I. Introduction

1.1 A General Theory of Linguistics

A general theory of linguistics is a study of abstract structural relations underlying all human languages. It is a study of linguistic universals, and not just a study of diversities or idiosyncratic properties of languages. Structural features common to all languages are called language universals. A general theory of linguistics tries to find answers to the following three intimately related but distinguishable orders of questions:

i) What are the formal and substantive universals of syntactic structure?

ii) Is there a universal base, and if so, what are its properties?

iii) Are there any universally valid constraints on the ways in which deep structure representations of sentences are given expression in the surface structure?

As far as formal universals are concerned, we find such proposals as Chomsky's, that each grammar has a base component capable of characterizing the underlying syntactic structure of just the sentences in the language at hand and containing at least a set of transformation rules whose function is to map
the underlying structures provided by the base component into structures more closely identifiable with phonetic descriptions of utterances in that language (Chomsky, 1965: 27-30). Lyons (1966: 211, 223), while discussing substantive syntactic universals, states that every grammar requires such categories as Noun, Predicator, and Sentence, but that other grammatical categories and features may be differently arranged in different languages. Bach (1968: 171) has given reasons to believe that there is a universal set of transformations which each language draws from in its own way, and he has shown what such transformations might look like in the case of relative clause modification. Discussions on the possibility of a universal base have mainly been concerned with whether the elements specified in the rules of a universal base—if there is one—are sequential or not. A common assumption is that the universal base specifies the needed syntactic relations, but the assignment of sequential order to the constituents of base structures is language specific. Halliday (1966) has tried to show sequence-free representations of the universal deep structure. Lyons (1966: 227) recommends leaving for empirical investigation the question of the relationship between the underlying representation and sequential order and Bach (1965) suggests that continued investigation of the syntactic rules of the world's language may eventually provide reasons for assuming specific ordering relations in the rules of a universal base. Kiparsky (1968: 171) says, "The linguistic
universals which linguistic theory specifies include fixed notations in which grammars are written and an evaluation measure, which together establish a hypothesis about which of the innumerable grammars that might characterize the sentences of a language possesses psychological reality in the sense of representing the form rather than just the substance of a fluent speaker's competence. From among the pile of generalizations that might be made about the sentences of a language they select certain ones as being linguistically significant and corresponding to the generalizations that a child hearing such utterances would actually arrive at in constructing his grammar. The question, then, is how the various aspects of this hypothesis are justified."

"For many features of universal grammar there is justification enough in the fact that without them it would simply not be possible to write grammars that account for the sentences of a language. Particularly in syntax, as Chomsky has pointed out, the typical problem is not choosing the right one among various theories that work but finding even one that will work at all .........."

The general theory of linguistics today has accepted that there are certain phonological, syntactic, and semantic units that are Universal and their occurrence in any particular language can be treated and identified as instances of a universal set. Jakobson maintains that there is a fixed set of upto
twenty distinctive features of a determinable acoustic or articulatory character independent of any particular language. The consonantal and vocalic distinctions maintained in any language can be reduced to combinations of a minimal universal set of opposed phonological features. Similarly, at the level of syntax categories like Noun, Verb, or Past Tense can be treated as **Universals**, and at the semantic level such components of the meaning of words as 'male' or 'physical object' belong to a fixed set of semantic features. These phonological, syntactic and semantic categories that constitute the vocabulary required to describe a language are the substantive universals. They are universals, not in the sense that they necessarily present in all languages, but in the sense that they can be defined independently of their occurrence in any particular language. Formal universals refer to universal properties of a more abstract sort and are concerned with the general principles and relations which determine the formulation of general grammatical rules and their operation in particular languages. They are based on the claim that the grammar of every language meets certain specified formal conditions.

