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AN APPROACH TO THE SYNTAX AND SEMANTICS

OF THE IMPERATIVE IN ENGLISH

Thesis submitted to the University of Newcastle upon Tyne

by

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in fulfilment of the requirements for the
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DEDICATION

To the memory of my mother, Aluonode.

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ABSTRACT

This study provides a categorial analysis of the syntax and the semantics of the imperative in English, using two related grammatical models of Generalized Phrase Structure Grammar and Montague Semantics.

With regard to syntax, aspects of Generalized Phrase Structure Grammar are extended to the construction. The analysis shows that possible imperative subject noun phrases, except where they are pronouns, contain post-modifiers. A noun phrase which lacks this characteristic does not therefore occur as a subject in it. The examination of the verb phrases reveals that they constitute a unique category, as demonstrated by the nature of the constituents themselves, and the syntactic behaviour the elements that occur in them. The various imperative sentence structures and their major components are captured by a set of Phrase Structure rules. The analysis sheds light on many aspects of the syntactic nature of the construction.

The semantic analysis of the construction, through an extension of Montague Semantics, identifies the kinds of semantic types that its major constituent categories are. It is observed that although the imperative subject noun phrases and the verb phrases are susceptible to a surface compositional analysis, the S-structures are not. The analysis shows that this is due to the nature of its subject-predicate relationship, and so identifies a significant aspect of the grammar of the imperative that has not been given adequate attention. For example, it is this aspect that excludes certain elements from occurring in the sentence, and also separates it from other sentences in certain respects.

A special model-theoretic analysis provided for sections of the construction gives new insights into the semantico-

pragmatic conditions surrounding it, especially with regard to the specification of the intended agent-of-action. Apart from identifying aspects of the "fulfilment conditions" of the imperative, the semantic analysis examines the issue of its "propositional content" and specifies the problems that need to be resolved in this regard. The present approach provides new ideas on the semantic organization of the imperative, and so makes it easier to understand.

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INTRODUCTION

Since the mid-fifties, the protagonists of generative grammar have taken a keen interest in the imperative construction in English. However, it has remained a recalcitrant problem. The issues involved divide into two parts: (a) the theoretical assumptions used in major studies on the construction, and (b), the nature of the construction itself. Whereas the analyses under (a) are aimed at exposing generalizations among all sentence types, (b) is singularly resistant to such generalizations. The result has been a list of claims and counter claims, which is rather vague and unsatisfactory. The fact is that many grammatical subsystems which appear to work well for, say, the declarative are often unable to resolve the problems presented by the imperative.

With regard to methodology, a change of direction is highly desirable. It is now being realized in generative grammar that sentences should be analysed according to their respective types. The necessity for this has been slow in coming to the attention of linguists working within various models of generative grammar. There is the suggestion that in imperatives a semantic analysis should identify "fulfilment conditions" (see Montague, 1974: 248). McCawley (1981) directs attention to the need for grammar to relate to sentences as types. In the area of syntax, Generalized Phrase Structure Grammar allows categories to be created by rules which have nothing to do with transformations, and which do not derive all sentence types from declarative-like sentence structures. All the above aspects therefore provide an appropriate theoretical framework which I intend to use to approach the problems raised by the imperative.

The issue of the nature of the construction itself is very controversial. The imperative has been referred to in

various terms, raising the question of whether it is a full sentence in its own right or an ordinary clause. In these two classifications of the construction, the issues are whether it is a sentence type and so a unique syntactic category, or a highly constrained indicative clause type, and also whether or not it should be distinguished from the subjunctive and the infinitive in certain aspects.

The two aspects of the study of the imperative (i.e., (a) and (b) above) cannot however be neatly separated since the structural distinctions that are made may be constrained by the theoretical assumptions that are used. It is therefore necessary to approach the imperative as a syntactic "mood" category, and so study it as it really is: an objective that is pursued in the present thesis which is organized in the following manner.

Chapter One discusses the current literature on the imperative in generative grammar since its inception. It notes not only the direction of the thinking on both the topic and the grammatical theories used but also the problems that have arisen.

Chapter Two contains a discussion of specific aspects of the theoretical assumptions which have been applied to the imperative and clarifies the issue of its classification. It then introduces the grammatical models to be used for the two parts of the study -- syntax and semantics -- and indicates some of the modifications that will be made in the models for the purpose of extending them to the construction.

Chapter Three analyses the subject and vocative noun phrases that occur in the imperative. It examines their shapes, their syntactic functions and also their semantic nature. It identifies their relationships with the context

of use of the construction, and their roles as descriptions or specifications of the agent(s) of the action mentioned in it.

Chapter Four examines the imperative verb phrase as a category, and discusses elements like be, do and not that occur in it. Phrase Structure rules are also provided for the verb phrases and S-structures. In addition to the analysis of the semantic aspects of the above elements, the semantic type which the imperative VP represents is also identified.

Chapter Five, the final chapter, then takes up the imperative sentence structure itself. It discusses the dichotomy between its subject and predicate components, and the behaviour of adverbs in the sentence. The semantic aspect contains an analysis of how subject NP's receive denotations and how the nature of the context of use can be used to resolve the problem raised by the occurrence of you as subject in the construction. It also examines not only the question of the fulfilment conditions of the imperative but also the issues raised by the analysis of its propositional content.

CHAPTER ONE

DEVELOPMENTS IN THE STUDY OF
ENGLISH IMPERATIVE SENTENCES IN GENERATIVE GRAMMAR

1.0 Introduction

There has been a considerable amount of interest in imperatives in generative grammar since the mid-fifties. This is perhaps not surprising because there has been a long tradition in the philosophy of language that carved out non-declaratives as problematic to describe. This is probably due to the fact that predicate logic uses a structure of predicate and argument in a way that parallels the predicate and subject of a declarative sentence. This is a logical structure which imperatives do not seem to have. Furthermore, whereas declaratives express propositions which might be predicated as true or false, this is not the case with regard to non-declaratives.

These differences generated a great deal of controversy in philosophical logic and the philosophy of language before the emergence of generative grammar in the fifties.¹ Quite understandably, the grammar bows to tradition and so represents a basic sentence as consisting of two main parts -- the subject noun phrase and the verb phrase. This is of course the structure of a declarative sentence. The problem that is

raised is how to generalize this assumption to non-declaratives, especially to imperatives. These sentences prove very recalcitrant in this regard. Alongside this is the problem of how to extend truth-conditional semantics to them.

As the present study is about only one class of non-declaratives -- the imperative -- I intend, in this chapter, to concentrate on the literature on the syntax and semantics of the construction in English. I begin with the syntax.

Several linguists take issue with many of the proposals on the syntax of the imperative in English. Davies claims that the impression that the construction is "idiosyncratic" and that it differs from other constructions with regard to pattern "may well arise from too superficial an examination of the facts" (1981: 2). Schmerling, on her part, observes that the construction has been used to justify "a number of innovations in generative syntax" (1980: 1). She cites the analysis of English verb phrases by Akmajian, Steele and Wasow (1979) as one of the examples of this development. She also remarks that the imperative construction is "one clause type that has been generally ignored in recent discussion" (1983: 412).

Issues like those raised above make it pertinent to give the discussion of the syntax of the imperative in this chapter a two-fold focus. The intention is therefore

- (i) to identify the major developments in the study of imperatives in generative grammar, and, in so doing, map out the direction and orientation of the multifarious studies which have been carried out on the subject, and,
- (ii) to try to highlight, very briefly, some of the areas of intense controversy and so provide an

over-view of the relevant literature as a background to the rest of the study.

One implication of this approach is that in the end, we shall, perhaps, be in a position to know that the real problem is not that imperatives have been ignored, as Schmerling remarks, or that they are wrongly characterized as idiosyncratic, as Davies claims, but that most of the previous studies are seriously weakened by the limited explanatory potential of the grammatical model within which they were undertaken.² Consequently, there is a great deal of vagueness about the nature and other aspects of the imperative sentence. It is today almost as mysterious as it was in the past (cf. Culicover, 1976: 144).

1.1 The Beginnings of the Generative Analysis of the Imperative in English

A) Chomsky's Proposals on Subject NP's, Verbs and Adverbs in Imperatives

Chomsky's (1955, 1975) theory of transformational grammar (TG) appears to regard imperatives as perfectly normal sentences. They do not present any serious problem to the new theory. They are quite open to the operations of transformations, and his main finding is that imperatives are derived sentences, just like interrogatives. Furthermore, unlike interrogatives, they are characterized as elliptical sentences, having lost some of their parts in the course of their derivation.

Chomsky goes on to give details of the transformational derivations of the sentences. They are kernel sentences in the deep structure for a start. They change into interrogatives and then into imperatives by dropping their subject, you,

and modal will under the influence of the Imperative Transformation. The incidence of reflexivization is said to provide justification for the postulation of you as the sole element that can be the subject.³ His argument may be summarized thus.

The Reflexive Transformation derives reflexives in the following manner:

(1.1.1) You love you =====> REFL
 You love yourself

The Imperative Transformation then deletes the subject NP you and so we have

(1.1.2) Love yourself

He also contends that we do not have a sentence like the example in (1.1.3),

(1.1.3) *Love myself⁴

because first person pronouns cannot occur as subject NP's in imperatives. His conception of the reflexive construction therefore is one in which the Reflexive Transformation carries the pronoun X into X-self in the environment of X -- verb -- (see p.554), and this must take place before the Imperative Transformation deletes the subject NP which must be you.

With regard to do, he discusses the following imperatives.

(1.1.4)(a) Do come to visit us.
 (b) Don't come to visit us.

He claims that these sentences are derived from those in (1.1.5) by deleting you.

- (1.1.5)(a) Do Ac - you - come to visit us
 (b) Do n't - you - come to visit us

These structures are themselves derived from the following:

- (1.1.6) You - \emptyset - come to visit us

by the process of applying the Not- or the Ac-Transformation to it, followed by the Question Transformation. The resulting phrase marker is the example in (1.1.7) -- (p. 555).

- (1.1.7) $\emptyset \begin{bmatrix} \text{Ac} \\ \text{not} \end{bmatrix}$ - you - come visit us

Do, which normally has a heavy stress, is then inserted to take the place of the displaced affix \emptyset ; and Ac (accent) assigns stress to the vowel of the preceding morpheme.

Chomsky also claims that the same analysis applies to the following imperative sentences.

- (1.1.8)(a) You get it.
 (b) You be the first volunteer.
 (c) Don't you get it. (i.e., "Let him get it".)

He says that these sentences are derived uniformly by dropping the auxiliary. This is possible if they are derived from questions. He comments:

Note that a further advantage in deriving imperatives from questions is that this treatment excludes them from the context that --. (Ibid.: 555).

All this seems normal; at least it "proves" that TG is able to capture, for example, an assumption of traditional grammar, i.e., that in the imperative construction, the subject (believed to be understood) is you.

Chomsky also makes other proposals with regard to the auxiliary of the imperative. Like the interrogative, the

imperative accepts Do-Insertion and few more modals. But its VP cannot accept any past time adverb.

In brief, Chomsky may be said to have made the following five main claims which have since generated a deal of interest and controversy. They cover the following aspects:

- (a) the derivation of the imperative from a declarative-like deep structure;
- (b) the postulation of modal auxiliaries in the underlying structure of the sentences;
- (c) the restriction of the subject to the second person pronoun you;
- (d) the restriction on the type of adverbs that can occur in the sentences, and,
- (e) the insertion of do into imperatives.

B) Reactions to Chomsky's Proposals

Chomsky's proposals have attracted considerable attention. For example, Katz and Postal (1964) question Chomsky's proposal on the derivation of certain sentences, including imperatives. They claim that if transformations are allowed to change structures from one sentence type⁵ into another, then they can be said to have changed the "meanings" of such structures. They therefore suggest that the imperative should be marked in the deep structure (DS) with a phonologically empty morpheme I. This may then prevent the transformations, which it encounters in the processes of its derivation (as described above), from changing its meaning. The structure will thus not be derived as a question before it is derived as an imperative as Chomsky has claimed above. Thus, this proposal, which is now dubbed the Katz-Postal Hypothesis, makes the claim that by having phonologically

empty morphemes like I marked on structures in the DS, the transformations which operate on the structures will become "meaning-preserving" (cf. Huddleston, 1976: 88-90; Baker, 1978: 230, and Akmajian and Heny, 1976: 236-244).⁶

Another of Chomsky's proposals that comes under review at this time is the one on the modal will. It is generally accepted that it is dropped along with TENSE, and so, according to Klima (1964: 259), it is example (1.1.9)(b), not (1.1.9)(c), that is derived from (1.1.9)(a) -- after "affix hopping".

(1.1.9)(a) You will+TENSE be making a noise

(b) Be making a noise

(c) You are making a noise

It is now made clear that TENSE is deleted along with the auxiliary.

However, Lees (1964) finds it convenient to link the empty morpheme I (or Imp as it is sometimes used) with a "zero" modal which performs some functions. For example, it triggers transformational rules like Aux-Attraction and Preverb Particle Placement (cf. Stockwell et al, 1973: 661). This modal also attaches to the imperative main verb without any visible effect on its shape.

Another view of the auxiliary that emerges at this time involves the claim by Postal (1964), Klima (1964), and Katz and Postal (1964) that the modal will along with the subject you is copied to the tag segment of a tagged imperative before the modal is deleted by the Imperative Transformation. We therefore have a situation in which the second sentence in each of the following pairs is derived from the first:

(1.1.10)(a) You will stop that =====>

Ø Ø stop that, won't you?

(b) You will not go there again =====>

Ø Ø don't go there again, will you?

Postal claims that the negative occurs either in the main part of the sentence or in the tag, but never in both simultaneously.

Nevertheless, the proposal that only you can be the subject of an imperative does not receive universal support among linguists. Thorne (1966) claims that the second person pronoun may not be the only subject NP which an imperative can have. He proposes an abstract element vocative which he says is phonetically realized as you. This element, according to him, functions as a definite article, and co-occurs with the subjects of imperatives. Such subjects, he claims, have both full and short forms as follows.

(1.1.11)(a) You boys : Boys

(b) You John : John

(c) You somebody : Somebody

The sentences in (1.1.12) are thus possible imperatives, according to Thorne.

(1.1.12)(a) You boys sit down.

(b) John switch off the light.

(c) Somebody keep quiet!

He claims that since the vocative element stands in place of the definite article, the latter cannot occur in such sentences, as the following examples show:

(1.1.13) *The boys sit down.

It may be said that the sentence in (1.1.13) is definitely unacceptable, but, as we shall see in Chapter Three below,

Thorne seems to have failed to give the correct reasons for its ungrammaticality. The issue here is the degree to which the imperative subject is particularized in relation to the context of use.⁷

Huddleston (1971) rejects certain aspects of Thorne's claims. For example, on the elements that can co-occur as the subjects in imperatives, he criticizes Thorne for drawing a false analogy between you boy and you somebody, thus implying that the latter does not form a single unit as does the former (see pp. 50-51). He discusses the classes of NP's that can occur as subjects in imperatives and identifies three possible types of noun phrases:

- (a) second person NP, you;
- (b) third person (mainly indefinite) NP's, and,
- (c) first person plural pronoun.

They are thus found in imperatives like the following:

- (1.1.14)(a) You say it.
- (b) Somebody clean his shoes.
- (c) Let's close the matter now.

Stockwell, Schachter and Partee (1973: 642-646) introduce a new element into the controversy. What they think is crucial is the reference of the subject. Their fundamental thesis on this is that in all cases, the speaker is addressing the subjects of the imperative constructions. They observe:

It seems to be necessary to recognize that while the referent of the subject NP of an imperative is addressed by the speaker, constraining the NP basically to the second person, nevertheless certain third person NP's can occur with second person reference. (Ibid.: 646).

Stockwell et al go further, in their analysis, to set up a device, the "SJC", which ensures that only imperatives in

which the subjects have the feature [+ II person] can be generated grammatically.

It can be said that the point at issue now is whether there are real third- and first-person imperative subject NP's after all, in view of the claim that when such NP's occur as subjects in the construction, they must have the feature [+ II person]. Is Chomsky therefore not right in suggesting that only you can occur as subject in these sentences? In other words, does his use of the incidence of reflexivization amount to presenting a pragmatic argument in which case the occurrence of an NP like somebody as subject in the imperative may be regarded as the same as that of you in the same role, in the context of use? It is therefore reasonable to ask, at this juncture, where we are to draw the line between matters pragmatic and matters syntactic or even semantic in the characterization of the subject NP in an imperative construction.⁸

There is no doubt that there is some vagueness in the current thinking on the topic in the literature. Schmerling (1980) expresses some new ideas about how to solve the above problems about the nature of the subject NP and the characterization of you as subject in the imperative. She suggests that it may be necessary to abandon You Deletion. But she adds:

Giving up You Deletion is something of a frightening prospect, necessitating as it does a semantic account of "understood you" with compatible semantic accounts of "control" phenomena. (Schmerling, 1980: 27).

This has not been attempted yet, as far as I know.⁹ It is also important to find out why only a subset of NP's can occur as subjects in imperatives, and how this fact relates to the occurrence of "understood you" in the sentences. I shall suggest solutions to these problems in Chapter Three.

1.2 The Late Sixties and Early Seventies

A) Tags in Imperatives

The general interest which linguists take in the auxiliary in this period extends to tags. Many views about the structures are put forward. Negation, deletion transformation, and do are also discussed. A number of analysts, including Postal (1964), Lees (1964) and Arbin (1969) make suggestions about them which I shall now consider along with those of others.

What attracts the attention of the analysts in particular is the formation of tags in both imperatives and interrogatives. This issue has to do with the claim (cf. Postal, Op. cit.: 27) that will is the auxiliary that occurs in imperatives. Although Lees (1964) and Hartung (1964) support this claim, they express the view that tags are formed from conjoined sentences. Lees says that the second conjunct must contain the modal will and the first may not contain any negation -- an element which he claims optionally occurs in the second. The processes of deriving tagged imperatives, according to this proposal, may be simplified thus:

(1.2.1)(a) You will accompany them

(b) Will you accompany them

After the conjoining of both sentences, we have

(1.2.2) You will accompany them and will you accompany them.

The deletion rules then apply to them to derive the following:

(1.2.3) Accompany them and will you.

A transformational rule will then delete and. Hartung makes

the same claim. He says the following structure is first brought about by a transformation:

(1.2.4) Accompany them, will you accompany them.

Deletion rules then drop those elements in the second segment which repeat items that have already occurred in the first, and so we have the following sentence:

(1.2.5) Accompany them, will you!

The questions raised by the occurrence and role of will in imperatives and the formation of tags in both imperatives and interrogatives are also discussed by Arbini (1969). What is important in his suggestions is his attempt to determine the role of negation and negative preverbs¹⁰ in distinguishing a tagged imperative from a tagged question. The thrust of his argument is that the presence of these elements in the main segments of tagged constructions makes it difficult to support the claim that the formation of tagged imperatives may involve the deletion of you and will. Such constructions should therefore be regarded as tagged questions.

Arbini, to begin with, agrees with Lees that a negative in the tag of an imperative is completely optional. He however points out that this is in clear contrast with what obtains in the tags of questions.

(1.2.6) Show me your ticket $\begin{cases} \text{will you} \\ \text{won't you} \end{cases}!$

He observes:

In interrogatives, the formation of negative tags appears to be influenced by the positive characterization of the source phrase-marker, whereas the formation of negative tags in imperatives is obviously not. (Arbini, 1969: 207).

