
& : \text{non perfect} \\
\end{align*}
\]

It must be mentioned here that the category of tense and aspect in French are realised by morpho-syntactic rules.