It is true that languages differ in many ways. Each language has its own mechanism for pairing off sound and meaning, but this should not preclude the existence of a rich system of similarities underlying the superficial syntactic differences.
Surface peculiarities often conceal underlying uniformity. All languages exemplify the same basic organization of phonological, syntactic, and semantic patterns. This general theory of linguistics is the basis of the present synchronic comparison of the Noun Phrase in English and Marathi. The English and Marathi Noun Phrases are found to have a good deal of similarity in their overall categorical structure with similar co-occurrence restrictions even though they show considerable differences in the strings that actually occur. This turns out to be accountable in terms of the behaviour of embedded structures and the scope and nature of the transformational operations that can be carried out on them.

1.2 **Contrastive Linguistics and Foreign/Second Language Teaching**

This study, in its general/overall presentation, tries to give a comparative picture of the structure of the Noun Phrase in English and Marathi but it does not intend to be a 'contrastive' study. This analysis tries to discover the characteristic structural 'habits' of the two systems in respect of their manipulation of the constituents of the phrase to obtain various kinds of strings in the surface structure. Some of the conclusions of this study may be of some interest, because of the preoccupation with the language universals in the deep structure. Synchronic comparisons are very closely associated with foreign/second language teaching. Apart
from the theoretical implications of such analyses, they certainly have many applied purposes. Synchronic contrastive analyses are pursued not only with a view to showing linguistic typologies, linguistic universals, structural, systemic and transformational differences between/among languages, but also with a view to improving foreign/second language teaching by predicting learners' errors and thereby grading teaching and testing materials.

Linguists and pedagogues alike are unanimously agreed that in teaching a foreign/second language due consideration to the fact of the mother tongue must be given. ' It is axiomatic that if two pupils with the same mother tongue learn the same foreign language, they will encounter largely similar problems and difficulties; pupils with a different mother tongue will encounter different problems; the recurrent difficulties of any individual pupil reflect the similarities, and differences between his own language and the language he is learning; the most appropriate materials for teaching a language are those which embody a bilingual comparison (sometimes called a contrastive analysis) of the mother tongue and the target language' (Strevens, 1965: 7).

J.B. Carroll (1963: 17-18), while discussing the implications of 'linguistic relativity theory' for language teaching, pointed out how relative to the native language of the learner, some phenomena in the second language are convergent, and some are divergent. Convergent phenomena occur when the referents of two or more symbols
in the native language are represented by a smaller number of symbols in the second language. Divergent phenomena occur when the opposite is true, i.e., when the second language contains a larger number of symbols and corresponding semantic distinctions than the first language. The language learner must be apprised of both kinds of phenomena; the divergent ones are probably more critical for him as a speaker, while the convergent ones are more critical for him as a learner. Again, there are cases where a certain concept represented by a certain symbol appears to have a zero representation in another language. Contrastive linguistics, apart from identifying convergent and divergent phenomena, must therefore be particularly watchful for apparent 'holes' in the representational systems of a language.

Contrastive analyses help a teacher to understand why his students make the mistakes they make. Many of the misdeeds of students that seem like evidences of carelessness and perversity become understandable and, therefore, possibly curable when one has examined the students' own language with the target language as linguists do. But the uses to which these studies are put, whether for predictions of difficulties, for text-book writing, or as a basis for selection, presentation or ordering of materials in a meaningful sequence, are matters for pedagogues making use of these studies. It does not need pointing out that most teachers, whether of the first or the
second language, have not learnt to analyse language with specific objectivity. Consequently, they must depend on the linguists to ring the alarm bell when something they do or say is likely to interfere with their students' perception of the language system by concealing some of its crucial features rather than revealing them. But we need to remember at all times that linguistics is not essential to language learning. Teachers and pupils totally untrained in linguistics are all the time teaching and learning languages, sometimes to a standard near perfection. ' To justify our arrogance in appearing to take over this field we must show that we can improve efficiency, economy, speed or similar factors by our contributions. Linguists are but midwives, without whom parturition would nevertheless take place; one function of linguistics, like that of the midwife, is to increase the convenience, comfort, certainty and dispatch of a natural process ' (Strevens, 1965 : 66 ) .