For tagged questions, therefore, the situation is as follows:

The problem he has with this construction is that he accepts Postal's (1964) proposal that a sentence like the example in (1.2.10) can be given an imperative interpretation. He puts it thus:

the phrase-marker from which it derives terminates in a string producing sentences which have legitimate interpretations as imperatives... (Ibid.: 208).

(1.2.10) You will not sit down.

We may note that the issue he really has to resolve is if the structure in (1.2.9) is indeed derived from the same phrase-marker as the construction in (1.2.10), why then should the former be interpreted as an interrogative whereas the latter is interpreted as an imperative. The only difference between them is the fact that the former is tagged but the latter is not. The presence of negation in the main segment of a tagged construction can no longer be used to tell a tagged question from a tagged imperative, since it is now obvious from the example in (1.2.10) that an imperative can contain negation; and may be tagged as well.

Arbini however goes on to give his reason for regarding the construction in (1.2.9) as a tagged question rather than as a tagged imperative. He claims that if it is labelled as a tagged imperative, its phrase-marker will allow the optional deletion of you and will (following Chomsky, 1955, 1975), which will thus lead to the derivation of a deviant sentence like

(1.2.11) *Do not sit down, will you!

He points out that his rejection of the imperative interpretation of a sentence like the one in (1.2.9) has not been motivated simply by the presence of a negative element in its main segment alone. He says that sentences like the following

should also be rejected as tagged imperatives:

- (1.2.12)(a) You will sit down, won't you.
- (b) You will show me your ticket, won't you.
- (c) You wil listen to me, won't you.

He claims that sentences like these as well as the one in (1.2.9) may well have been generated as interrogatives, and so, no elements in them are deleted by the Imperative Transformation. If this is the case, he continues, none of them can be said to be the sources of the sentences in (1.2.13).

- (1.1.13)(a) Sit down, won't you!
- (b) Show me your ticket, won't you!
- (c) Listen to me, won't you!

He then concludes that the transformation responsible for the production of tagged imperatives is

BASICALLY a permutation transformation (optionally adding not to the tag), unlike the Tag-question transformation¹ which is an addition transformation. (Ibid.: 209-210).

It is perhaps correct to comment here that what Arbin has done, basically, is to test two claims in the literature against constructions containing tags. The claims are (a), that by Lees (see above) which says that the first conjunct of a tagged imperative may not contain any negative element, and (b), that by Chomsky which says that imperatives are derived from interrogatives by the deletion of you and the auxiliary which is now believed to be will (see Postal, 1964).

He does not really accept that the example in (1.2.9) may well be a tagged imperative. The point he has however brought out has to do with the deletion of the subject and the auxiliary in the sentence. He claims that if the sentence in (1.2.9) is turned into a subjectless, tagged imperative as in (1.2.11), it will be ungrammatical, since the

sentence does not conform with the proposal of Postal and others (see above) on the formation of a tagged imperative. He therefore concludes that only structures which can grammatically drop their subjects and auxiliaries as a result of the operations of transformations may be regarded as imperatives, and only those which can have their subject and auxiliary copied to the tags (as suggested by Postal and others) may be regarded as interrogatives. Since the sentence in (1.2.9) does not undergo the operation of a transformation involving deletion, as (1.2.11) shows, it may thus be regarded as an interrogative, formed as suggested by Postal and others.

Arbini argues his point very strongly. He seems to say, in effect, that only imperatives can drop subject NP's and auxiliaries. This is true if we ignore the aspect of the auxiliary will. There is no evidence that will occurs in the imperative in the first place. However, the absence of subject NP's in the construction may not be due to the action of a permutation transformation. This is particularly so in view of the fact that such a permutation transformation presupposes, rather incorrectly, that the subject of the imperative sentence must be you.

With regard to tags in imperatives and questions however, Arbini fails to come forward with any reason why he thinks the sentence in (1.2.9) may be said to be ambiguous between question and imperative interpretations, although he prefers to regard it only as a tagged question. Chomsky, it may be recalled, claims that imperatives are better derived from interrogative-like, rather than from declarative-like, constructions. Postal and others hold the view that if this is done, it will thus be possible to derive tags for the constructions, provided that negation does not appear in both segments in the case of imperatives. The position which

Arbini adopts, however, is that we cannot really know whether these tagged constructions are imperatives or not until we subject them to the operation of a certain deletion transformation. This is a very narrow view to hold because although questions do not drop their subject NP's as imperatives do, it is not in all circumstances that subjectless imperatives can be used without ambiguity or loss of meaning. Furthermore, although all imperatives may drop their NP's where necessary, this is not dependent on the absence of negation in them, as we shall see in Chapter Five below.

Arbini also attacks the suggestion that the modal will occurs in the underlying structures of all imperatives. He claims that "complementized imperatives"¹², for example, have no specific modals. He notes that the transformation relating to the placement of the for-to complementizer does not allow the occurrence of modals in complement sentences, contrary to what happens in the case of that.

(1.1.14)(a) I command you to stand still.

(b) I pray that he may be well soon.

He points out, however, that his claim does not fully account for the distribution of the modal will in imperatives. What provides a full account, he observes, is Thorne's (1966: 72) structure index for imperatives:

'Def N Imp VP, there being a rule Imp -----> $\left\{ \begin{array}{c} \underline{\text{will}} \\ \emptyset \end{array} \right\}$,
the forms with will always having the full form of the vocative, those with \emptyset having either the full or the reduced form.' (Arbini, Op. cit.: 212).

Thus, imperatives like the following are predicted by the above rule.

(1.2.15)(a) You girls will complete your assignment tomorrow.

(b) You girls complete your assignment

• tomorrow.

(c) Girls, complete your assignment tomorrow.

It rejects the following sentence:

(1.2.16) *Girls, will complete your assignment tomorrow.

The implications of the above rule, according to Arbini, are numerous. I summarize them as follows:

(a) true third person imperatives do occur as complement sentences. In their embedded positions, Imp has been rewritten as \emptyset :

(1.2.17)(a) He orders Kate to be here tomorrow.


(b) I command the students to leave the room forthwith.

(b) The modal will always occurs where there is a full form of the subject NP, and so it must occur in the tags of imperatives;

(c) there is no deletion of you or will in the initial segment of a tagged imperative, as claimed by Klima (1964) as well as Katz and Postal (1964);

(d) tagged imperatives are generated with the help of a permutation transformation which operates in the following manner (which fleshes out the rule he gives). (Cf. Arbinì, *Op.cit.*: 213).¹³

(1.2.18) You - children - will - behave yourselves
 1 2 3 4



Behave yourselves, - will - you (not) children
 4 3 1 2

In sum, it may be said that Arbini's proposals, some of which reflect Thorne's rule, are as follows:

- (a) a sentence like "You will leave tomorrow" may be an imperative;
- (b) to transform it into a tagged imperative, it will be necessary to switch around the elements in the sentence: "Leave tomorrow, will you". So, no deletion is required.
- (c) If the deletion of you and will is carried out as required by Katz and Postal when there is not in the DS, then it will inevitably generate an ungrammatical sentence as in (1.2.11) above;
- (d) As for the sentence in (1.2.12), you cannot regard them as tagged imperatives because they are not derived in accordance with the above principle of permutation. Thus, in each sentence, there are two you's and two will's.

This in itself raises an interesting question. What is the consequence of treating the sentences in (1.2.12) as the sources of the imperatives in (1.2.13)? The answer points to certain things which Arbinì may, perhaps, not want to do:

- (i) he may be obliged to accept the proposal of Lees and Hartung that tagged imperatives derive from two conjoined sentences, for example,
 (1.2.19) You will sit down, will you sit down?
- (ii) he may also have to accept the deletion of certain elements in the sentence -- the initial you and will as well as the main verb in the second clause.

So, in effect, we now have three separate, possible ways in which the tags of imperatives may be derived:

- (1) the Katz-Postal proposal -- involving the copying of some elements which are deleted later;
- (2) the Lees-Hartung proposal -- involving the conjoining of two sentences, and the deletion of some of their elements, and,
- (3) the Arbini proposal -- involving the switching around of the elements of a sentence, and no deletion whatsoever.

It is perhaps in place here to say that all of them cannot be correct. So, there is a problem in deciding which of them is explanatorily adequate, and which may be rejected. Nevertheless, what separates that of Katz and Postal from that of Arbini is the fact that the former accepts deletion whereas the latter does not. Arbini's proposal does not involve a deletion transformation because it does not derive its tag for an imperative by copying any element in the main part of the sentence to it. Since that of Lees and Hartung involves the conjoining of two separate sentences, deletion is required in order to derive the required surface forms. They all depend on transformations which also allow tagged imperatives to be formed by deriving, for example, the sentence in (1.2.20) through Chomsky's Question Transformation.

(1.2.20) Will you come here?
 1 2

This operation can then be followed by switching round the elements in the new structure to derive the imperative in (1.2.21), in the fashion of Arbini. So, when 1 and 2 interchange positions, we have

(1.2.21) Come here, will you!

The tag may contain a negative.

(1.2.22) Come here, won't you!

There is no independent motivation for any of these proposals.¹⁴

Huddleston (1970) supports the proposal which involves two conjoined sentences, saying that they are in a paratactic relationship (cf. p. 215). His main contribution is his suggestion of the kind of question which the second sentence is (a yes/no question), and the condition for their conjoining (they must "make sense").

This suggestion appears to provide a motivation for the Lees-Hartung proposal. But this kind of motivation seems to be based on pragmatic and semantic considerations only, and does not appear to owe anything to the principles of TG. If the proposal and the defence of it are acceptable, it is probably as a result of their apparent departure from the fundamental conventions of TG. Indeed, the existence of two clauses in each of these sentences is superficially transparent, and so we do not need to postulate underlying structures and transformational derivations for them in order to capture this fact. I would like to end my discussion of tags in imperatives here. I have nothing further to say about the structures in the subsequent chapters of the present study.¹⁵

B) The Performative Hypothesis

The Performative Hypothesis (PH) is discussed here because it represents an attempt to investigate the nature of sentence types. Again, one of its primary concerns is the manner in which sentences are derived. It tries to draw a link between the verbs in the highest clauses in the sentences and the uses to which the sentences themselves are put. The postulation of the idea that such a link exists becomes the basis of a claim that the deletion of you may be attributable to its placement in sentences which are used to convey commands. Since the Hypothesis covers both syntactic and semantic issues, it seems reasonable to discuss it here so that it may be easy to make references to it in both parts of the chapter.

The PH attracts a great deal attention among linguists in this period. It is known to have been presented in different versions, but its central ideas include the following:

- (a) that the surface sentences of a natural language are derived from deep structures in which they are complement clauses;
- (b) that they are each dominated in the deep structure by a higher performative clause, that is, a clause containing a performative verb like order or ask.
- (c) that it is such a performative verb that conveys the illocutionary force of each sentence;
- (d) that the illocutionary force of a sentence should be treated as a part of the "logical structure" of the sentence, and,
- (e) that the higher performative clauses are deleted when various sentence types are derived.

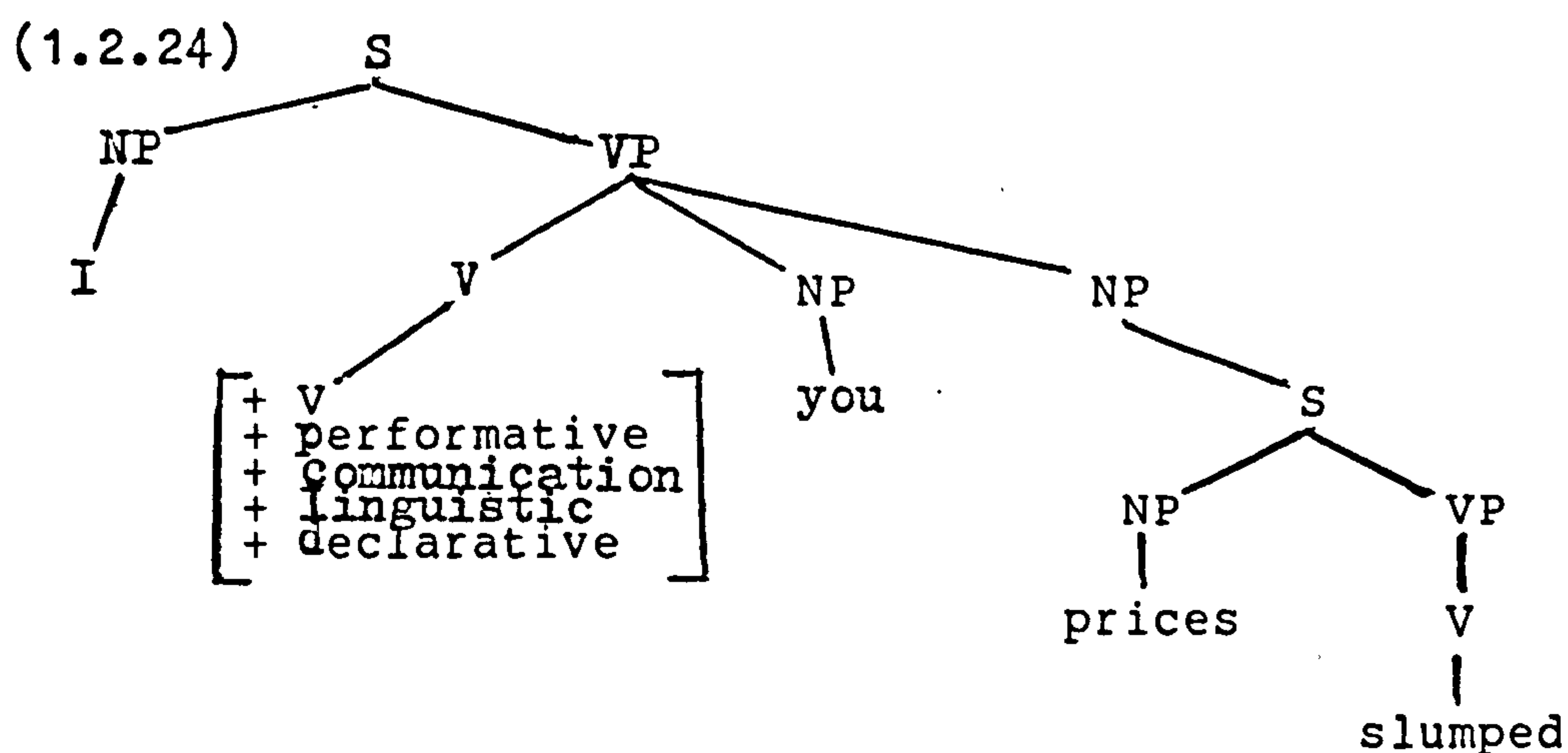
The above views are traceable to a number of linguists each of whom is emphatic on one or more of them. Ross (1970) is mainly interested in declaratives being derived in this way, but thinks that the same thing can still apply to other sentences. He comments:

... every declarative sentence ... will be derived from a deep structure containing as an embedded clause what ends up in surface structure as an independent clause. (Ibid.: 224).

His point is that the sentence in (1.2.23) (Ross's example),

(1.2.23) Prices slumped.

should be analysed as an implicit performative as follows (Ibid.):

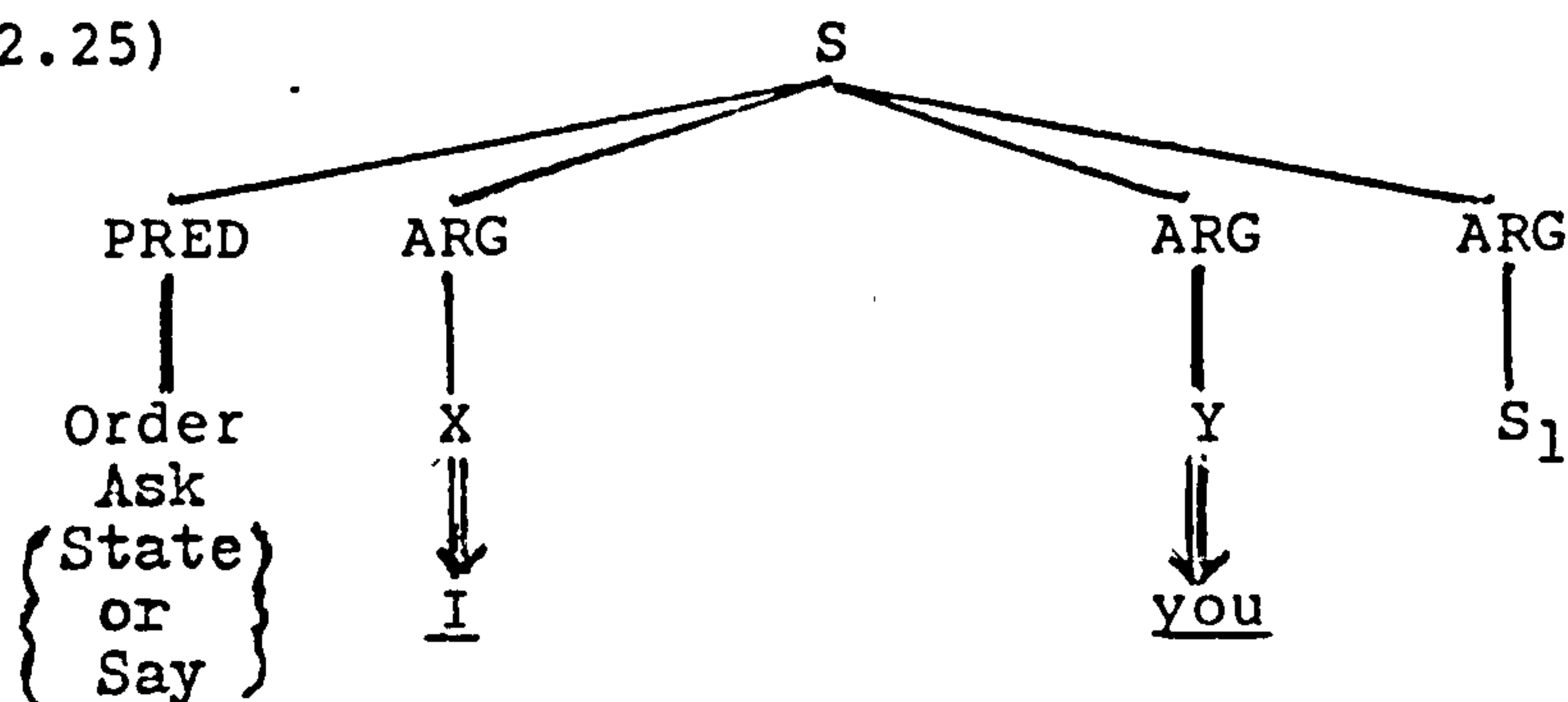


G. Lakoff also shares Ross's views. He suggests that all sentence types -- for example declaratives, interrogatives and imperatives -- should be derived from logical representations where they function as complements to higher performative clauses. With regard to imperatives, he says:

It is clear that sentences like 'I order you to go home', in which there is an overt performative verb, namely 'order', enters into the same logical relations as a sentence like 'Go home' in which there is no overt performative verb in the surface form. (G. Lakoff, 1972: 560).

It is not clear what he means by logical relations, but he appears to be referring to the ideas of Generative Semantics. He says that Generative Semantics claims that the underlying grammatical form of a sentence is the logical form of the sentence. If we accept that as correct, he goes on, we cannot separate the study of the logical forms of sentences from the study of grammar. The logical forms of sentences can then be represented in terms of phrase structure trees, and the illocutionary forces which they convey can also be represented as parts of the logical forms of the sentences in the phrase structure trees. However, the performative verbs may not overtly appear in the surface structures of the sentences, he concludes. We therefore have trees like the following:

(1.2.25)



(Ibid.)

McCawley claims that the higher performative verb in such a sentence,

(1.2.26) I hereby request you to leave here at once

"specifies the relationships the utterance mediates between the speaker and the person spoken to" (1968, 1976: 84). Turning to the construction in particular, he suggests that the morpheme I or Imp should have "the meaning of a verb with first person subject and second person indirect object" (Ibid.). His views on the subject may be summarized as follows:

- (a) all verbs of ordering are followed by a noun phrase you as an indirect object, and an embedded sentence, which also has you as its subject;
- (b) then the Equi-NP-Deletion transformation deletes the second you as it is preceeded by a co-referential NP, you;
- (c) the loss of the subject of the embedded (imperative) sentence is a special case of Equi-NP-Deletion, and so it is not due to any other syntactic operation.

R. Lakoff seeks to provide independent motivation for the proposals on imperatives by referring to the case of Latin. Her arguments, according to Sadock (1974: 30), may be summarized thus:

- (a) Latin imperatives use the second person subjunctive like VENIAS;
- (b) non occurs in subordinate clauses which function as subjects of higher sentences and ne in subordinate clauses which function as object clauses;
- (c) but ne is also found in independent subjunctive clauses with imperative force, and in negative imperatives;
- (d) it may therefore be concluded that such sentences with ne are subordinate object clauses earlier in their derivations, in accordance with (b) above.

Finally, it appears that Sadock is so convinced by the various arguments (including his) that he suggests that the abstract label IMPERE should be used to capture the element of force shared by all types of imperatives: the elements that show that "they indicate that the speaker is prescribing with his sentence some future course for the addressee" (1974: 149-150).

To comment briefly, I would say there is no doubt that the Performative Hypothesis is vigorously put forward by its advocates. This perhaps explains one of its weaknesses. It attempts to cover several aspects of all sentence types, without identifying, methodically, the differences that exist among them. As a result, it is vague on a number of issues. First, it does not state clearly what it means by the term "logical form" and how it is to be captured in a rule-governed way. Second, the Hypothesis is not explicit on the distinction to be drawn between the meaning and use of a sentence; rather, it characterizes the illocutionary force of a sentence as if it was an inherent semantic feature of the sentence; a feature that the sentence possesses even after

the higher performative clause is deleted. This therefore creates a very simplistic notion of the sentences of natural languages.

The criticism of the Hypothesis in the literature is wide-ranging, and applies equally to all the sentence types, including the imperative construction. Nevertheless, I intend to concentrate on three of the critics who, together, may give us an adequate picture of the other aspects of the Hypothesis which many linguists find unacceptable.

The central point of Anderson's (1971) criticism of the PH is that it is mistaken on its views on the nature of the notion performative. He thinks that the notion performative should be treated as a semantic feature [+ performative] or as a semantic category. He explains that the motivation for his proposal is the fact that performative verbs, which have the features of being

- (i) non-stative,
- (ii) able to appear in imperatives, and,
- (iii) able to appear in the present simple with habitual or generic interpretation, and also with the interpretation of historic present,

do preserve their semantic reading of present simple under passivization. This claim is borne out by the following examples which are the types of structures that the PH regards as the source of the imperative:

- (1.2.27)(a) I order you to leave my office.
- (b) I command you to lead the workers out of the factory.
- (c) I request you to send for his father immediately.

Under passivization, they become

- (1.2.28)(a) You are ordered (by me) to leave my office.
 (b) You are commanded (by me) to lead the workers out of the factory.
 (c) You are requested (by me) to send for his father immediately.

Anderson therefore accuses the advocates of the PH of ascribing to syntax alone what properly belongs to semantics as well. He comments:

The only syntactic characteristic of these verbs [i.e. performative verbs] is their ability to disappear when unneeded (in Ross's analysis), and their existence remains to be demonstrated before this can be considered. (Anderson, 1971: 5).

He questions the relevance of the Hypothesis to the performative/constative distinction. He notes that Austin, in his later lectures, draws the conclusion that there is "no consistent syntactic correlate of performative utterance" (Ibid.: 24). He points out that Austin therefore develops his theory of locutionary, illocutionary and perlocutionary forces of an utterance. Austin, he claims, identifies locution with the meaning of a sentence or utterance without any regard to the context in which it is used, relates the illocutionary force to the action that is carried out by uttering the sentence and regards the perlocutionary force as the effect of the utterance on the addressee. He observes that Austin intends the illocutionary and perlocutionary forces to be kept separate from the locutionary force -- the sense or meaning of the utterance. He explains:

Locution having been identified with meaning, and illocution and perlocution with force, he [Austin, 1962] emphasized (p. 100) that "I want to distinguish force and meaning in the sense in which meaning is equivalent to sense and reference, just as it has become essential to distinguish sense and reference within meaning". Illocutionary and perlocutionary forces and their study, then belong to a theory of language use. (Ibid.: 24).

Anderson thus maintains all along that the phenomenon involved in the performative analysis is of such a nature that it cannot be systematically described within syntax alone. He notes that some of the characteristics can also be explained within a theory of semantic structure.¹⁶

Anderson, I would say, fails to explain a number of points. For example, he does not make clear what he means by the notion "performative" being semantic. The ability of certain verbs to appear in imperatives and retain their present simple and historic present under passivization cannot be what constitutes the semantic category performative. These features clearly pertain to syntax. Again, I think that there is certainly no need to question the relevance of the Hypothesis to the performative/constative distinction, for it is such a distinction that gives rise to Austin's conception of the notion of illocutionary force. Indeed, since the proponents of the PH claim that the illocutionary force of a sentence is part of the logical form of the sentence, it appears that Anderson, in his advocacy of a semantic status for the notion "performative", may not be saying anything different from what is claimed for illocutionary force. That this sort of thing has happened is perhaps traceable to the vagueness that surrounds most of the claims of the Hypothesis, especially with regard to their failure to specify clearly how to capture the semantico-pragmatic aspects of sentences.

Fraser (1974), on his part, examines the relationship between syntax and the PH. His aim, he says, is to find out how the use that a speaker makes of the sentence which he utters can be expressed within the grammar of a language. He contends that the arguments which have been advanced in favour of the Hypothesis are inadequate. He says, for example, that the claim by Ross that the performative verb occurs

in the topmost clause in the sentence is not borne out by the following examples (1974: 3).

- (1.2.29)(a) I regret that I must inform you of your dismissal.
- (b) I am pleased to be able to offer you the job.
- (c) Let me point out that I admit you're right.
- (d) I would like to congratulate you.

This argument can be extended to the structures which the PH claims to be the sources of imperatives.

- (1.2.30)(a) It has been decided to request you to ask for voluntary retirement.
- (b) I have been instructed to inform you to order the protesters out of the hall.
- (c) It is interesting to note that the committee has decided to request you to command the soldiers for the time being.

As in the examples in (1.2.29), the highest clauses in the sentences in (1.2.30) do not contain performative verbs.

After examining other issues in the Hypothesis, Fraser comes to the conclusion that

- (a) no linguist has shown any evidence that the Performative Analysis has the capacity to pair sentences with their illocutionary forces;
- (b) contrary to what Ross claimed, the notion of Performative Analysis is not syntactically motivated, and that
- (c) although the Performative Analysis falls within Generative Semantics, what is really at issue is "how are the generalizations between sentence sense

and sentence force best captured?" (Ibid.: 38).

I think that the criticisms by Fraser of the the PH are relevant. As for the force of a sentence, it has been pointed out that a sentence does not have any particular force attaching to it (see Huddleston, 1976). With regard to the sense of of a sentence, I shall indicate in Chapter Two how it can be captured, and the semantic sections in the present analysis, especially the Model Theoretic interpretations which I shall provide in Chapter Five, will provide examples.

Gazdar criticizes the PH on the grounds that it fails to meet both "semantic and pragmatic standards of adequacy" as is required of all "semantic and pragmatic explanans for syntactic phenomena" (1979: 18). He attacks many aspects of the theory, three of which I shall summarize here because they are relevant to the imperative construction.¹⁷

He takes up the aspect he describes as follows (Ibid.: 19):

(i) "The clause contains I and you".

Gazdar here restates the criticisms which other linguists level against the above claim. He refers to both Anderson (1971) and Matthews (1972) who note that performative verbs can accept singular or plural subjects and indirect objects. Gazdar also points out Matthews' observation that the sentence,

(1.2.31) You will go home

will thus become four ways ambiguous. Lakoff's (1972) suggestion that variables which are marked as first- and second-person should be used for subject and indirect object respectively is also rejected by Gazdar. He recalls Dahl's (1972)

remark that this suggestion does not change the situation because it is the contextual co-ordinates of I and you, which are thus eliminated, that decide the assignment co-ordinates that replace them. He adds that in any case there are many performative sentences where the first-person NP is not the subject and the second-person NP is not the indirect object. There is an example of this in (1.2.17)(a) above.

I would say, despite Gazdar's criticism, that there is still some substance in Lakoff's suggestions, if we use the variables for strictly syntactic analysis of the phenomenon, and not for semantic or pragmatic analysis where contextual considerations are called for. It is very misleading to think that what matters about the subject and indirect object in an imperative construction is the referent of each of the NP's rather than the manner in which he or she is particularized. We shall learn very little about the nature of the imperative construction unless we can identify clearly how the subject NP's in particular are specified.¹⁸

Another aspect of the PH to which Gazdar directs his attention is the following claim (Op. cit.: 27).

- (ii) "The performative verb represents the illocutionary force of the sentence".

He claims that this proposal is the main semantic motivation for the PH. He points out that the alternative to maintaining it is to "revert to the use of merely syntactically motivated IMPERATIVE and INTERROGATIVE morphemes in the deep structures of a transformational grammar". (Ibid.). But the question now, he argues, is how it can be supported. He gives a list of sentences with the illocutionary force of requesting. He observes that the proponents of the Hypothesis cannot explain how the sentences have come to have that kind of force. His list includes the following (Ibid.):

- (1.2.32) (a) Close the door.
 (b) I request you to close the door.
 (c) Why don't you close the door.
 (d) Will you close the door.

Gazdar however concedes the point that a sentence like (1.2.32)(a) may be said to have derived from a deep structure containing a performative verb like the one in (1.2.32)(b). He however notes that the other sentences are problematic for the PH. He then suggests many ways out of the problem. These include the attempt of Sadock (1970) to provide a schema for capturing the illocutionary force of request-type sentences like (1.2.32)(d) -- (p.235).

- (1.2.33) ((I ASK you (you will (you close the door)))
 and (I REQUEST you (you close the door))).

Gazdar observes (p.28) that Green (1973) also suggests something similar to handle sentences like (1.2.32)(c).

- (1.2.34) (I REQUEST you ((you close the door) (or (you tell me (why you do not close the door))))).

Gazdar rejects both proposals as unworkable, and declares:

I do not intend to discuss how these proposals fail to handle the data because it seems to me that deep structures like ... [(1.2.33)] and ... [(1.2.34)] stand as their own *reductio ad absurdum*. (Ibid.: 28).

He adds that even if they handle the syntax adequately, they should still be rejected, for example, on the grounds that they lack simplicity, generality and motivation.

Gazdar explains that the advocates of the PH may even argue that sentences like (1.2.32)(c) and (1.2.32)(d)

don't in themselves have the illocutionary force of request but are, in fact, assertions or questions (according as

to whether they are declarative or interrogative respectively). Their "request" force is actually a perlocutionary effect of their utterance. (Ibid.).

He goes on to say that this kind of defence is "merely terminological" because there is no independent criterion for distinguishing perlocutionary from illocutionary forces. Consequently, the whole argument, he claims, is circular; it is something of a "misuse of Austin's terminology" (Ibid).

I would say Gazdar is right in his criticism of the PH as indicated above. Indeed, the proposals by Sadock and Green are nothing more than attempts to create speech contexts for the sentences concerned. This of course demonstrates in no uncertain terms the general orientation of the PH towards pragmatics.

The last of the three aspects which I want to review here is set out by Gazdar (Ibid.: 29) as follows.

(iii) "Illocutionary force is semantic".

Gazdar totally rejects this proposal. He points out that no syntactic evidence or motivation has been advanced to support it. He also rejects G. Lakoff's (1975) suggestion that some forms of model-theoretic apparatus may be able to handle matters relating to the truth conditions of performatives. He contends that there has been no attempt anywhere to provide such a semantic representation which sets out felicity or truth conditions, let alone show that such a representation can be adequate.

Gazdar expresses the opinion that these claims cannot be supported. First, even if the connection between the illocutionary force expressed by a sentence and the felicity conditions (that is, the factors which make the uttering of a sentence appropriate) is semantic, the onus is still on the

proponents of the PH to prove that such a semantics will work for both deleted and undeleted performatives. He concludes by conceding the fact that a great deal of work still needs to be done about finding out the interconnection between syntax and semantics before it can be decided which of the competing analyses of sentences will emerge as adequate.

It is revealing to note that six years after Gazdar made the above observations on the study of sentence types, the situation has remained pretty much the same. I am of the opinion that with regard to the study of sentence types, TG (the theoretical model assumed by the studies we have come across so far) is handicapped by these elements, deep structures, on which it heavily relies. Their existence necessitates deletion devices, and so, analyses which assume these two features of TG seem to lack the ability to capture the semantic aspects of the sentences of natural languages. It is necessary to make clear that a distinction is being drawn between sentences as single units which fall into differentiable types and the elements of sentences like subject and object NP's. One of the explicit examinations of the role of deep structures in the literature is Huddleston (1976). It has been claimed for these structures that they can resolve syntactic ambiguities and show some paraphrase relations between sentences-- claims that have already come under attack; for example, there is the suggestion about a lexical or non-transformational approach to passive constructions.

Huddleston gives this explanation:

In saying that it is the deep structure functions that determine meaning we are making the weaker but nevertheless important claim that the rules which relate the syntactic structure of a sentence to its meaning will interpret the semantic role of an element on the basis of its function in deep structure, not in surface (or intermediate) structure. (Huddleston, 1976: 84).

He then examines some sentences and observes that there

is "a constant semantic role" which can be identified with a particular NP which is either subject or object in the sentences. The Katz-Fodor (1963) projection rules also have this orientation towards individual lexical items and their syntactic functions in sentences in their account of the "meaning" of a sentence.

The issue, it seems to me, is therefore not only that illocutionary force is not semantic, but also that the analysts fail to use appropriate theoretical models to provide such a semantic account even if it was semantic. What is involved here is not the identification of the behaviour of certain lexical elements in certain sentences as we have seen above, but the provision of a general framework within which the semantic representation of the sentences can be located according to their grammatical mood categories.¹⁹

The idiosyncratic nature of the various sentences cannot be seriously denied. The advocates of the PH, despite their mistaken notions about the nature of illocutionary forces, seem to have realized such a uniqueness among sentence types, hence their postulation of different illocutionary forces for different sentence types. There is reason therefore to regard the imperative sentence as unique (see Culicover, 1976).²⁰

1.3 The Second Half of the Seventies and the Early Eighties.

A) Auxiliaries

Of necessity, we first of all go back briefly to an earlier period in order to have a full picture of the main developments in the generative account of another aspect of the construction. One such development has to do with the analysis of Stockwell et al (1973) of auxiliaries in imperatives.

What is significant in this regard is the element "SJC" which they claim exists in the deep structure of imperatives. They say that this element is "distinctive with both modal and tense" and go on to explain:

Thus, we do not generate a modal such as will in the deep structure of imperatives, but a separate form which behaves in certain respects like modals (in AUX-INVERSION) and in certain respects like affixes (in AFFIX-SHIFT and DO-SUPPORT). (Ibid.: 635).

The SJC is said to occur in the AUX of imperative sentences and those of that-complements which follow words like suggest and move, and not to have any morphological effects on the forms of their main verbs:

(1.3.1)(a) I request that the prisoner (SJC) be set free.

(b) I move that the society (SJC) be disbanded.

The main function of the SJC, they claim, is to prevent sentences from acquiring indicative forms.

(1.3.2)(a) ?I request that the prisoner is set free.

(b) ?I move that the society is disbanded.

Stockwell et al also claim that the presence of the SJC in the AUX of imperatives makes it unnecessary to postulate I or IMP in sentence-initial positions, as Katz and Postal, as well as Thorne, suggest. They then construct a new rule, called IMPERATIVE-SUBJ-AUX-INVERSION, which follows affix-switching. They explain:

Since SJC acts as an affix it will then be available for inversion with the subject only if there is a NEG or EMPH present to prevent it from moving onto the verb. (Stockwell et al, 1973: 662).

Therefore, in the derivation of

(1.3.3) You sit down

we will have, after AUX-ATTRACTION, the string,

(1.3.4) SJC you sit down

only if there is EMPH present in the sentence. As an affix, the SJC is prevented from moving onto the verb by you in (1.3.4) and so, according to them, it triggers off DO-SUPPORT in order to form a string like

(1.3.5) Do - SJC - you - sit - down.

Consequently, we may have, as an imperative, the grammatical sentence in (1.3.6)(a), if you is deleted, or the ungrammatical sentence in (1.3.6)(b), if it is not.

(1.3.6)(a) Do sit down.

(b) *Do you sit down.

It may be observed that we have so far seen nothing unique about the function of the SJC. But this will now change. The SJC is also given some blocking powers. It is not permissible to delete it (thus making the sentence in question ungrammatical) if (a), the imperative subject NP lacks the feature [+II person], as in the following examples,

(1.3.7) *Your wife stand up

and (b), the referent of the subject NP is not an agent of the action indicated in the sentence. For example,

(1.3.8) *Be short.

Condition (b), I would say, takes the issue outside the realm of syntax. The point that is raised by (1.3.8) is not whether or not the referent of an imperative subject NP can be the agent of the action indicated in the sentence but that the whole idea conveyed by the sentence is simply inconceivable. Neither the referent nor any other person can be

the agent. As for condition (a), it is claimed, as we saw above, that other NP's, apart from the second person pronoun, can also function as the subjects of imperatives. I am leaving this issue open until Chapter Three where it will be examined in detail.

Stockwell et al however point out that the constraints do not apply to what they call "embedded imperatives" which they say may still have, as subjects, NP's which do not possess the feature [+ II person].

(1.3.9)(a) I suggest that she drop the case.

(b) It is obligatory that he go at once.

It must be pointed out that Stockwell et al fail to give any reason why they think the nature of the subjects of imperatives varies between embedded and non-embedded imperatives. Since they claim that imperative subject NP's must have the feature [+ II person], they should also make such a constraint applicable to all varieties of the sentence, at least for the sake of the principle of generality. Their failure to do so raises the question whether sentences like those in (1.3.9) contain embedded imperatives.

Culicover (1976) also discusses AUX and the auxiliaries in imperatives, but in relation to You Deletion. His contention is that imperatives lack AUX both in the underlying and at the surface structures. He comments:

Notice ... that You Deletion can apply only in the main clauses, and that it cannot apply when either there is tense marked on the verb or there is a modal present: (Culicover, 1976: 149).