The present study is oriented towards foreign language teaching; to be more precise, towards teaching English to the native speakers of Marathi. It is hoped that this study will bring out those problems which Marathi speaking students of English are likely to face in the specific area under investigation. By problems we mean ' those units and patterns that show structural differences between the target and native languages. The disparity between the difficulty of such problems and the units and patterns that are not problems, because they
function well when transferred to the target language, is much greater than we suspect' (Lado, 1968: 87).

1.3 Contrastive Analysis and Linguistic Theory

The basis of the present synchronic contrastive analysis is the general theory of linguistics, i.e. the study of abstract structural relations underlying all human languages. A prerequisite of any attempt to compare the grammars of two languages is of course a common point of reference, without which we shall have neither a justification for bringing two languages together, nor a starting point. Such a point of reference between two languages can be found in a theory of descriptive linguistics. In order to characterize the notion 'Linguistic description of a natural language', we need to distinguish two aspects of such descriptions: that part which concerns features of the language which make it different from other languages and that part which concerns features common to all languages. That is, one must distinguish those features of a language that it has by virtue of being a natural language. The features specified in order to characterize it as a natural language are the universals of language (Katz and Postal, 1964: 160).

Different existing theories have their own categories of the universals of language and provide theoretical support for comparability of languages. Tagmemics provides theoretical
support for comparability through the concept of mihi etics. Etic systems are analytical constructs, conceptual tools for linguistic studies. Etics provides the theoretical vocabulary for the description of natural languages. It provides a set of criteria to systematize comparable data from different languages, and it brings together different emic systems into a relationship in so far as each system can be seen in terms of units related to the etic grid. Neo-Firthians also have dealt with this problem of comparability. According to W.S. Allen (1953: 52-108), "there is the theoretical possibility of an identification via situational-contextual criteria." Halliday's systemic (scale-and-category) grammar provides us with theoretical categories to which all language descriptions should be related. Transformational theory distinguishes, as has been discussed above, two types of universals: substantive and formal. A category like 'noun phrase' or 'verb phrase' is a substantive universal. According to Chomsky, unless such substantive identifications are made, and a theory of universal or general grammar is developed, we shall not be in a position to account for human ability to acquire languages (Chomsky, 1962: 528-550).
1.4 The Problem of the Relationship of Equivalence

So far we have been discussing the general theory of linguistics, contrastive linguistics and foreign/second language teaching and the possible theoretical basis for synchronic comparison. Actual comparison, however, creates the necessity of bringing together items from two languages in some kind of a relationship of equivalence, as for example, in translation.

Professor Catford (1965:50) suggests how texts or items from two languages are in relationship of equivalence when they are 'relatable to (at least some of) the same features of substance. But at the same time he recognizes that in total translation, and, mutatis mutandis, in linguistic comparison, 'the question of sameness of situation substance is a different one, and is linked to the question of the 'sameness' or otherwise of the cultures (in the widest and loosest sense) to which the second language and the target language belong. 'Situation', in relation to contextual meaning, is a wide blanket-term which, within a general semantic theory, requires considerable refinement' - (Catford, 1965: 50).

It is undeniable that the notion of 'situation', however difficult it might be to formalize or even to discuss satisfactorily in general terms, is essential to any comprehensive theory of linguistic behaviour and consequently to any comparison of two (or more) languages. Though Firth must be
given credit for his recognition of this fact and for his insistence that situational correlations must be taken into account as an integral part of the description (or comparison) of languages and not treated as secondary 'paralinguistic phenomena', he, despite his own assertions and those of his followers, does not provide with a complete theory of semantics. Inspite of the recent works done in this field (Katz and Fodor, 1963; Katz and Postal, 1964; Chafe, 1967; and Weinreich, 1966) we are no doubt a long way from being able to account for systematically for contexts of situation and, as Catford (1965: 50) says, 'There is, as yet, no general theory of situation - substance, no general semantics from which to draw descriptive terms for the distinctive features of contextual meanings of grammatical or lexical items in particular languages. We are therefore forced to operate with ad hoc terms in discussing contextual meaning and its correlation to situation - substances.'