He gives the following examples. (Ibid.):

(1.3.10) { *Will }
 { *Can }

- (a) { *Must
*Might
*Should
*Ought to
*Have to
*Be going to }
- (b) *Got off of my foot!
- (c) *Are polite.
Be polite.

He claims that since tensed verbs are not grammatical in (1.3.10) and the bare, infinitival form occurs in (1.3.10)(c), imperatives have no TENSE. He also claims that they are AUX-less. He then explains that this makes it possible for You Deletion to take place. He declares:

The assumption that imperatives lack AUX would require us to state a special transformation to insert do in examples such as [(1.3.11)]. (Ibid.).

- (1.3.11)
- (a) { Do
Don't
Do not } have a piece of pizza with your beer.
- (b) { Do
Don't
Do not } be here when the band begins to play.

Culicover also says that non-second person subjects may be accommodated within imperatives because they are AUX-less.

- (1.3.12)(a) Everybody look at me. (IMPERATIVE)
(b) Everybody looks at me. (DECLARATIVE)

He claims that do is not in the underlying structure of subjunctives. (Ibid.: 151).

- (1.3.13)(a) It is important that Bill be polite.
(b) *It is important that Bill do not be polite.
(c) It is mandatory that Mary have seen you

. before noon.

(d) *It is mandatory that Mary do not have seen you before noon.

With these kinds of examples, Culicover contends that the subjunctive lacks both TENSE and modals, and that Do Replacement does not apply to them, as indicated by the positions of not and have and be. He therefore claims that the do of imperatives does not occur in the deep structures, just as the analysis of Stockwell et al implies. He then expresses the opinion that the Do Insertion transformation may be satisfactory, as far as imperatives are concerned, but adds that such a rule will be ad-hoc in nature.

I would say however that the fact that imperatives lack modal auxiliaries is observable from the appearance of the constructions themselves. But the proposal that they also lack AUX node raises a theoretical problem for which there can only be a theoretical solution. There are several suggestions on how to resolve the problem. It affects many more sentence types than imperatives, but I intend to concentrate on those aspects of it that relate to the imperative.

As far as imperatives are concerned, the elements in question now (after the modals have been eliminated from such matters) are do, be and have. The position of do has hardly changed since Chomsky's original suggestion in 1955. TG analysts may still insert it but it is not clear how this can be done in imperatives if they are regarded as AUX-less. The Do Insertion rule proposed by Emonds (1976: 211) is not applicable to imperatives since the rule requires the presence of TENSE in the sentence, and imperatives are believed to be tenseless.²¹ This is a non-trivial matter for, as far as I know, nobody has proposed a rule for the insertion of do into

imperatives since they are characterized as tenseless and AUX-less. Culicover's observation that such a rule would be ad-hoc in nature simply acknowledges the problem.

Underlying all this is the old problem as to whether or not imperatives have auxiliaries. Lees (1964), we may recall, thinks that they have a zero modal, Imp; Other devices have also been suggested. (See Culicover, 1971, Stockwell et al, 1973, and Ukaji, 1978). What is significant here is that Davies (1981) sees in this situation some evidence that these linguists hold the position that imperatives have an AUX but are tenseless. On the basis of this, she characterizes the imperative sentence as having the features [+AUX], [-TENSE] in COMP, after the fashion of Pullum and Wilson (1977). So, in line with the treatment of auxiliaries as main verbs, she seeks to extend the Pullum-Wilson proposal to imperatives by suggesting that do, be and have should be capable of occurring in the "-THAT, -TO complement of a higher verb". (Op. cit.: 313). She concludes:

Finally, to capture the fact that do will ultimately not appear before be or have except in Imperatives, we can postulate a rule which will raise be or have to replace do in a tensed S. (Ibid.).

Her proposal, she claims, correctly predicts the generation of the following sentences (p. 312).

(1.3.14)(a) Don't be silly.

(b) Don't have eaten it all before they arrive.

A brief comment is in place here. Davies's suggestion that the occurrence of do before be and have must be blocked for sentences which are not imperatives is significant. It must be pointed out however that it is not clear how imperatives like those in (1.3.14) are predicted by her proposal. There must be a rule to capture the situation presented by do in imperatives (i.e., its ability to occur before be and have

in the imperative sentences only). Davies fails to provide such a rule. Furthermore, she fails to identify the consequences which her characterization of do as a main verb will have on its relationship with, for example, negation in the imperative.

Another suggestion about do in imperatives is made by Schmerling (1980). She claims that the do of imperatives is unique to them. Her approach avoids the theoretical problems which beset the analyses that seek generalizations between imperatives and other sentence types. She claims that one of the peculiarities of this do is the fact that it co-occurs with be. She however does not say that the imperative is AUX-less, but avoids the problem relating to Do-Insertion.

As for don't, Schmerling claims that it is an imperative morpheme which occurs in colloquial imperatives. She observes:

We have thus identified a special negative marker for English imperatives. (Ibid.: 23).

This is similar to the claim of Gazdar et al working within the framework of GPSG. They comment:

... we are following Cohen (1976) in assuming that the don't which shows up in imperatives is synchronically quite distinct from the tensed negative auxiliary verb found in declaratives and interrogatives. (Gazdar, Pullum and Sag, 1980: 36).

- (1.1.15)(a) You don't wrap it up. [DECLARATIVE]
 (b) Don't wrap it up. [IMPERATIVE]

Interesting questions are raised here about the nature of do and TENSE in the imperative to which I shall return in Chapter Four. It will be necessary to find out not only the features of verbs that can occur in the sentence but also those of the VP-constituent itself in the construction.

To conclude this subsection, I examine the general trend in the treatment of be and have within TG in this period. The tendency now is to "raise" them in the manner of Emonds (1976). However, Akmajian et al (1979) introduce some new ideas into the analysis of verbs. They postulate three levels of verbal elements -- v^1 , v^2 and v^3 . Their base rule for sentences is as follows. (p. 21).

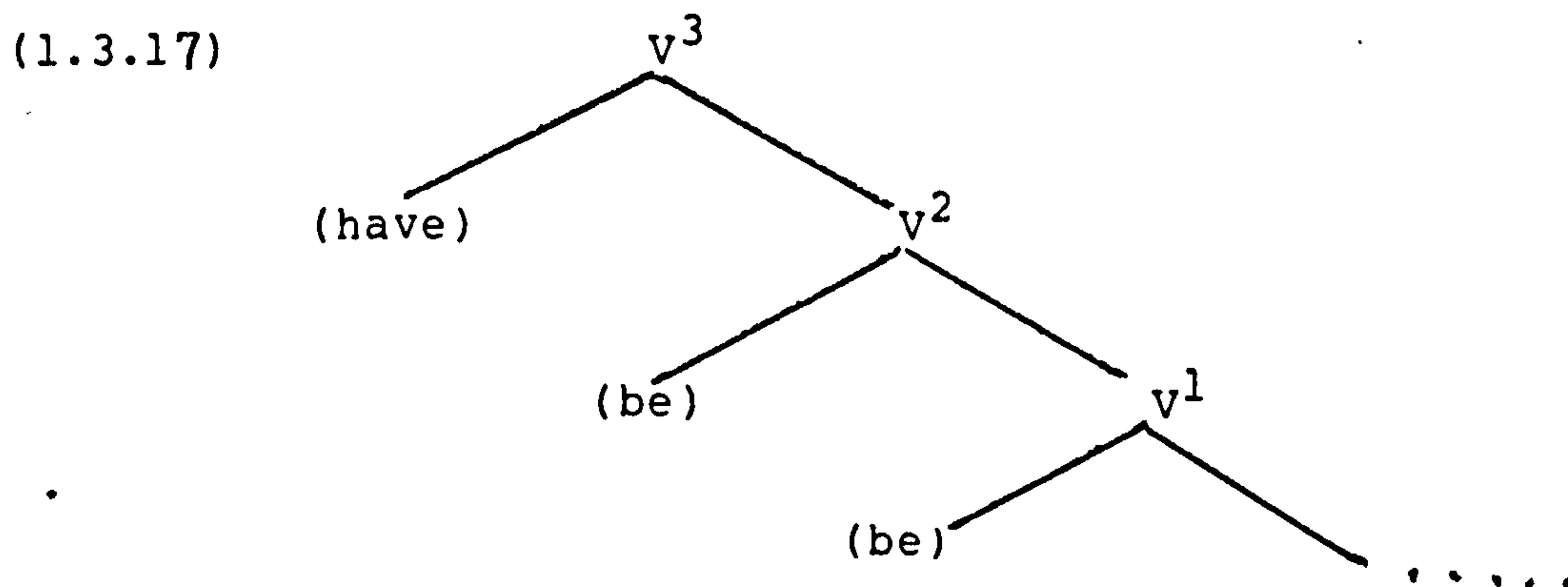
$$\begin{aligned}
 (1.3.16) \quad S &\longrightarrow NP \text{ AUX } v^3 \\
 \text{AUX} &\longrightarrow \left\{ \begin{array}{c} \text{Tense } \underline{\text{do}} \\ \text{Modal} \end{array} \right\} \\
 v^n &\longrightarrow \left(\left[\begin{array}{c} +V \\ +\text{AUX} \end{array} \right] v^{n-1} \dots \right)
 \end{aligned}$$

The feature complex $\left(\left[\begin{array}{c} +V \\ +\text{Aux} \end{array} \right] \right)$ is realized as have or be.

They explain:

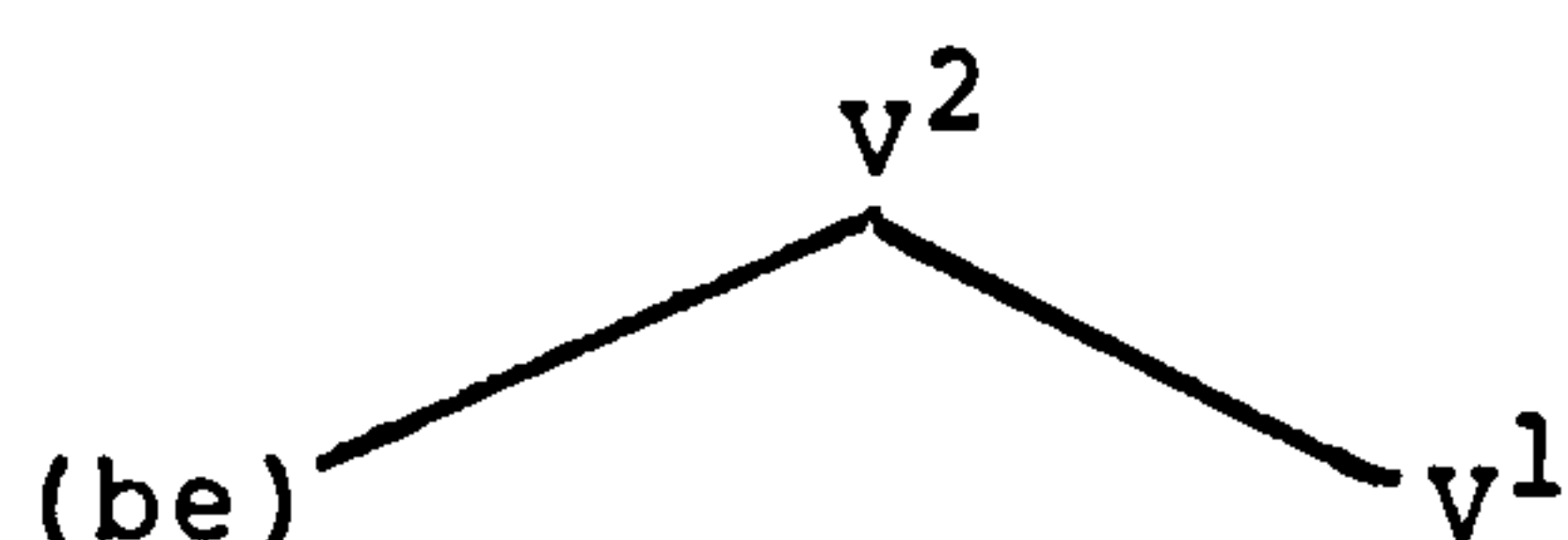
The perfect have is strictly subcategorized to require v^2 complements; the progressive be requires v^1 complements; and the passive be must be immediately followed by a main verb. (Ibid.: 21).

So, they generate the verb phrase as follows:



Applying this proposal to imperatives, they claim that the relevant verb phrase is v^2 . They stress that v^2 , as an instance of the schematic PS rule in (1.3.16), is generated as follows:

(1.3.18)



in which be is optional. The rule is able to generate an imperative like

(1.3.19) Close your eyes

if be does not occur. But if be does occur, the rule will generate imperatives like the following:

(1.3.20) Be following me all along the way.

They however claim that imperatives involving perfect have are grammatically unacceptable, although they are not semantically unreasonable. They would therefore star a sentence like the following.

(1.3.21) *Have replaced the book before the day runs out.

They also express the view that imperative sentences have no constituent AUX and cannot contain the verb phrase v^3 .

I would say by limiting the imperative verb phrase to v^2 , Akmajian et al restrict the element that can appear higher than the lexical verb in the imperative to be. Presumably, the negative would be inserted. But in the imperative, negation usually requires the presence of do.²² Akmajian et al accept Do-Replacement (see Emonds, 1976, and Culicover, 1976), but fail to say how this may be applied to imperatives since they are believed to be AUX-less. If the grammar is to generate sentences like

(1.3.22)(a) Do listen to me.

(b) Do sit down.

some form of Do-Insertion rule may be necessary, and so we are back to the old problem of writing an "ad-hoc" rule for

the imperative construction. The reasonable attitude to adopt, it appears, is to recognize the uniqueness of the imperative construction, as Schmerling (1980) does, and so accept that the do that occurs in it is special. It however remains to be shown (see Chapter Four below) in what ways it is special.

The treatment of do in the imperative is thus a serious problem for analyses which use the framework of TG. In order to resolve it, certain syntactic generalizations (i.e., the conditions for Do Insertion) may have to be abandoned. This may however have some upsetting effects on the grammar. For example, it is difficult, in the case of Akmajian et al, to support (as they now do) do replacement by be and have and then turn round to postulate a device which can replace be by do in imperative phrase-markers which contain do. In their rule schema, only be is allowed to occur before lexical verbs in imperatives. In fact, this special replacement of be by do would have to take place in the case of the sentences in (1.3.22). However, even if do replaces be in order to generate such sentences, it may still be necessary to have a Do-Insertion rule in order to generate the imperatives in (1.3.23).

- (1.3.23)(a) Do be reasonable
- (b) Don't be lazy

So, the problem of how to insert do into phrase-markers for imperatives in TG is again raised. Therefore, one of the major problems that the study of imperatives faces is not that it has been ignored in recent years as Schmerling (1983) claims, but that TG analysts find many aspects of the sentences very problematic.²³

B) Stative Verbs and Negative Preverbs

The last topic I want to consider in this part of the

review relates to the treatment of certain verbs and adverbs in relation to the imperative construction. This is a topic that is first raised by Kiparsky (1963) in TG. The discussion must therefore begin from the early sixties. Kiparsky claims that verbs like want, hope and understand (which are commonly referred to as stative verbs) cannot also occur in imperative verb phrases.

- (1.3.24)(a) *Want a sports car.
- (b) *Hope Sam arrives today.
- (c) *Understand that times have changed.

It must be noted, however, that this claim cannot be pursued very far because words cannot easily be marked stative or dynamic outside the context of use, as the following examples demonstrate.

- (1.3.25)(a) Understand my position.
- (b) Hope for the best.

Kiparsky also claims that an adverb like surprisingly cannot occur in imperatives.

- (1.3.26) *Report in the office tomorrow surprisingly.

There are also certain other adverbs noted by Katz and Postal (1964) as well as Lees (1964) which appear to support Kiparsky's view that one of the features of imperatives is their inability to accept certain adverbs. This class of adverbs includes hardly, scarcely and almost.

- (1.3.27)(a) *Hardly close the door.
- (b) *Scarcely look at me.
- (c) *Almost come here.

As noted above, Arbini (1969) claims they are not present in sentence structures from which tagged imperatives are derived. They are at times called negative preverbs; Emonds

(1976) calls them "scarcely adverbials" (p. 163), and one of their distinguishing features, which he notes, is the fact that they do not follow the verbs that they modify.

(1.3.28)(a) He rarely goes late to work.

(b) *He goes late rarely to work.

However, they render the sentences in (1.3.27) ungrammatical, despite the fact that they occur preverbally. The question that remains to be answered, therefore, is why they are unable to occur in imperative sentences.

Schreiber (1972) discusses the distribution of adverbs in imperatives. He identifies two categories of imperatives, (i) command imperatives, for example,

(1.3.29)(a) Keep off from the main roads

(b) I command you to keep off from the main roads

and (ii), hortative imperatives, for example,

(1.3.30) Be glad they have come back.

This division, he points out, is not to be seen as clear-cut. Only hortative imperatives, he claims, admit "style" adjuncts, as in (1.3.32),

(1.3.31) { Frankly
Honestly
Confidentially } be glad that all is well

but command imperatives do not.

(1.3.32) *{ Frankly
Honestly
Truthfully } report for work tomorrow.

Davies (1981) comments rather briefly on the case of hardly and scarcely. She says that their unacceptability in imperatives is perhaps caused by the "meaning relations" in

the sentences rather than by any general syntactic characteristic of such sentences.

It is necessary, I should say, to specify what these meaning relations are. Davies does not specify them. She also fails to say what these meaning relations specifically have to do with the unique nature of these sentences, since it is not the case that these adverbs cannot co-occur with certain verbs in other sentences.

(1.3.33)(a) *Rarely speak to her. [IMPERATIVE]

(b) She rarely speaks to him. [DECLARATIVE]

The co-occurrence relation between rarely and the verb speak is acceptable in the declarative sentence. The issues raised here will be investigated further in Chapter Five.

To conclude this part of the chapter, it may be said that there have been many developments in the treatment of the syntax of the imperative in generative grammar. Thus, after the initial ideas of Chomsky (1955, 1975) on certain aspects of the sentences, namely, his ideas on

- (a) the generation of the imperative structure;
- (b) the nature of the imperative subject NP which he restricts to the second person pronoun;
- (c) the presence and role of modal auxiliaries in imperatives;
- (d) the sort of adverbs that can occur in the construction, and,
- (e) the nature and behaviour of do,

(see Section 1.1 above), there are now corresponding proposals suggesting that

- (a') sentences may be generated on the basis of the claims of the Performative Hypothesis;
- (b') some other NP's, for example, the third person indefinite NP's, can also occur as subjects;
- (c') imperatives lack not only modal auxiliaries but also an AUX node;
- (d') certain adverbs which do not occur in imperatives have also been identified, and that
- (e') the do that occurs in imperatives is unique to them.

The general orientation and direction of these proposals tend towards a rejection of Chomsky's original suggestions. For example, no modal auxiliary is ever known to occur in front of the lexical verb in an imperative sentence, and so such an auxiliary should not have been postulated in imperatives in TG accounts in the first place. This also applies to the postulation of you as the only subject NP for all imperatives, when the observable forms of the sentences lend no support to such a claim.²⁴ We have also seen that it is not unreasonable to conclude from all the available evidence so far (for example, the features of the verbs, adverbs and NP's occurring in the sentences) that imperatives are an idiosyncratic sentence type, contrary to the views that have been expressed by Davies (1981).

The above developments notwithstanding, there are still many problems surrounding the imperative construction with regard to the structure of the sentence, the nature of its subject NP and the internal structural organization of its VP. Several of the current proposals on these issues in TG are vague and inadequate, and there is a serious doubt about the possibility of the TG model for syntax being exploited

fruitfully to deal with these problems. Chapter Two below examines, among other things, the problem of the choice of suitable grammatical models for the characterization of sentence types in natural languages, with special reference to the imperative in English. I now take up the semantic aspects of the construction.

1.4 The Semantic Analysis of Non-Declaratives

A) Frege and the Question of Truth

As pointed out in the introduction to the present chapter, the controversy about the semantic nature of non-declaratives, including imperatives, antedates the advent of generative grammars. Frege (1892) argues that imperatives and optatives do not raise "the question of truth". They do not express any thought. He says that he does "not want to deny sense to an imperative sentence" (1952: 12); nevertheless, he points out, it does not have any truth value.

B) Constatives and Performatives

The above controversy still goes on. For example, Austin (1962) classifies utterances into two broad categories: Performatives and Constatives. He explains that the latter are mainly used to make statements. They can "describe" some state of affairs or "state some facts", and they have to do this "either truly or falsely" (p. 1). Examples of these utterances are as follows:

- (1.4.1)(a) John is at home.
- (b) Human beings walk.
- (c) John has bought a house.

In contrast, he describes Performatives as follows:

- A. they do not "describe" or "report" or constate

- anything at all, are not "true or false"; and
- B. the uttering of the sentence is, or is part of, the doing of an action, which again would not normally be described as saying something. (Ibid.: 5).

Such sentences include the following:

- (1.4.2)(a) I hereby order you to withdraw from the contest immediately.
- (b) I hereby request that this matter be closed.
- (c) I hereby request you to report for work tomorrow morning.

1.5 The Sentence-Radical and the Paraphrased Performative Approaches

A) The Nature of Meaning

Linguists and some philosophers now begin to take an interest in the debate (by the early sixties). In this period too, they also begin to apply the much older tradition of Categorical Grammar with some interesting results. Some of the issues that engage their attention are problems like

- (1) What sort of thing is a meaning?
- (2) What is the form of a semantic rule whereby meanings of compounds are built up from the meanings of their constituent parts? (Lewis, 1972: 169).

These sorts of questions inevitably confront linguists and semanticists with the problem created by the distinctions between declaratives and non-declaratives, and the attendant problem of deciding the sort of semantical object that an imperative is. With the great interest they now take in referential or model-theoretic semantics, in the sixties and the early seventies (see, for example, Carnap, 1963; Kripke, 1963; Kaplan, 1964; Montague, 1960, 1968 and 1970; Scott, 1970 and Lewis, 1972);²⁵ with Chomsky's (1955) characterization of imperatives as derived, elliptical sentences; with

the claims of the Katz-Postal Hypothesis, and with the proposals put out by the protagonists of the Performative Hypothesis, as seen above, we can say that the analysis of the syntax and semantics of sentences, including the imperative, has become a major problem. It is now as much a linguistic issue as it is a philosophical one. There are several suggestions as to how to resolve it.

Stenius (1967) and other researchers are inclined to think that sentences of different types possess something like a common core. Stenius calls it "the sentence-radical". Searle (1969) goes further to claim that this core meaning is recoverable in the that-clauses in structures in which the sentences -- declaratives, imperatives and interrogatives -- are complements.

- (1.5.1)(a) You are a boy : I say that you are a boy.
- (b) Stand up! : I order that you stand up.
- (c) Will you stand up? : I request that you stand up.

The fact that this idea also surfaces in the PH does indicate that it is very widespread in this period. In Generative Semantics, linguists use the notion of the logical form of a sentence in their analyses.

Lewis (1972) claims that the first thing to know about "the meaning of the English sentence" is "the conditions under which it would be true" (p. 169). He describes the analysis of meaning as consisting of two topics:

... first, the description of possible languages or grammars as abstract semantic systems whereby symbols are associated with aspects of the world; and second, the description of the psychological and sociological facts whereby a particular one of these abstract semantic systems is the one used by a person or a population. (Ibid.: 170).

The first is the referential or model-theoretic approach, with a long tradition dating back to Frege (1892), Ajdukiewicz (1935), and Tarski (1936). It is Montague's version of it that I intend to use for the semantics of the imperative in English in the present study. It will be referred to as Montague Semantics (MS).

Referring specifically to the treatment of non-declaratives, Lewis modifies his earlier claim that the meaning of a sentence "was at least that which determines the conditions under which the sentence is true or false" (Ibid.: 205). He claims that only declaratives may be referred to as true or false and then concludes that if commands and questions (and others) do not have truth values, it will not be correct to say "that their meanings determine their truth conditions" (Ibid.).

B) The Representation of Meaning

Lewis cites the sentence-radical theory of Stenius as one of the possible approaches to the representation of meaning in sentences. In it, he notes, all sentences are broken up into two parts. He says these are

a sentence-radical that specifies a state of affairs and a mood that determines whether the speaker is declaring that the state of affairs holds, commanding that it hold, asking whether it holds, or what. (Ibid.: 206).

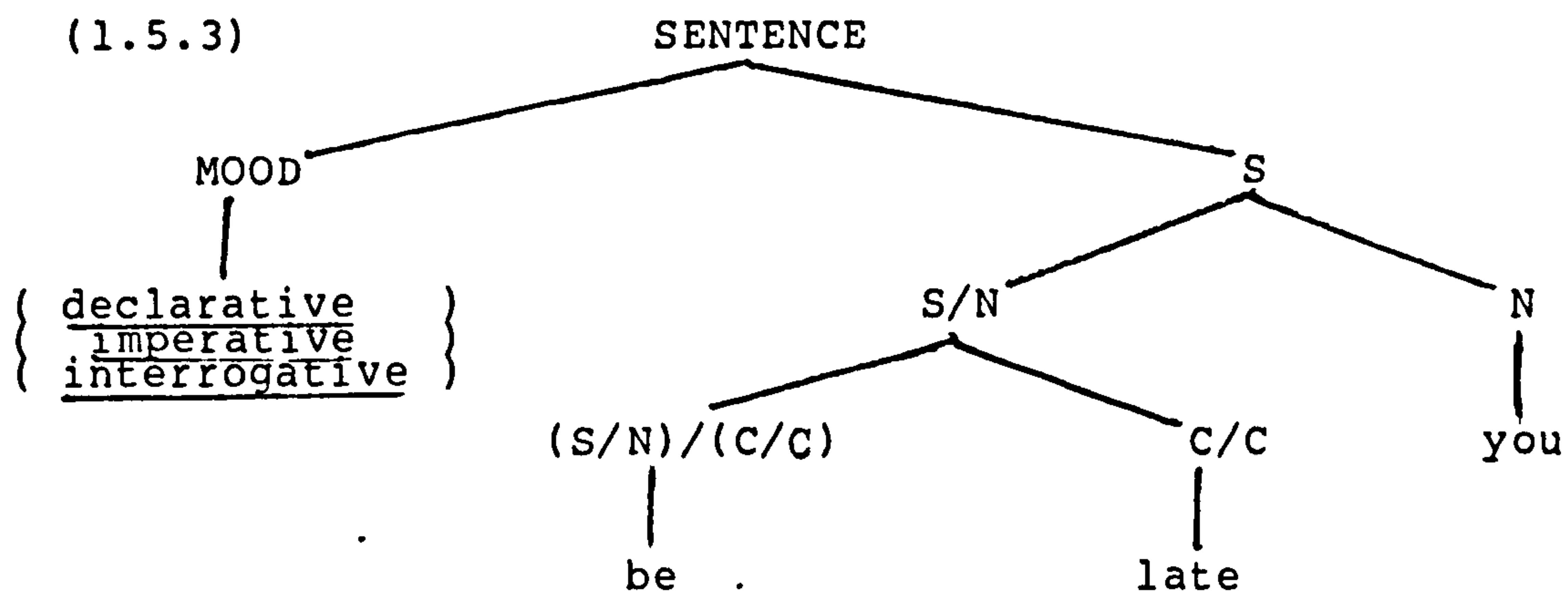
Lewis then refers to the following sentences (Ibid.),

(1'.5.2)(a) You are late.

(b) Be late!

(c) Are you late?

as having a "common sentence-radical". This sentence radical thus identifies the state of affairs of "your being late", except that the moods are different. He gives the base structure of the sentences as follows:



(Lewis, Op.cit.: 206)

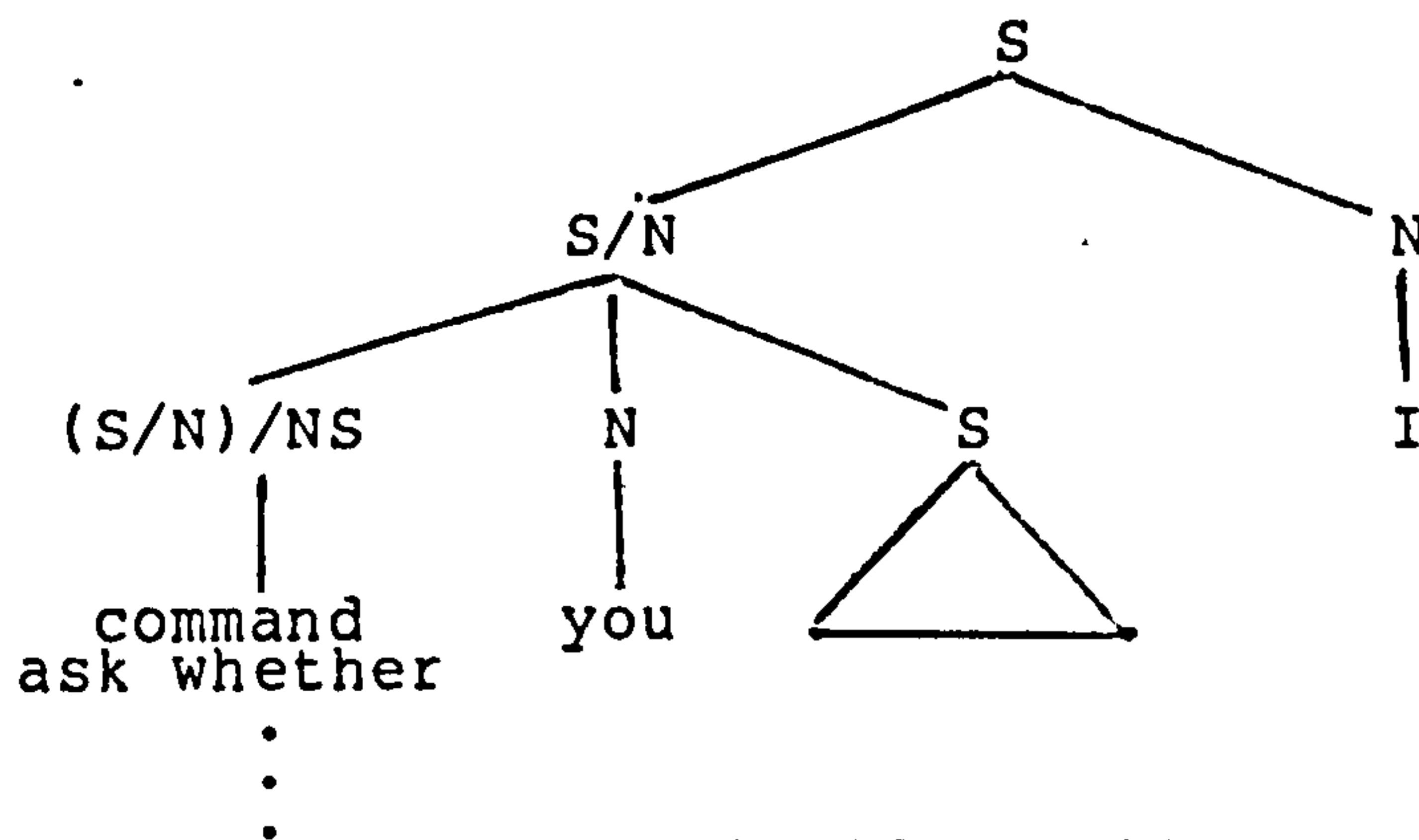
He explains that S stands for the sentence radical, and that the different moods trigger off "different transformations of the sentence radical, leading to the different sentences above". He claims that the sentence is not declarative, although it may be represented on the surface as "that you are late" (Ibid.). He then concludes:

It is sentence radicals that have truth-values as extensions, functions from indices to truth-values as intensions, and meanings with the category S and an S-intension at the topmost node. (Ibid.).

Nevertheless, it is only the sentence radicals of declaratives that can have truth values; those of imperatives and other non-declaratives still cannot. The semantics of mood, he notes, is rather different for it pertains only to rules of language use. As Stenius puts it, if a person in an appropriate position of power addresses a sentence (which represents the form MOOD IMPERATIVE PLUS S-MEANING M) to you, it is the case that you may act in such a manner as to make M true in that state of affairs.

Lewis says however that he prefers his own approach in which meanings are seen in terms of base structures. He gives the following examples:

(1.5.4)



(Ibid.: 207)

He claims that meanings like these may be represented by performative sentences, in the style of Austin (1962), thus (p. 208):

(1.5.5)(a) I command you to be late.

(b) I ask you whether you are late.

From these performatives, the following non-declaratives are transformationally derived (Ibid.).

(1.5.6)(a) Be late!

(b) Are you late?

He declares:

I propose that these non-declaratives ought to be treated as paraphrases of the corresponding performatives, having the same base structure, meaning, intension, and truth-value at an index or on an occasion. And I propose that there is no difference in kind between the meanings of these performatives and non-declaratives and the meanings of the ordinary declarative sentences considered previously. (Ibid.: 208)

He also claims that if performatives are declarative in structure, the only difference between declaratives and non-declaratives will merely be a matter of "syntactic surface distinction". But he draws a distinction in sentential meanings between those represented by declaratives and those represented by performatives, and he describes the latter as "performative sentential meanings" (Ibid.). Lewis acknow-

ledges, however, that non-declaratives do not express truth values (just like Stenius, who only assigns truth values to sentence radicals and not to full sentences). Lewis claims that the method of his paraphrased performative does allow sentences which are not performatives to have truth values. Explaining how this may happen, he says that such a truth value is not assigned to the embedded sentence (the that-clause of the sentence radical) but to the paraphrased performative. He observes:

If I say to you 'Be late!' and you are not late, the embedded sentence is false, but the paraphrased performative is true because I do command that you be late. I see no problem in letting non-declaratives have the truth-values of the performatives they paraphrase; after all, we need not ever mention their truth-values if we would rather not. (Lewis, 1972: 209-210).

I comment briefly here. The two approaches just summarized are quite significant in the literature on the semantics of sentences in English. Recent proposals have been organized around the ideas that emanate from the studies, e.g., the significance of the complement that-clause (as we shall see shortly). Nevertheless, it must be asked why these analysts adopt methods which practically do three things:

- (i) rephrase the original sentence,
- (ii) change non-declaratives structurally into declaratives, and then,
- (iii) claim that the "new" sentences have truth values in the same manner as declaratives (since the distinction between declaratives and non-declaratives has structurally been suppressed in the paraphrased "new" sentence forms).

One may react to this by asking what choice they have. How can they avoid paraphrasing the sentences?²⁶ Are they simply to represent the meaning of an imperative like

(1.5.7) Advance!

as

(1.5.8) Move forward!

or not? If they do something like this, they may only succeed in replacing verbs by their synonyms. But they will thus leave the syntactic configurations of the original sentences basically unchanged, and so we can still talk meaningfully about declaratives and non-declaratives. Therefore to claim, as they do, that there is a core meaning, an S-meaning or a base structure representing "meaning" is simply to distort the point at issue, i.e., how to do the semantics of the sentences of natural languages as they are structurally -- declaratives and non-declaratives -- not as declaratives disguised as that-clauses or as paraphrased performatives. And it is possible to do this in a neutral and efficient way, i.e., by the use of an extension of the model-theoretic approach proposed in the writings of Richard Montague. I shall elaborate on this in the next chapter.

1.6 The Syntactic Mood Approach

A) Propositions and Clause Types

The ideas raised by Stenius, Lewis and others generate considerable interest in the complement clauses that occur in sentences. Apart from the aspects that come up under the PH, there is also the question of what the form of the verb in a sentence may have to do with the proposition that the sentence may have. Huntley (1980) examines this issue and asks if it is the subjunctive form which some complement that-clauses have that prevents them from having truth values. He contrasts the complements in the following sentences which have subjunctive verb forms with those which have indicative

verb forms (p. 293),

- (1.6.1)(a) He $\left\{ \begin{array}{l} \text{requested} \\ \text{demanded} \end{array} \right\}$ that he be sent to Coventry
- (b) He $\left\{ \begin{array}{l} \text{announced} \\ \text{declared} \end{array} \right\}$ that he $\left\{ \begin{array}{l} \text{is being} \\ \text{will be} \end{array} \right\}$ sent to
Coventry

and asks why a semantic difference that parallels the subjunctive/indicative distinction appears to hold. He then raises the question as to whether or not there are two types of propositions. He notes that (i) the proposals of Stenius (Op. cit), Prior, Hare as well as that of Searle (Op. cit.) contain the notion of a core meaning (or what he calls the "Same Content Thesis" (SCT)) for all sentences and regard proposition or descriptive content as capable of being true or false; and that (ii) Lewis (1972) and others hold the view that propositions are functions from possible worlds to truth values. In (ii), Huntley points out, the indicative/subjunctive contrast is irrelevant, for it is a question of the "actual world either is or is not a member of the set of worlds which constitutes a given proposition" (p.304).

Huntley then goes on to say that it may be that the proponents of the SCT have the same conception of propositions as that of Lewis and others, and so the proposition in a declarative sentence is true if the set of possible worlds which it contains includes the actual world. He observes:

Where such a proposition is expressed imperatively, the very same set of possible worlds is again at issue as constituting the set of which the actual world has to be a member in order for the order or demand to have been complied with. Assessing a command or order involves determining what has to be done in order to bring it about that the actual world is a member of the set in question. (Huntley, 1980: 305).

Huntley then links indicative clauses with declaratives and propositions which relate to actual situations on the one hand, and on the other, subjunctive clauses with imperatives

and propositions referring to merely possible situations.

A brief comment is in place here. In Huntley's proposal, two aspects can be isolated: (a) the question of what the notion of proposition embraces, and (b), how the indicative and subjunctive verb forms relate to the declarative and imperative sentence types with regard to propositions. In the (a)-aspect, he surprisingly tries to link the notion of possible world with verbal moods -- indicative and subjunctive moods -- making the subjunctive mood the medium that refers to unreal (or merely possible) situations or worlds. But this is not necessarily the case. The notion of unreal situations can be conveyed by if-clauses which lack the subjunctive verb mood and are not in complement positions in sentences. Furthermore, the sense of unreality associated with such situations may be due to other lexical entities that occur in the sentences.

(1.6.2)(a) If I lived on the moon, I wouldn't need a telephone.

(b) If I see a unicorn, I'll be delighted.