Professor Catford (1965: 27-28) further suggests that 'the discovery of textual equivalents is based on the authority of a competent bilingual informant or translator; or when 'the investigator acts as his own informant and discovers textual equivalents intuitively' i.e. by drawing on his own experience.' In the words of Verma (1971: 71), 'For comparative analysis, the source of the data is not a native speaker of one or the other of the languages involved, but a competent bilingual. It is his intuition about the relationship
of the forms, in the two languages that is part of the valid data for analysis. It is parallel to a case like the grammatical description of a relation that may obtain between two sets of sentences in a single language. In the same way, it is the bilingual's intuition about the relationship of equivalence that the analyst has to treat as his data and account for in his comparative study. Pike (1960), while discussing bilingualism, states that there is a hypersystem of cultural matrix in which two languages are brought into a relationship. A shared cultural matrix is essential for any kind of relationship including the relationship of equivalence between two languages. It is in a bilingual that this relationship of equivalence is realized.

1.5 Aim and Scope

The primary aim of this study is to present a synchronic comparative analysis of the category noun phrase in English and Marathi under the framework of the transformational theory of grammar. Synchronic comparisons are pursued for the sake of theoretical explorations such as linguistic typologies, language universals, structural and transformational differences between languages, etc. They are closely related to the foreign/second language learning and teaching, and thereby grading teaching and testing materials. Translations, either by man or machine, get facilitated by synchronic comparisons. Our reason for choosing to analyse the constituents of the category noun phrase in English
and for presenting a contrastive study with the noun phrase constituents in Marathi is that they are among the less well understood areas of English grammar and they present maximum difficulty to foreign learners of English, in this case, to Marathi speaking learners of English. The English noun phrase constituents such as the articles, quantifiers and preordiners are perhaps the most difficult areas of the English grammar to the Marathi learner of English.

Synchronic comparative studies are definitely useful in the field of foreign or second language learning or teaching. To the Marathi learner of English, the present analysis of the noun phrase constituents of English may be very useful, if English in Maharashtra is viewed to be a foreign/second language. The present ELT situation in Maharashtra particularly and in India generally is very complex. English can hardly be described today, in India, as a second language. "It is now in the process of acquiring the status of a compulsory 'third' language" (Yardi, 1977:2). The methodology of the second language teaching can hardly be useful for the teaching of the third language. To quote Yardi (1977:4),

"Pedagogically considered, such a distinction between L2 and L3 seems warranted. An active command of a third language is rare. Michael West is of the view that a"
bilingual person knowing two or more languages is a myth flourishing only in England. The point in the Indian context is whether we can continue to practise second language-teaching methodology in a situation where English has acquired the status of a third language. Second-language teaching methodology with almost equal emphasis on all the four skills seems unsuited to the emerging situation. The emphasis may have to shift to the acquisition of passive/receptive skills."

Even in the changing situation, synchronic comparative studies (like the present one) are necessary for the production of graded teaching, testing and reading materials. What is wanting today is the suitable graded teaching material, especially the reading material. The insight obtained through a study of this kind, it is hoped, can be helpful in the preparation of adequate reading materials, pedagogical contrastive grammars, remedial grammars, translation algorithms, etc.

It is proposed here to compare the English and Marathi noun phrase with the initial assumption of a substantive identification (Chomsky, 1965: 27-30) of this category in English and Marathi. The noun phrase structures in the two languages are described separately first and then they are compared. The chapter on the English noun phrase has attempted to systematize the various known aspects of the structure of the English noun phrase. New proposals have also been made here about the determiner system, especially about the sources of the articles and the quantifiers, pronouns and nominal modifiers. The analysis of the Marathi noun phrase presented in the chapter on the Marathi noun phrase is almost entirely new, in its statement as well as the details. The
various constituents of the noun phrase in English and Marathi have been compared in the fourth chapter. The striking similarities and significant differences between the English and the Marathi noun phrases get revealed in the chapter on the comparative analysis.