I reject the attempt, in the (b)-aspect, to associate an imperative with a subjunctive form of verb, even for the purpose of determining why it does not denote truth values. I am inclined to believe that Huntley fails to make a careful distinction between a subjunctive verb form and a base verb form. I shall return to the issue of sentences and their verb forms in the next chapter.

Huntley (1984) also pursues the issue of truth values in imperatives. He seeks to examine the question as to whether or not an imperative possesses a "core meaning which will figure in any explanation of its various uses" (p.103). He says he will thus find out whether this core meaning is a

proposition or something else. He assumes the position that structures with verbs in the indicative (like declaratives) express truth values. He then claims that structures like main clause imperatives, complement infinitival clauses and non-finite that-clauses (which lack both auxiliary modal and tense features) are not indicative clauses, and so cannot have any truth values. This, for him, means they all have a common semantic characteristic, i.e., they cannot have any proposition which may be said to be true or false.

If we view this claim against the one contained in Huntley (1980), we can see that his basic thesis is that sentences which do not have their verbs in the indicative mood cannot have truth values. This is only too true.²⁷ But he gets into trouble when he tries to draw up a list of such structures. He mentions "complement infinitival clauses" as an example of such clauses. He thus gives the incorrect impression that such a clause is in the same position as an imperative.²⁸

- (1.6.3)(a) Kate wants to go home.
 (b) John tried to stand up.

At least on the basis of their surface forms, the complement clauses in (1.6.3) must be distinguished from imperatives.

- (1.6.4)(a) Kate, go home!
 (b) Stand up, John.

As we shall see in Chapter Four below, the relationship between imperatives and tenses must be made very clear.

I would like to add that Huntley fails to provide a concrete demonstration of the semantic representation of any of the structures in question, including the imperative, as Lewis (Op. cit.) has tried to do. This is the real test for the correctness of the claims that link propositions with the

notion of clause types. I shall take up this problem in Chapter Five and then try to spell out an alternative way of going about it.

B) Mood and Sentence Interpretation

Hausser (1979) also discusses the imperative construction. He tries to make a distinction between a syntactic mood and a speech act. He says that a syntactic mood refers to the formal properties of linguistic surface expressions whereas a speech act refers to the function that a linguistic expression is used to perform. (See also Lyons, 1968). He observes that the literal meaning of an expression remains the same no matter the number of different speech acts that are made with it. For example, the sentence in (1.6.5) can be used as a request, where the response will be the action of giving the speaker the salt; or as a mere question, where the response may simply be yes or no.

(1.6.5) Could you pass the salt?

Referring specifically to sentence types, Hausser argues that both declaratives and non-declaratives can be semantically interpreted with the help of the denotations of complex IV-phrases. The only difference between them, he continues, is that in the same model-theoretic, surface compositional analysis, a declarative receives a treatment involving functions from points of reference to truth values, whereas non-declaratives, including imperatives, are given a treatment involving a function from points of reference into functions from individuals to truth values, i.e., VP-meaning:

(1.6.6)(a) (t) -----> { 0, 1 } [DECLARATIVES]
 (b) (W, t) -----> (A -----> { 0, 1 })
 [NON-DECLARATIVE]

To comment briefly on Hausser's proposal, I would say his representation of non-declaratives does not distinguish

them from declaratives. The denotation he gives them is no more than a set of properties of individuals in Montague's PTQ. (see Montague, 1974: Chapter 8). This does not capture the notion of imperatives as sentences.

He goes on to claim that since declaratives have propositions as their possible denotations, non-declaratives should have other kinds of possible denotations since it is obligatory in generative grammar that different syntactic moods should have different types of semantico-syntactic surface representation. He maintains that it is possible to do this within the framework of the grammar of PTQ. According to him, a semantic analysis of an imperative therefore looks like this:

(1.6.7)(a) Leave! $\in \langle e, t \rangle$

When translated into intensional logic, it becomes

(b) $\lambda x [r_2\{x\} \wedge \text{leave}'(x)] \in ME\langle s, \langle e, t \rangle \rangle$
(I have modified some of the symbols used in Hausser (1979: 183.).

He explains the above translation thus:

[(1.6.7)(b)] ... denotes the property of being the hearer (r_2) and to be leaving. r_2 is a context-variable representing the property of being the hearer ... (Ibid.).

The presence of the context-variable r_2 , he claims, is very crucial. It separates, semantically, imperatives ("which are complete expressions") from other IV-phrases which are not complete linguistic expressions.²⁹ The advantage of this, he points out, is that

The 'propositional content' of imperatives, finally is captured in the semantic representation without the counter-intuitive assumption that imperatives denote propositions and without invoking putative speech-act properties. (Ibid.: 184).

He then posits the fulfilment condition for imperative sentences as follows.

If the hearer S utters $f_{20}(a)$ (where $a \in P_{IV}$) towards a hearer h at time j in order to make a request, then this utterance is a fulfilled request if and only if there is a time $j', j' > j$, such that $[h = x \wedge a(x)]$ is true at j' . (Ibid.).

I briefly comment on the proposal above. Hausser here tries to provide fulfilment conditions just as we have felicity conditions for declaratives (see Austin, 1962). Hausser, unlike Huntley (1984), attempts to give an indication of what syntactic structure may be said to denote a proposition that will be true when the request is fulfilled. It is $a(x)$. The problem here is that $a(x)$ represents a declarative sentence in predicate logic. Since this structure is the "semantic representation" of what he calls the "propositional content" of an imperative, it all comes down to saying that it is declarative sentences that denote propositions. In this regard, the unique contribution of the imperative construction relates to the "shift in time". This is perhaps what Schmerling (1982) means when she says that imperatives bring about states of affairs that are true. (See Chapter Three below).

The problem with highlighting the change in time that is associated with imperatives with regard to their "meaning" is that it places too much emphasis on what they do (to bring about a new state of affairs). It is also necessary to account for how they are organized (for them to be able to indicate this shift in time). If imperatives are to be analysed as a syntactic mood category, it is crucial to be clear about this aspect of their nature. One of the aims of the analysis of the imperative to be provided in the present study, therefore, is to find out how they are organized, semantically, as a syntactic mood category and so

account for how they convey meaning.

In sum, it can be said that we have seen many different approaches to the semantics of sentences in English, including the imperative sentence. Suggestions range from "common core" theories for all sentences presented in different forms -- complement that-clauses, sentence-radical and others -- to the derivation of non-declaratives from performatives and theories on how to make non-declaratives have truth values. It is fair to say that not one of them actually attempts to provide truth values for non-declaratives directly; their attempts do not go further than turning the sentences into declaratives in a variety of ways, and trying to make the notions of truth and falsity apply to the new structures rather than the original ones.

It is the case that imperatives (and other non-declaratives), in their original syntactic shapes, have no truth values -- just as Frege said a long time ago. It is interesting that there are a few attempts to try to use the syntactic mood approach, as we have seen above. Although the proposals they make are inadequate, they are remarkable in that they give a great deal of attention to sentences as types, although the denotation of truth values still remains the exclusive preserve of declaratives.

1.7 Conclusion

In conclusion, I would like to say that what we saw above in the syntax of the imperative is the problem of how to extend generative syntax to it, and in the semantics, the problem is how to extend truth-conditional semantics to it. This is so because both generative syntax and truth-conditional semantics have, for many years, been based on the declarative sentence, not on the non-declarative.

Footnotes to Chapter One

1. It is quite in place here to ask why I have limited this study to generative grammar only. There are two reasons for this. First, it is not desirable to include everything that has been said in the past in the study, even if it was possible to do so. Second, studies within the framework of generative grammar share certain common general principles in linguistic analysis, especially the view that the grammar of a natural language is the set of rules, the output of which is an infinite set of sentences (see Smith and Wilson, 1979: 277). There are of course different versions of generative grammar. However, they are, by and large, sufficiently related enough for us to regard them as members, as it were, of the same family of grammars. So, it is relevant for me to concentrate on this grammar or set of grammars so that I may be able to present an integrated body of information (in this and subsequent chapters) on various aspects of imperative sentences.

2. A great many of the studies on English imperatives undertaken in the generative grammar framework, which I shall review in this chapter, are related to the Transformational Grammar (TG) version of it.

3. The role of reflexivization in the determination of the imperative subject and the general character of such a subject are closely examined in Chapter Three.

4. A few sentences are marked with the symbols "*" or "?". Those marked with * are to be regarded as "ungrammatical", and those marked with ? are to be regarded as "usually unacceptable", or "acceptable in certain contexts". Apart from sentences that are thus marked, the example sentences that I shall provide in the present study are to be regarded as "Standard English" sentences.

5. The phrase "sentence type" is used to refer to each set of sentence structures which is distinguished as the declarative, the interrogative, the imperative or the exclamative. What the individual sentences that constitute a type have in common are numerous. The main ones are (a), the verb form; (b), the syntactic structure, and (c), what has been described as the characteristic function of a sentence. The characteristic function of the imperative is to give orders. But, this function is not restricted to the imperative sentence type only.

6. This Hypothesis is very often seen against the background in which it is proposed. There is a tendency (albeit a misleading one) among grammarians to see it only in terms of syntax, although its authors referred to "meaning" in the sentence. Although they fail to say categorically what they mean by "meaning", a close examination of the problem concerning the derivation of sentences which the protagonists of the Hypothesis face leads one to the conclusion that they are also trying to characterize the relationships between the syntax and semantics of the sentences of natural language.

7. This is an aspect that has scarcely been mentioned before, as far as I know. I must say however that other issues are involved also, as we shall see in Chapter Three later. The characterization of you as a definite article is also argued for by Postal who says that "the so-called pronouns, I, our, they, etc, are really articles, in fact types of definite articles" (1966: 203).

8. What I have found to be quite interesting is the evidence given in support of the reflexive argument. As it stands, it appears to be unassailable, although, as we shall see soon, You-Deletion may not be indispensable.

9. The seriousness of the problems referred to above appears to be borne out by the remarks which Schmerling

makes in a footnote. She comments:

It would be nice if the class of acceptable imperative subjects could be shown to be delimited on strictly pragmatic grounds, given the rules I have proposed; (Schmerling, 1980: 56).

The rules she is referring to (see Chapter Two, Section 2 below) do not actually preclude any particular account.

10. These are adverbs like never, scarcely, hardly, and barely which can occur within the predicate of a sentence, before the main verb. (See Section 1.3 below for more discussion of these words).

11. See the example in (1.2.18) for an illustration of how this "permutation transformation" operates.

12. Arbinì gives the following example sentences in which he describes the complement sentences as imperatives (1969: 211).

- (1) I order you to bring me a slab!
- (2) I command you to remain here!
- (3) I request you to stand aside!

He adds that the embedded sentences "have roughly the following labelled bracketing":

- (4) S (NP (you) + Imp (\emptyset) + VP" (Ibid.).

13. The rule is as follows:

$$\text{Optional: } \underset{1}{\text{you}} - \left(\left\{ \begin{matrix} \text{the} \\ \emptyset \end{matrix} \right\} \right)_{\underset{2}{N}} \dots - \underset{3}{\text{will}} - \underset{4}{\text{VP}} \implies$$

4 3 1 (not) 2 (Arbinì, 1969: 213).

14. They all fail to predict the type of tagged imperative noted in Emonds (1976: 213).

- (1) Do come in, won't you
- (2) Do be more polite, will you

15. I would however like to add here that another feature of Arbini's analysis which Huddleston also criticized is its acceptance of the Katz-Postal view that only the modal will can occur in the tags of imperatives. The general opinion now is that many more modals can occur in such tags (see Downes, 1977). For example,

(1) Give us a ride in your car, { won't you }
 { can't you }
 { would you }!
 { could you }

16. G. Lakoff (1972) makes it clear that the PH indeed treats illocutionary force as an aspect of the semantics of a sentence. As we have noted earlier, he fails to indicate how this can be explicitly done. Even the suggestions by Sadock (1970) and Green (1973), cited by Gazdar (1979), on how the force may be captured are rejected.

17. Gazdar's criticisms fall outside the period specified in this section. However, they are so relevant to the issues being discussed here that I have decided to include them.

18. See Chapters Three and Five for an example of this.

19. The term "grammatical mood" is used to refer to the structural form of the sentence. This must be distinguished from the use of "mood" in Traditional Grammar to refer to the form of the verb. See also Section 2.4 and footnote 11 in Chapter Two.

20. Imperatives really do not have to have unique sets of verbs, adverbs, subject NP's etc, in order to be regarded as a unique set of sentences. We have to look deeper than the level of such features; to the overall shapes of the sentences and the nature of their semantic representations in order to discover their idiosyncratic nature.

21. With regard to Verb-Raising, Emonds explains that he is not making any reference to the do that occurs in imperatives. (See Emonds, 1976: 213, footnote).

22. It is not generally the case that negation requires do in the imperative construction. An imperative like

(1) Not to worry!

has been attested to, especially among women, in parts of England.

23. These aspects have to do, for example, with the subject NP's and VP's of the imperative construction.

24. I am not claiming any unanimity of opinion among linguists on any of these developments. I however think that the developments which I have mentioned, and the directions to which they point, are significant enough to be noted in this review. Others which are equally important but not mentioned here will be referred to in the rest of the study.

25. It is also the case that philosophers were also concerned, at this time, with issues like quantifiers, belief-contexts, the nature of meaning and others.

26. It is not clear whether or not Lewis is here claiming that a sentence like

(1) Sit down please

will always derive in one way or the other from a sentence like

(2) I order you to sit down please.

In view of the oddity of please in the sentence in (2), he should have made clear whether or not both sentences should be seen as paraphrases of each other since they must have the same meaning.

27. The claims here must be weighed against the other ones in which he says that the imperative does not denote truth values. There must however be further evidence, other than its verb form, to support this general belief. (See Chapter Five below for this sort of evidence).

28. The characterization of the imperative as a sentence is discussed in the next chapter.

29. Hausser argues that propositions are actually possible denotations, for they occur as denotations of subordinate clauses. He explains:

it is logic-wise conceivable that possible denotations other than propositions may serve as denotation of complete linguistic expressions.... (Hausser, 1979: 179).

He cites imperatives and interrogatives as examples of such expressions.

CHAPTER TWO

THE IMPERATIVE CONSTRUCTION AND ASPECTS OF GRAMMATICAL THEORIES

2.0 Introduction

In the previous chapter, we came across many proposals which apply to the imperative construction both directly and indirectly. Several of the analyses that contain such proposals tend to equate the imperative with certain other constructions in ways that are very vague. For example, with regard to verb forms, Huntley (1984) draws a link between the imperative, complement infinitive clauses and subjunctives. Hausser (1979) characterizes imperatives as "complete IV-phrases expressions", a term which reflects the subjectless forms of the constructions. Schmerling (1982) refers to the imperative as a clause-type, reflecting a problem in generative grammar which does not distinguish clearly between sentences and clauses.

The aim of this chapter therefore is to examine the treatment of the imperative with regard to

- (a) how to characterize it -- whether in relation to the declarative, the infinitive and the subjunctive, or as a unique syntactic mood category, and,

- (b) the general classification of sentences and the implication of this for grammatical analysis.

It is hoped that all this will clarify not only the aspects of the imperative construction mentioned above but also the issue of how it may be given a satisfactory analysis in generative grammar.

2.1 The Imperative Construction

A) The Imperative as a Sentence

In nearly all the studies discussed in the previous chapter, imperatives are treated as sentences. It is not difficult to find justification for this, as the following examples show.

- (2.1.1)(a) Mary loves her mother. [DECLARATIVE]
 (b) Do you like it? [INTERROGATIVE]
 (c) All of you stand up. [IMPERATIVE]
 (d) How nice! [EXCLAMATION]

All but (2.1.1)(d) of these constructions have identifiable subjects and predicates. Even the absence of subject NP's in some examples of the imperative is explained by the traditional view that "you is understood", a view which is reinforced by Chomsky's Reflexivization thesis noted in Section 1.1 above.

The structural shape of the imperative has however attracted comments from analysts, some of which deserve a close examination. The link that is often sought between imperatives and subjunctives has already been noted. The form of the verb that the construction has apparently makes it tempting to do so. The most noticeable aspect of all, the subjectless form of the construction, is a problem since its

shape is hardly different from those of VP's. Schmerling, for example, describes the imperative in the following terms:

a broader perspective on clause-type variation leads to the conclusion that imperatives are formally primitive relative to indicative clauses (Schmerling, 1982: 203).

Elsewhere, she describes it as

an especially primitive or poorly elaborated clause type cross-linguistically. (Schmerling, 1983: 412).

The fact that the imperative is thus compared to many other structures -- VP's or IV-expressions, indicative clauses, infinitives, and subjunctives -- shows that its characterization as a sentence cannot be taken for granted.¹ It also raises the question of how these structures may be considered as "relatives" of the construction. Opinion is divided between describing it in relation to some of these other structures (see Bolinger, 1977) and describing it as a sentence type in its own right (see McCawley, 1981).

I begin with the distinction that needs to be made between "sentence" and "clause"; or between "sentence type" and "clause-type". I would say it is much better to refer to the imperative as a sentence than as a clause. Huddleston (1984) suggests that since units like imperatives, declaratives and interrogatives can occur in structures as clauses, the term "sentence" may be applied only to an instance of such structures while the term "clause" may consistently apply to the imperative, the declarative, the interrogative and the exclamative, whether or not they are parts of larger structures. The problem with this suggestion is that it restricts the notion of sentence to a structure that has more than one clause; i.e., any one of what are traditionally referred to as "complex", "compound" and "multiple" sentences. I would say that the main ingredient of sentencehood is the ability of the structure to occur "alone" in a discourse

-- this is probably what is meant, in Traditional Grammar, by the idea that a sentence expresses a "complete thought". In this sense therefore, an imperative like the example in (2.1.2)(a) is a sentence since it occurs alone (i.e., it is not a component of another structure), but within (2.1.1)(b), it functions as a main clause.

(2.1.2)(a) Sign those papers!

(b) Sign those papers, if you don't mind.

One advantage of this approach is that it allows the term "imperative" to be applied to "complex sentences" even though they contain other clauses also.

(2.1.3)(a) The boy who found my cat yesterday come here please.

(b) Hand over your papers before you leave the room please.

(c) If you don't like it, send it back to us.

Furthermore, it is necessary to separate the function of, say, the construction,

(2.1.4) who found my cat yesterday

as a relative clause in (2.1.3)(a) from its grammatical function as an interrogative, when it occurs alone as in (2.1.5).

(2.1.5) Who found my cat yesterday?

Therefore, the imperative must be characterized as a sentence type, an instance of which may function as a main clause in a complex or compound sentence. The situation is such that where it is part of another structure, as the examples in (2.1.3) show, it usually functions as a main clause and so it gives its name to the whole construction.

If it is correct to regard the imperative as a sentence type, it is rather misleading to see the unique syntactic features of the construction from the point of view of "indicative clause type", as we have seen above. I will have more to say in this regard in Chapter Three.

B) The Imperative and the Declarative

The characterization of imperatives as a sentence type leads to the issue of its relation with the declarative. I would say the generalizations that are often drawn between the two structures may not be as clear-cut as they are at times said to be. Let's consider the case of ellipsis. Zwicky (1985) claims that declarative and imperative sentences present cases of ellipsis which require contextual interpretations. However, if such cases are brought about by different factors, contextual interpretations alone may not explain both of them adequately.

- (2.1.6)(a) He goes to work early and <>returns late.²
 (b) <>go to work early. [IMPERATIVE]

The sentences in (2.1.6) show examples of ellipsis which Zwicky says require contextual interpretations in contrast to the optional occurrences of NP's as objects in sentences which do not require such interpretations because there are transitive and intransitive verbs.

- (6.1.7)(a) Mike is driving the car.
 • (b) The children are sleeping.

The problem with this generalization about ellipsis is that whereas it captures the situation presented by the imperative correctly, it plays down the syntactic motivation for the absence of subject NP in the second conjunct of (2.1.6)(a). This type of motivation is not apparent in the

case of the imperative. Let's have (for example, a conjoined sentence involving imperatives as in (2.1.8).

(2.1.8) You go to school and <> come back late.

In spite of the fact that imperatives do have subjectless forms, the example in (2.1.8) cannot be converted into the following compound in which the first conjunct lacks a subject NP but the second has one.

(2.1.9) *Go to school early and you return late.

In the same manner, the declarative compound in (2.1.6)(a) cannot be changed into the following form:

(2.1.10) *Goes to school early and he returns late.

The problem therefore is that even though the two imperative conjuncts in (2.1.9) can occur separately without any lexical subject NP, unlike the declarative conjuncts, both sentence types do not possess the forms where a subject NP is specified for the second conjunct but not for the first.

A contextual interpretation may resolve the problem with the imperative conjuncts if the addressee for each conjunct is the same person.

(2.1.11)(a) <>go to school early and <>return late.

(b) You go to school early and you return late.

The context may perhaps determine whether or not the second conjunct is addressed to another person (I shall return to this issue in Chapter Five).

The declarative conjuncts have their subject NP's referring either to the same person, as I assume in (2.1.12)(a), or to different people as in (2.1.12)(b).

(2.1.12)(a) He goes to school early and (he) returns late

- (b) Tom goes to school early and Kate returns late.

The conclusion to draw therefore is that whereas a contextual interpretation can explain why the imperative compound in (2.1.9) is starred, only a syntactic analysis can account for the starring of the declarative compound in (2.1.10). In the former it is necessary to be certain who the addressee is. In other words, after s(he) has been identified in one form, s(he) may not be re-identified in another form in the same sentence. In the latter, it is syntactically obligatory for any main clause declarative beginning a sentence to have a subject NP; the subject NP for another clause in a compound sentence cannot anaphorically apply to the first main clause, even if the context shows that both clauses have to do with the same person. Therefore, it is a syntactic problem in the case of the declarative compound in (2.1.10), but a problem of reference in the case of the imperative compound in (2.1.9), and so a contextual interpretation alone cannot resolve both problems.

Subtle differences between declaratives and imperatives like the above cases of ellipsis do have far-reaching implications which are often missed in generalizations that are drawn between them. For example, we can conclude, from the example above, that what is significant in the issue of subjecthood in the imperative is the manner in which the referent of the NP is identified. But in the declarative, as it is well known, it is obligatory for the subject NP to be phonetically expressed, in spite of the phenomenon of sentence compounding. This may also be seen in relation to truth values. A sentence type which grammatically needs subject NP's is more likely to denote truth values than one in which the contextual identification of the addressees is all that is required, basically.

2.2 Transformational Grammars

A) The Derivation of Sentences

S-Expansion Rules in a host of transformational grammars (see Chomsky, 1957: 26; 1965: 68; Huddleston, 1976: 35; Akmajian and Heny, 1976: 79; Baker, 1978: 36, and Radford, 1981: 41) amount to one of the following:

(2.2.1)(a) S -----> NP VP

(b) S -----> NP AUX VP

Simple declarative sentences can be generated from any of these rules with a minimal use of transformations, for example, the AFFIX-SWITCH-RULE. The generation of non-declaratives however requires a much greater use of transformations, for example, some interrogatives require SUBJECT-AUXILIARY INVERSION and imperatives require SUBJECT DELETION, as we have seen in Sections 1.1 and 1.2 above. (See Brown, 1984: Chapter Five, for a discussion of transformations and sentences). A variety of sentences like the following are thus derived, with the help of transformational rules, from any of the base rules in (2.2.1).

(2.2.2)(a) Koko likes flowers.

(b) Will Koko like flowers?

(c) Give these flowers to Koko, please.

The structures may be more complex than these ones. As we saw in the previous chapter, it is the manner in which the imperatives like (2.2.2)(c) is derived that has created a great deal of the controversy about the treatment of imperatives in TG. Despite the operations of rules as indicated above, a derivational analysis of sentence structures does not tell us all we need to know about them. It is also necessary to examine the classificatory aspects of the structures that are derived either as clauses or as sen-

tences, and it is interesting to investigate how this is carried out in TG.

B) The Classification of Sentences

(1) DERIVATION AND COMP

There are a number of devices in TG that treat aspects of sentence behaviour in complex structures where their classification as distinct units is very important. The one that immediately comes to mind with regard to S-structures is the device known as COMP. The elements that can be in the COMP node include clause-initial entities like as, that, than, for and WH (see Bresnan, 1979: 6-7). Their treatment varies from one method in which they are transformationally inserted into the Phrase Marker to another in which they are base-derived. In the former case, as Bresnan points out, they are believed to be semantically empty, and have to do with Movement Rules. This function of theirs in TG is quite significant, and so there is now a rule which establishes the COMP node in the following manner,

(2.2.3) $\bar{S} \rightarrow \text{COMP } S$

and into this node the entities above move. They may also move out of it, in which case they are said to leave traces behind. In this regard, we have transformations like COMP-TO-COMP Movement, and constraints on such movements -- for example, the SUBJACENCY CONDITION, the TENSED S CONDITION, and the SPECIFIED SUBJECT CONDITION (see Chomsky, 1977(a), and also (b): 144-153, and Bresnan, Op. cit.: Chapters Three and Five).

The question that arises therefore is whether or not COMP can be used in generative grammar to classify sentences into types so that syntactic analyses may be more relevant

to the conception of sentences as types. As observed above, the notions of sentence and clause are not clearly separated in many models of generative grammar. The X-bar convention establishes hierarchical structures within the NP and other non-sentential structures (see Chomsky, 1970 and 1972; Bresnan, 1976 and 1977; Jackendoff, 1977(a) and (b), Hornstein, 1977, and Radford, 1981), but the system in TG, in which the categories S and \bar{S} stand for a host of sentence-structures, fails, for example, to capture the fact that imperatives function only as main clauses in complex sentences -- declaratives and interrogatives may function in different capacities, as main as well as subordinate clauses -- despite the existence of the COMP node and Movement Rules. In the examples in (2.2.4), an imperative is the main clause in each case whereas an interrogative and a declarative function as subordinate clauses in (2.2.4)(a) and (2.2.4)(b) respectively.

- (2.2.4)(a) Find out whether it is correct.
 (b) Make sure you're there on time.

There are however recent attempts to identify, formally, other types of S-Structures like the relative clause S[R], in addition to S and \bar{S} . Generalized Phrase Structure Grammar (see Gazdar et al, 1985) through its rule system, does allow a large number of structures to be identified, e.g., S[BSE] for the structure that occurs as a complement to prefer.

There is also an attempt to refer to specific clauses in larger sentential structures in relation to the elements of COMP that introduces them. Bresnan (1979) provides examples, including the following (pp. 37-38).

- (2.2.5)(i) Object complementation
 (a) I know that is wise.

(ii) Subject Complementation

(b) For you to leave right now would be inconvenient.

(iii) Nominal Complementation

(c) The main question is whether they will support us.

(iv) Adjoint Complementation

(d) Whether or not his son enjoys the army, he will try hard.

The use of COMP elements for the classification of structures is not extensive enough to be applied to many other structures. With regard to the different sentence types, it is pertinent to find out whether or not they can be identified as main clauses or otherwise within larger sentential structures by the so-called "empty complementizers". If there are such elements with respect to imperatives, for example, they should be able to identify the constructions just as the non-empty COMP elements identify the clauses that they introduce in (2.2.5). Schmerling (1982: 205) claims that 'clauses may have "empty complementizers" just as they may have "empty subjects"'.

In order to pursue this point, it is convenient to use a sentence structure that is postulated under the PH as a probable source of an imperative by McCawley (1968, 1976). (See Chapter One, Section 1.2 above). I reproduce his example in (1.2.26) as (2.2.6) here.

(2.2.6) I hereby request you to leave at once.

If the higher performative clause is dropped, the following structure will remain.

(2.2.7) to leave here at once

If to is treated as an auxiliary verb, as it is done in GPSG (see Section 2.3 below), the "zero complementizer" may be

said to occur just before it, but the structure in (2.2.7) simply becomes an example of a VP[BSE] construction. This is a verb phrase with a main verb in the base-form.

Although the imperative has the same verb form, it is difficult to conclude that the structure in (2.2.7) is an example of a subjectless imperative, similar in form and function to any of the following:

(2.2.8)(a) You leave here at once.

(b) Leave here at once.

If the TG model is assumed, to may have to be dropped in order to derive a structure like the one in (2.2.8)(b), but this is difficult to justify, since it alters the verbal structure of the entire construction from an infinitival structure with a base form to one that is simply a verb with a base form. And there is nothing to suggest that the imperative verb form is infinitival in the underlying structure. (For the role of to in complement constructions, see Rigter, 1982).

The conclusion that may be drawn is that the use of COMP to identify or classify S-structures does not extend to the imperative, whether or not the "zero-complementizer" is postulated. It has also been demonstrated that infinitival constructions must be separated from the imperative. The imperative neither has the syntactic shape that they have nor perform the same syntactic function as they do in larger sentential structures.

(2) SYNTACTIC FEATURES IN COMP

There is also an attempt in the literature to place certain features in the COMP node. In this approach, the node is defined as "+COMP" which is subcategorized as

(2.2.9)(a) [COMP] -----> [+ THAT]

(b) [+ THAT] -----> [+ TENSE]

- (c) [+ TENSE] -----> [± PAST]
- (d) [- THAT] -----> [± TO]
- (e) [+TO] -----> [± FOR]

(Pullum and Wilson, 1977: 773).

Pullum and Wilson use the above subcategorization to identify four complementation types. As TENSE is a feature, their system of specification provides [+THAT, -TENSE] for the "subjunctive" complement. For the imperative, they give the specification [+COMP, +IMP, -TENSE] in an example (p. 765)⁴ and so imply that the notion of the imperative as a sentence (or perhaps clause) type may be captured by a set of syntactic features specified in the COMP node. If that is the case, it is quite significant. The objection that may be raised here is that the feature [+IMP] in COMP does not tell us much about the imperative construction. Its precise meaning is not spelled out. Some of the features may be marked on nodes other than the COMP node as we shall see soon. Nevertheless, while it is possible to associate some of the features with subjunctives like those contained in (2.2.10),

(2.2.10)(a) I wish that you stop that noise.

(b) He requests that the meeting be suspended.

(c) The soldier pleads that he be re-engaged.

where the features [+THAT -TENSE] are borne out by the presence of that and the verb forms in the structures in question, it is difficult to identify the structures that are captured by [+THAT, +IMP, -TENSE]. It is also difficult to claim that the subjunctives contained in the examples in (2.2.10) are similar to the following imperatives in either form or function respectively. Also, the meaning of (2.2.10)(c), for example, is different from that of (2.2.11)(c).

(2.2.11)(a) You stop that noise!

(b) Suspend the meeting.

(c) Re-engage the soldier!

It may be said therefore that the analyses of Bresnan, and Pullum and Wilson show that COMP may be used to identify complement types only. They fail to identify the imperative construction because it is not a complement type.

(3) VERB FORMS

It is also pertinent find out whether or not we can use verb-forms to link one structure with another. To examine the issue, let's take the following example.

(2.2.12) I wish that you be examined by the doctor.

We may also have the imperative in (2.2.13) which may be said to have the "same" verb form as the subjunctive in the sentence in (2.2.12).

(2.2.13) You be examined by the doctor.

It is necessary to find out whether there is any reason to suppose that the example in (2.2.13) is derived from the one in (2.2.12) on the basis that they have the same verb form.⁵ In other words, to what extent can we associate the notion of the imperative as an independent sentence type with an "imperative" that is deemed to be derived from a subjunctive?

I would say that the imperatives like the one in (2.2.13) should not be associated with subjunctives like the example in (2.2.12) because to do so would involve getting rid of that. As we shall see in Chapter Four below, getting rid of that involves changing the base form of the verb in the complement, subjunctive, structure itself. Such a change effectively removes all the features that may be specified for it (as in the Pullum-Wilson proposal). The construction in (2.2.13) is therefore an example of a sentence as an independent, syntactic mood category, as I shall explain soon.⁶

(4) THE BY-CONSTRUCTION

The construction in (2.2.13) also raises a semantic problem. This is whether or not the referent of the imperative subject NP must always be the the agent of the action specified in the sentence. This issue is discussed extensively in the next chapter, but here, I restrict myself to the aspect that has to do with whether or not an NP can function as a subject in an imperative and also have its referent as the "agent" of the action specified in it if the verb has a form like be examined which involves the by-construction. In order to examine this issue, let's take an imperative construction like the one in (2.2.14).

(2.2.14) All of you be interviewed by a panel of judges.

Certainly, this example does not in any way mean that the addressees are to interview themselves but that they should be in "a state of being interviewed by a panel of judges". It appears that since the people who are to be in this state of being interviewed are the addressees, and no other person can be involved in that state, they may be said (after being interviewed) to be "responsible" for the state, even though they are not responsible for "the action of interviewing". Their role in such an action can only be that of interviewees.

Let's take another example.

(2.2.15) The man who signed the contract be advised by your solicitor.

It may also be contended that the man who signed the contract, according to the sentence in (2.2.15), will be involved only in the state of being advised (i.e., after his solicitor has actually given him the legal advice in question).

In the light of the examples in (2.2.14) and (2.2.15), I

conclude that with regard to the imperative in (2.2.13), the following distinctions must be made: (a), the one-off action in which the doctor is the agent of the action of examining, and (b), the subsequent state of affairs of having been examined by the doctor which involves only his patient. The former relates directly to the presence of the "by-Construction" in the sentence, but the latter is as a result of the presence of be as the main verb in the construction. So, I maintain that with respect to the verb be, it is a state of affairs that is in question. After you are examined by the doctor, in a one-off action, you, and nobody else, stay in that state of affairs of "having been examined by the doctor", and it is that state of affairs that is commanded by the example in (2.2.13), and not the action of examining itself. (For a discussion of the role of "agents" in sentences, see Wierzbicka, 1978).

One aspect that emerges from the above discussion is the fact that the imperative construction cannot be captured by the devices that identify complement constructions in generative grammar. Another one is the question of the extent to which the imperative should be related to the subjunctive and the infinitive. What we have seen suggests that neither the aspects of derivation nor those of verb forms justify the links that are usually drawn between the structures. Thus, after considering the generative treatment of aspects of sentence derivation, Bolinger observes:

It is valuable to point out that these resemblances among structures, but deriving one from another, generatively, is another matter. A spurious chopping of many essentially unitary phenomena is only one of the undesirable results, The machinery is geared to multiply illusions. (Bolinger, 1977: 188).

Although Bolinger suggests, in the same study, the treatment of all the structures as a single problem, I think there are more advantages to be derived from approaching the issue on the basis of sentence types, at least as far as it

relates to the imperative construction. First, this approach avoids the "illusions" that are created by deriving one structure from another, which is one of Bolinger's objections to all such analyses in the TG framework. Second, it identifies clearly one major sentence type which can be analysed on the basis of its being a syntactic mood category. This type of approach is supported by the following observation:

An adequate account of the syntax of a natural language will have to distinguish somehow among different sentence types: declarative sentences, interrogatives, imperatives, exclamatory sentences, and the like. If one's scheme of linguistic description is that which I have assumed throughout this book, according to which a grammar of a language is a set of explicit rules that relate the sentences of that language to their meanings, it will be necessary to draw distinctions of meaning that correspond to the differences among the various sentence types. (McCawley, 1981: 210).

Third, it permits a surface, model-theoretic, compositional analysis of the imperative in which its real syntactic and semantic nature can be captured by a system of rules in a uniform way. This approach thus involves the use of certain theoretical models which I shall discuss briefly in the next section.

In sum, it may be said that the imperative construction has been shown to be a sentence type. With regard to the aspects of its syntactic functions, and structural shape, it must be distinguished from both the infinitive and the subjunctive. Whereas devices in generative grammar like COMP can identify real complement structures, they cannot identify the imperative since it is not a complement construction. In comparing imperative with the declarative, it is important to note the differences between them as such differences may be symptomatic of more fundamental distinctions between them, for example, the fact that it is the declarative, but not the imperative, that denotes truth-values. It is also shown that the base form of the verbs in the subjunctive, the infinitive and the imperative is not an acceptable basis for treating

the structures together. The imperative raises certain unique questions, for example, whether or not the referent of its subject NP is always intended as the agent of the action specified in it. It must thus be concluded that the semantic and the syntactic phenomena presented by the imperative can best be approached by treating the construction as a unique syntactic category.

2.3 Alternative Grammatical Models

The alternative grammatical models that I have in mind, as indicated in Chapter One, are Generalized Phrase Structure Grammar (GPSG) and Montague Semantics (MS). The former will be used for the syntax of the sentences and the latter for their semantics. The relevant aspects of these models will be discussed briefly in this section, and the models will be extended and applied to the imperative construction in the rest of the study. I start with GPSG.

A) Generalized Phrase Structure Grammar

GPSG is a context-free phrase structure grammar. In it, syntactic categories are complexes of features, and PS rules are set out by rewriting the left-hand symbols as a set of right-hand symbols. It also uses meta-rules as a system of relating one rule to another, for example, the relationship between a sentence and its passive counterpart is expressed through such rules. It does not use transformations and coindexês. (See Gazdar and Pullum, 1982; Gazdar, Klein, Pullum and Sag, 1985).

As I said above, this model allows many structures to be created. So, its rules are also used to identify certain sentential structures. Since these are base rules which just expand syntactic categories, they are sensitive only to the

constituent structures of the categories to which they relate.

There is a good chance that I can successfully tackle the syntactic problems presented by the imperative construction in English through an extension of this model. For one thing, the problems relating to the derivation of sentences are no longer relevant. For another, it is all a question of accounting for the surface forms of the construction. Nevertheless, with regard to the imperative, this approach will present a certain amount of complexity which the TG approach does not have, since I will have to formulate distinctive rules to capture distinctive imperative sentence structures.

It is necessary to stress here that doing the syntax of the imperative in the manner suggested above does not mean that the syntactic features and elements which it shares with other sentence types will be missed. These are the kinds of features which Davies (1981) has tried to highlight. The fact is that as S-structures, all sentences are bound to have certain characteristics and elements in common. They all have, for example, subjects, verbs and adverbs. These are generally captured by base rules. What is not easy to do, however, is the identification of the ways in which these general properties of sentences are organized in each sentence type. It is these aspects of the sentences that separate them one from another. The task which the extension of GPSG here will be directed at is the analysis of the elements of the imperative in a manner that can capture its distinctive characteristics.

It is pertinent to see how the authors of this model have tried to make it as explanatory as they can. In this regard, I shall direct attention to two main aspects, (i), its rule system, and (ii), its feature system. The rule

system of the grammar serves as an input into the translation of constructions into intensional logic. Thus, a rule may have the following shape:

$$(2.3.1) \quad \langle 1, [\bar{V} \quad \bar{N} \quad V], \bar{V}' (\hat{N}') \rangle$$

(Gazdar, Pullum and Sag, 1982: 594).