Thus, the aim of this study is to present a systematic picture of the constituents of the English noun phrase, to analyse the constituents of the Marathi noun phrase and to present the comparative analysis of the category in the two languages by pointing out their similarities and dissimilarities. The analysis may be useful for the Marathi learners of English, for those who are interested in the work of translation and in preparing graded teaching, testing and reading materials.

1.6 Model and Terminology

The theoretical base for this work is mostly the Transformational Generative Theory of Grammar. It draws heavily on the transformational terminology and notational devices. But it does not attempt to present the analysis entirely in terms of abstract rules with all the formal constraints on their presentation, or to replace discussion entirely by rules. The traditional grammars as well as the new approaches like the structural, the transformational, the generative semantics, etc. have equally influenced this analysis. It enjoys the long-established tradition of grammar as well as the insights of.
several contemporary schools of linguistics. In the words of Quirk, et al (1972: vi),

"But while we have taken account of modern linguistic theory to the extent that we think justifiable in a grammar of this kind, we have not felt that this was the occasion for detailed discussion of theoretical issues. Nor do we see need to justify the fact that we subscribe to no specific one of the current or recently formulated linguistic theories. Each of those propounded from the time of de Saussure and Jespersen onwards has its undoubted merits, and several (notably the transformational generative approaches) have contributed very great stimulus to us as to other grammarians. None, however, seems yet adequate to account for all linguistic phenomena, and recent trends suggest that our own compromise position is a fair reflection of the way in which the major theories are responding to influence from others."

We will start our discussion of the structure of the noun phrase in English and Marathi with its deep structure as characterised by the following base rule:

\[
\begin{align*}
\text{NP} & \rightarrow \left\{ \text{DET} \rightarrow \text{N} \rightarrow (S) \right\} \\
\text{NP} & \rightarrow \left\{ \text{S} \rightarrow \text{NP} \right\}
\end{align*}
\]

But it will be interesting to note here how the traditional and the structural grammars have dealt with the noun, its kinds and its modifiers. The traditional approach is that of parts of speech. It has behind it a tradition of over two thousand years of practical use. Aristotle, Dionysius Thrax and the Port Royal grammarians contributed a lot to the development of the parts
of speech theory. The English grammarians such as Robert Lowth, William Cobbett, Lindley Murray, Samuel Kirkham and Henry Sweet wrote grammars of English based on the parts of speech theory. Even Otto Jespersen, like Sweet, based his analysis of the parts of speech on the three-fold division of form, function, and meaning, though he greatly reduced the importance of specific definitions of the parts of speech. He fully recognised the difficulties inherent in defining parts of speech, but he still felt that there was justification for retaining much of the traditional scheme. He refused to join the ranks of such of his contemporaries as Brunot, De Saussure, Sapir and Bloomfield, who were sceptical of the utility of the parts of speech approach. Jespersen held that the main difficulty with the approach was a pedagogical one, which could be obviated, particularly at the elementary level, if the teacher depended upon examples rather than brief definitions. Structural grammarians like Fries and Sledd have placed greater stress on formal criteria for defining the parts of speech. Fries, in his work on the structure of the sentence, constantly emphasizes form and disassociates his analysis of the parts of speech from the traditional terminology by using such neutral designations as Class 1, Class 2, Class 3, and Class 4 words. James Sledd retains the traditional terms but scrupulously attempts to eliminate semantic and logical criteria from his definitions.

The transformational generative approach, which provides
the base and model for our present analysis, speaks in terms of the deep structure specifications. Jacobs and Rosenbaum (1968: 50, 57) give the following phrase structure rule for the deep structure of the noun phrase:

\[
NP \rightarrow \begin{cases} 
    & NP \quad S \\
    & \{\text{ART} \} \quad N \quad (S) 
\end{cases}
\]

Mark Lester (1971: 36) analyses the English noun phrase as the following:

\[
NP \rightarrow \text{Art} \quad \text{Noun} \quad \text{No}
\]

- **Art**
  - Specified
  - Unspecified
  - \(\emptyset\)
  - the, this that these, those
  - possessive nouns and possessive pronouns
  - a/an, some, a few
  - a couple, several
  - much, many

- **Specified**
  - boy, tree, idea, Mr. Brown

- **Unspecified**
  - America

- **Noun**
  - Sg
  - P1
He treats noun modification and nominalized sentences by providing the following rules:

\[
\begin{align*}
\text{NP} & \rightarrow \text{Art Noun No (S)1, (S)2, (S)3 ...} \\
\text{NP} & \rightarrow \text{the fact that S}
\end{align*}
\]

Robert Geist (1971: 18 - 30) gives the following rewrite rules for the NP:

\[
\begin{align*}
\text{NP} & \rightarrow \begin{cases}
\text{Name} \\
\text{Pers Pron} \\
\text{Indef Pron} \\
\text{Det + N + No}
\end{cases} \\
\text{Name} & \rightarrow \{\text{George, Roberta, the United States ...}\} \\
\text{Indef Pron} & \rightarrow \{\text{every one, everybody, everything, someone, somebody, something, anyone, anybody, anything, no one, nobody, nothing}\} \\
\text{Pers Pron} & \rightarrow \{\text{I, you, he, it, she, we, they}\} \\
\text{Det} & \rightarrow \{\text{Art} \\
\text{Demon} \} + (\text{Num}) \\
\text{Det-misc} \\
\text{Pre-art} & \rightarrow \{\text{Some of, many of, a dozen of, three of, ........}\} \\
\text{Art} & \rightarrow \{\text{Def} \\
\text{Indef}\} \\
\text{Def} & \rightarrow \text{the} \\
\text{Indef} & \rightarrow \{\text{a/an} \}
\end{align*}
\]
As said earlier, we start our discussion of the deep structure of the noun phrase as characterized in the following way.\(^{(4)}\)

\[
\begin{align*}
\text{NP} & \rightarrow \{ \text{NP} \rightarrow \{ \text{DET} \rightarrow \{ \text{S} \rightarrow \{ \text{NP} \rightarrow \{ \text{DET} \rightarrow \{ \text{N} \rightarrow \{ \text{S} \rightarrow \{ \text{POST} \rightarrow \{ \text{PART} \rightarrow \{ \text{Indef}, \text{Def}, \text{Generic,Specific,} \} \} \} \} \} \} \} \} \} \\
\text{DET} & \rightarrow \{ \text{ART} \rightarrow \{ \text{POST} \rightarrow \{ \text{PART} \rightarrow \{ \text{Indef}, \text{Def}, \text{Generic,Specific,} \} \} \} \} \\
\text{ART} & \rightarrow \{ \text{Pronoun, WH, Genitive, Neg} \} \\
\text{PART} & \rightarrow \{ \text{Jitive} \} \\
\text{POST} & \rightarrow \{ \text{ORD} \rightarrow \{ \text{QUANT} \rightarrow \{ \text{CHIEF} \} \} \} \\
\text{ORD} & \rightarrow \{ \text{inal} \} \\
\text{QUANT} & \rightarrow \{ \text{itier} \}
\end{align*}
\]

\text{PART} (Jitive) is the source of the partitive construction of the boys in many of the boys. That is, many of the boys comes from many boys of the boys.

\text{ORD(inal)} includes first, second \ldots next, last, \ldots.

\text{QUANT(itier)} is the source of Few, some, several, many \ldots.

a few words such as all, each, either, every, any.
CHIEF includes main, chief, principal, poor, upper, lower, outer, ...... and is in general a source for adjective-like noun modifiers which cannot be derived from the predicate adjectives.

Nouns are discussed separately with their feature specifications. Pronouns, in this analysis, have been treated as derivatives and not basic formatives. All noun-modifiers such as adjectives, participial, nominal and possessive modifiers are derived from the embedded sentences and the section on adjectivization takes care of them. Both English and Marathi have the operations of nominalization. The S in the base rule is provided for the nominalized sentences and hence the treatment of the nominalized sentences in a separate section.

NOTES

1. Bach (1968: 91-122) has tried to demonstrate that the deep structures of sentences in different languages are identical. He has argued on the basis of many pieces of evidence that it is reasonable to suppose that all nouns come from relative clauses based on the predicate nominal constituent. He has further proposed that the referential indices assumed to occur with nouns in current theory be replaced by a system of operators and variables much like those used in logic but clearly different in detail, and that these elements rather than actual pronouns or the like be used to tie together the sentences underlying a single complex utterance. He has tried to show that the distinctions between such parts of speech as nouns, adjectives, and verbs have no
direct representation as such in the base, but are the results of transformational developments in one or another language. Eventually, he has suggested that the current theory of grammar be modified so that the role of the lexicon is to map into phonological shape structures derived via the major transformations.

2. Lee (1965: 251 – 259), a British professional in the field, drawing upon his own experience in Czechoslovakia, concludes that teaching bilingualism necessitates the construction, whenever possible, of a systematic contrastive study of the native language and the target language. He arrived empirically at the same position that Fries had taken on theoretical grounds. Fries, who was largely responsible for founding the University of Michigan’s English Language Institute, tried to deduce from linguistic theory that a sound ESL programme should rest upon a detailed structural contrastive analysis of the first and second languages. Transformational theory has provided more substantial basis for contrastive analysis than structural grammar. Ronald Wardhaugh (1970: 123 – 129) has treated this development at length in "The Contrastive Analysis Hypothesis" in the TESOL Quarterly, (4th issue of 1970).

3. Jespersen provided in his Essentials of English Grammar a demonstration of how he would reduce the importance of explicit definitions. The plan of organization in Essentials of English Grammar is evidently designed to keep parts of speech classification in the background. Only one short chapter out of thirty-six is devoted explicitly to defining word-classes, and no chapter is headed by the traditional names of the parts of speech. The Philosophy of Grammar makes clear why Jespersen has tried to reduce the role of parts of speech methodology. With grammatical evidence drawn from many of the same sources as those used by modern linguists, he shows the difficulties of applying the parts of speech approach to languages that exhibit principles of structure different from those of the Indo-European languages.
I owe this deep structure specification to Stockwell (1977: 101, 105); and Stockwell, Schachter and Partee (1973: 29 - 31).

According to Stockwell et al,

\[
\begin{align*}
NP & \rightarrow \{ S \} \\
& \rightarrow \{ D, \text{Nom} \} \\
\text{Nom} & \rightarrow \{ N, (\text{neut}), (\text{dat}), (\text{loc}), (\text{ins}), (\text{act}) \} \\
D & \rightarrow \text{ART, (post), (part)} \\
\text{POST} & \rightarrow (\text{ord}), (\text{quant}), (\text{chief})
\end{align*}
\]

Whereas Stockwell gives the following base rules:

\[
\begin{align*}
NP & \rightarrow \{ S \} \\
& \rightarrow \{ \text{Det}, N, (s) \} \\
\text{Det} & \rightarrow \{ \text{ART} \} \\
& \rightarrow \{ \text{DEICTIC}, (\text{quant}) \}
\end{align*}
\]
Our discussion starts with the following:

\[
\begin{align*}
\text{NP} & \rightarrow \{ \text{DET} \quad \text{N} \quad (S) \} \\
\text{DET} & \rightarrow \text{ART} \quad (\text{POST}) \quad (\text{PART})
\end{align*}
\]

and etc.