The rule in (2.3.1) consists of three parts -- the rule number (serving the purpose of identifying the nature of the subcategorization in question), the PS component (giving the constituent structure of the construction) and the part containing the translation into intensional logic (giving a rule-based logical representation of the construction on the basis of the surface compositional analysis of the middle part). It employs, among other things, a few other devices, e.g., the CONTROL AGREEMENT PRINCIPLE (CAP). (See Klein and Sag, 1981, and Lapointe, 1981). CAP is described, formally, thus:

$$(2.3.2) \quad \text{If } \beta_i \text{ controls } \beta_j \text{ then } \text{AGR} (a_i) = \text{AGR} (a_j).$$

(Gazdar and Pullum, Op. cit.: 31).

Its organization of rules as in (2.3.1) is reminiscent of Montague (1974). (See Halvorsen and Ladusaw, 1979: 188). I would like to say that only segments of the 'imperative' construction are open to such translations as we shall see below. So, certain modifications are necessary in the way the rules are set out. It is not necessary, I would say, to set out the syntactic and the semantic aspects of a construction in a single rule consisting of three parts. So, I shall dispense with numbering as a unit of the rule, and so allow the aspect of subcategorization to be subsumed under the PS rules. I shall therefore formulate rules to show the structural and the semantic aspects of the sentences separately, treating the aspects that have to do with semantics within Montague Semantics. As we shall see later, all these modifi-

cations are fully motivated by the imperative construction since, for example, they are not open to translations into intensional logic as single sentential units.

The feature-system of GPSG is quite extensive. It encodes syntactic information about Person, Number, Case, Syntactic Category itself, Phrases, Verb Forms as well as notions like Aspect, Finiteness, Passive and Null Terminal. These and a few others are treated as syntactic features. (See Gazdar and Pullum, *OP. cit.*: 1-14, and Gazdar, Pullum and Sag, *Op. cit.*: 596-598). The features however fail to mention the elements that can be used to capture the fact that a particular sentence is a member of a particular sentence type. This is necessary because the syntax of the imperative must provide information not only about the constituent structure of the sentence but also about the entire structure itself. This is in conformity with the need to do the syntax and the semantics of the sentences of natural language according to the sentence type to which they belong, as pointed out above. I shall therefore propose a new feature to fill up this gap in the feature-system in the next section. The use of these syntactic features in conjunction with the rules expanding the imperative S-category will, it is hoped, enable us to capture certain facts about the construction which are either ignored in the literature or difficult to account for in the transformationalist approach. I now turn to Montague Semantics (MS).

B) Montague Semantics

Montague Semantics is a term used to refer to the writings of Richard Montague, especially as contained by his papers "Pragmatics", "Pragmatics and Intensional Logic", "English as a Formal Language", "Universal Grammar" (UG) and "The Proper Treatment of Quantification in Ordinary English" (PTQ). (See Montague, 1974: 95-147, 188-270). My brief

discussion of MS. here will be limited to those aspects that are directly relevant to the task of providing an adequate semantic analysis of the imperative construction, and explaining why it can be successfully related to GPSG for the study of the semantics and syntax of the imperative.

I would like to put the relevant proposals into two main groups, (a) and (b). Group (a) has to do with the technicalities of identifying basic expressions of category A, sets of phrases of category A, the manner in which complex expressions are formed from basic ones, the analysis trees and translation rules. Group (b) is concerned with the semantic interpretation of English expressions on the basis of a model-theory involving indices of worlds and times or possible worlds and the contexts of use.⁷

It is these characteristics of this model that make it particularly relevant to the semantic analysis of the imperative. However, important modifications must be made. For example, the model has no specific categories for the major components that make up the imperative construction. So, these must be proposed in addition to those in Montague (Op. cit.: 237). This thus ensures that imperatives are given the same semantic interpretation. I shall also have to identify the unique expressions which they may have and the relevant syntactic and semantic rules.

The incorporation of a model into this theory is important. Such a model, however, has to be constructed on the basis of the data that I am confronted with. Thus, in the imperative construction, there is need to have a model which contains information not only about aspects of the actual world but also about certain features in the context of use. This is why an adequate semantic analysis of the imperative cannot be achieved by using a PTQ-style approach alone. An

outline of how some of these aspects will be organized in the present study is given in the next section. The details can only emerge from the analyses that are given to different components of the imperative in subsequent chapters.

It is in place here to comment on the combination of aspects of GPSG and MS in the present study. It should be made clear from the start that since the use of these two models itself presents a unique approach, only their general assumptions will be exploited here. My intention, therefore, is a basic one -- to develop fully two aspects of one construction, its syntax and semantics, which are so intertwined that only grammatical models (or model) which have access to both aspects can be of use. It is thus the case that in this regard, both GPSG and MS are compatible with each other in many respects -- in their conceptions of syntactic categories, in their compositional orientation to grammar, and in their organization of rules. The proposals which I shall make are also compatible with both models, and since they complement each other with regard to my purpose here, it makes sense, I suppose, to use both of them.⁸

2.4 Grammatical Notions

The aim of this section is to indicate how certain notions and subsystems which are contained in the grammatical models assumed in the present study will be extended or modified in order to make them quite adequate for the purpose of analysing the imperative construction.

A) Imperative and Grammatical Mood

Mood in Traditional Grammar is a term that is used to refer to the morphological shape of a verb. Terms like indicative, imperative and subjunctive are used to describe

the distinctions that are found in the shapes of the verbs. But in generative grammar, "mood" has acquired a much broader meaning. We now have the notion of grammatical mood which is used to refer to the distinctive grammatical structure of a sentence. (See Huddleston, 1971: 5, 1976: 127-128; Lyons, 1977: 745, and Hausser, 1979: 174). In this sense, the mood of a sentence does not change even when the latter is used to express illocutionary forces which are not typical of it. Mood is therefore seen as an abstract, inherent property of the sentence which is co-extensive with it. There is however a problem when mood, in this sense, is identified with the term "imperative" as a syntactic category in contrast with declarative and interrogative, even though none of the latter terms refers to the form of the verb as the former does. Lyons, noting the problem, describes it as a probable source of confusion. (See Lyons, Op.cit.: 748, 1981: 115). The terms are used to refer to verb forms and sentences in different syntactic contexts, and this creates a great deal of complexity. The first three tables below illustrate the problem thus created and the last two (which come up later) show the proposals put forward as solutions to it.

TABLE ONE

	VERB FORMS
MOOD	indicative, subjunctive, imperative, etc.

As stated above, the terms in TABLE ONE identify verb forms in relation to their moods.

TABLE TWO

	SENTENCES
VERB FORMS	indicative, subjunctive, imperative, etc.

In TABLE TWO, the terms identify sentences according to their

verb forms. (See Lyons, 1977: 747-748).

TABLE THREE

	SENTENCE TYPES		
	DECLARATIVE	IMPERATIVE	INTERROGATIVE
VERB FORMS	indicative	imperative	indicative

In TABLE THREE, the terms (in lower case letters) refer to the forms of the main verbs of their respective sentence types as well as the individual sentences in each sentence type. Here lies the confusion. Declaratives and interrogatives have "indicative" verb forms, but imperatives have an "imperative" verb form. This means that imperatives as members of a distinctive mood category (i.e., as a sentence type as set out in TABLE THREE) are identified by their verb form, which is in the imperative mood (as in TABLE TWO). As a sentence type, the imperative stands in contrast to the declarative and the interrogative, but these last two sentences are not identified by the names of their verb forms as the imperative is. This is certainly not a terminological problem. It is interesting to note that both the declarative and the interrogative have the same verb form, "indicative"; a fact that does not readily come to mind when we speak of "indicative" sentences or clauses. Now, if the mood of the main verb of the sentence is what decides the kind of semantic analysis that it can take, then the imperative is on its own indeed. The declarative and the interrogative are united by the fact that they have identical verb forms as illustrated in TABLE THREE.⁹

The attempt to restrict the imperative to TABLES ONE and TWO by putting it on a par with subjunctives and infinitives (see Section 2.1 above) creates additional problems because, as we can see in TABLE THREE, the occurrence of an identical

verb form (or a superficially identical verb form, to be exact) in two or more sentences (or clauses) does not necessarily make them identical.¹⁰ And as pointed out above, both subjunctive and infinitive clauses do not stand in isolation as the imperative does. However, the level of classification among the sentences represented in TABLE THREE is well motivated, and the particular problem that the term imperative poses there can be resolved.

Two possible ways of removing the confusion created by "imperative" now exist. First, Lyons (Op. cit.) proposes the term "jussive" in place of "imperative" for referring to sentence types along with "declarative" and "interrogative". This would then free "imperative" for referring to the verb form only on the level of TABLE THREE, as follows:

TABLE FOUR

	SENTENCE TYPES		
	DECLARATIVE	JUSSIVE	INTERROGATIVE
VERB FORMS	indicative	imperative	indicative

Second, there is a new term for referring to the verb form of an imperative sentence and so the term "imperative" is used without any confusion in contrast to "declarative" and "interrogative" (and "exclamative"). This is illustrated in TABLE FIVE.

TABLE FIVE

	SENTENCE TYPES		
	DECLARATIVE	IMPERATIVE	INTERROGATIVE
VERB FORMS	indicative	base-form	indicative

This term, "base-form" has appeared in recent studies in generative grammar. (See Gazdar, Pullum and Sag, Op. cit.: 596). It is generally used in GPSG, and so it is adopted here.

The use of "imperative" in the above sense (i.e., as a grammatical mood) has certain important consequences for the present approach. Since the imperative sentence is not fully identified by the name of its verb form, it should not be in TABLE TWO, and so should not be related to, or placed on the same level as, subjunctive or the indicative clauses -- structures that are actually known by the kinds of verb forms which they contain. The term "indicative" is thus not synonymous with the term "declarative", and it would be much clearer to reserve indicative clause for a dependent clause which has its main verb in the indicative verbal mood than to use it on the level of TABLE THREE, as if it meant the same thing as declarative sentence. We do not have "base-form clauses" because the term "base-form" does not refer to any clause which occurs in a dependent position in a sentence. (See Sections 2.1 and 2.2 above).

Since mood in generative grammar refers to the distinctive grammatical structure of the sentence as pointed out above, it is reasonable to capture this information in the form of a syntactic feature as in GPSG. I therefore propose a syntactic feature, [MOOD], which may be extended in the following manner to cover the various sentence types:¹¹

(2.4.1) [MOOD {DECL, INTER, IMP, EXCL}]

For the imperative, this feature is realized as

(2.4.2) [MOOD IMP]

Similarly, we would have other realizations in the case

of each of the other mood categories.¹² In the style of GPSG, the specification in (2.4.2) may be abbreviated as follows:

(2.4.3) [IMP]

without any loss of meaning. The S node which dominates an imperative sentence in a Phrase Marker can therefore be marked [IMP]. What this means is that each PS rule for the imperative construction must be subclassified as

(2.4.4) S[IMP]

with a full specification as

(2.4.5) S[MOOD IMP]¹³

Since the imperative consists of many subsets of sentences, I would like to adopt a method (see Halvorsen and Ladusaw, Op. cit.: 221) in which the PS rules are set out as follows:

(2.4.6)	S[IMP]	----->	...	(for subset (i))
	S[IMP]	----->	...	(for subset (ii))
	S[IMP]	----->	...	(for subset (iii))
	S[IMP]	----->	...	(for subset (iv))

The details are given in Chapter Four, following the discussion of aspects of the verb phrase.

The above proposal is motivated by the need to allow each PS rule to relate to each sentence structure directly, since I am doing a one-level, surface structure analysis. Furthermore, this approach is in consonance with the methods of both GPSG and MS as explained above. Each sub-type of S[IMP] is thus a sub-type of the imperative mood category and so will receive a translation into intensional logic within the general pattern that has been established for the impera-

tive construction. [IMP] is a syntactic feature and so must be distinguished from the use of MODALITY by Ransom (1977) as a semantic entity in sentences.

It is pertinent to compare the present proposal with others that have to do with the imperative construction and other sentence types. Schmerling proposes the following rule-schema for the imperative.

$$(2.4.7) \quad \text{IMP} \quad \text{-----} \rightarrow \quad \left\{ \begin{array}{cc} (\text{NP}) & (\text{AUX}) \\ \underline{\text{do}} & (\underline{\text{not}}) \end{array} \right\} \quad \text{VP}$$

(Schmerling, 1980: 27)

One serious objection to this rule schema is its failure to define or explain the meaning of IMP. Schmerling does not, however, use the feature-system in her paper. She does not raise the issue of syntactic mood at all. A possible definition of IMP may therefore have to incorporate a mood feature as I have suggested in (2.4.5) above. A second objection is the fact that she has no device in the rule-schema for marking each single rule as a rule that can predict an imperative sentence rather than a declarative, since IMP is not a feature on the imperative S-category. This defect is quite noticeable in a Phrase Marker for the following instance of the rule-schema,

$$(2.4.8) \quad \text{IMP} \quad \text{-----} \rightarrow \quad \text{NP} \quad (\text{AUX}) \quad \text{VP} \quad (\text{Ibid.: 24}).$$

where IMP has replaced S, unlike (2.2.1)(a) above, but the rest of the PM is hardly different from that of (2.2.1)(a) for a simple sentence. Since Schmerling's proposal assumes some operations involving transformations, it seems only the occurrence of IMP in the rule differentiates it from classical TG rules. As demonstrated by the alternative proposal above, IMP must be in the rule as a feature defined on the S-node, and since it represents the syntactic mood category of the imperative, it is used as part of the PS rule to predict

each imperative sentence directly. It trickles down the trees through the Head Feature Convention (HFC) (see Gazdar and Pullum, 1982: 4). The mood feature [IMP] thus lends itself, within the rule-system, to the syntactic characterization of the imperative as a sentence with a structure that is distinct from those which may be possessed by any other syntactic mood category or sentence type. So, the absence of the feature [MOOD] on the S-node in Schmerling's proposal makes it inferior to the alternative proposal that I put forward above.

In another proposal, rules are provided on the level of "meta-grammar", as follows:

(2.4.9) S -----> DEC / QUES
 QUES -----> Qu-Do/Qu-Modal/Qu-Have/Qu-be
 (Krulee, 1982: 125).

This proposal is a slight improvement on that of Schmerling in that S appears somewhere in the rule. But this has been done at a high cost. S is now being rewritten as sets of sentences rather than as sets of constituent categories as is customary in generative grammar. The creation of two levels, meta-grammar and pseudo-grammar, in which the former subclassifies the sentences of a language while the latter provides context-free rules (see Krulee, Ibid.: 121-130) complicates the grammar of natural language unnecessarily. Apart from the problem of how to interpret the meta-grammar which Krulee himself mentions (p.131), there is also the problem of how the intricate relationship between the meta-grammar and the pseudo-grammar can really be integrated into a system which involves translation into intensional logic as GPSG does (see Gazdar, 1982: 148-151). I believe the alternative proposal presented above is much simpler. It attains the same level of adequacy in the prediction of sentence structures without the complication of another level of analysis. It uses the

notion of grammatical mood and so it is rooted in the tradition of generative grammar and linguistic philosophy. (See the introductory paragraph of the present section, and Chapter One, Sections 1.1 and 1.6 above). Above all, the present proposal is completely open to surface, compositional analysis and logical interpretation in both syntax and semantics.

It is therefore the case that the representation of the imperative construction as

(2.4.10) S -----> IMP

cannot improve the situation since it is indeed an instantiation of the meta-grammar in (2.4.9), i.e., the first line of the rule. So, the proposal has all the theoretical inadequacies that have been identified with (2.4.9) above. But when IMP is regarded as a syntactic feature, then we are faced with another complication. Syntactic features are elements in the node, as explained above, and so cannot be used to expand an S, or any category for that matter. Consequently, it will be unacceptable to allow IMP to be a feature defined on an imperative S-node after it has been used to expand an S. Furthermore, to use IMP as a syntactic feature without relating it to the feature [MOOD] looks arbitrary, for it robs the PS rules predicting imperatives of their affinity with similar rules predicting other types of sentences as we have seen in (2.4.1) above.

In sum, we can say that the term "mood" has a wide range of uses and interpretations in the literature on the grammar of English. I follow a broad approach by using it in the present study as a grammatical element which uniquely identifies the distinctive syntactic structure of any sentence. In this sense, therefore, I propose that it should be treated as an element that functions as a syntactic feature, and so can be extended to all mood categories in a natural language which has mood distinctions.

For the imperative in English, as pointed out above, the full specification is S[MOOD IMP] and it may be abbreviated as [IMP]. This therefore takes us to the choice of the method of setting out the PS rules which predict imperative sentences. It is suggested that S[IMP] should be repeated as many times as there are subsets of imperatives to predict in the language.

The current suggestions discussed above lack many of the important features that the present, alternative proposal has. One of them has completely eliminated the S-category from its rule-system; another complicates its arrangement by creating a second level of analysis, and yet another has no efficient way of treating IMP. They all lack the syntactic feature, [MOOD] (and any use of the notion of syntactic mood category) and so either that the structures which they produce cannot be translated into intensional logic or their semantic representation of the imperative cannot be separated from those that declaratives generally have.

B) Indices and Context of Use

In a model theory, a model by and large consists of coordinates like time, place and situation which are referred to as indices, states of affairs or possible worlds. (See Montague, Op. cit.; Carnap, 1947 and Kripke, 1963 and 1972). Although this notion has been traced back to Frege, it has been developed in rather different ways, depending on the specific problem in question, e.g., modal contexts and belief contexts. Of particular relevance is the dichotomy between sense, intension, meaning, thought or proposition on the one hand, and on the other, reference or extension, in relation to expressions. (See Dowty et al, 1981: 144). The relationships between these notions revolve around the claim that the meaning or intension of an expression is determined by

its "extension" (or "reference") in a state of affairs (i.e., in a model with the indices of time, place and situation). What Montague presents is a rather formal approach to referential semantics. In PTQ, he uses the notion of denotation (of an expression) which is obtained relative to the indices of possible world, i, moment of time, j, and g assigning values to the variables, i and j. In UG, he explains how these entities relate to meanings. He comments:

Thus meanings are functions of two arguments -- a possible world and a context of use. (Montague, 1974: 228).

He explains that the index, i, consists of "pairs of a possible world and a moment of time", while the index j consists of "the set of all complexes of remaining relevant features of possible context of use" (Ibid.). Such features of context include speaker, addressee, objects, etc. (See Lewis, 1972: 185).

Montague's approach to semantics is therefore closely related to aspects of pragmatics which he interprets as indexicals. (See Thomason, 1974: 63). In his "Pragmatics and Intensional Logic", he observes:

An indexical word or sentence is one of which the reference cannot be determined without knowledge of the context of use; Consider 'Caesar will die'. This sentence cannot be considered either true or false independently of the context of use; before a truth value can be determined, the time of utterance, which is one aspect of the context of use, must be specified. (Montague *Op. cit.*: 119-120).

I have discussed the notion of indices or context of use in Montague Semantics at some length in order to emphasize its importance in the semantic analysis of the imperative construction. Almost all the recent studies on the imperative (see Section 1.6 above) have tried to identify the nature of the "proposition" or "denotation" that should be associated with the imperative, but almost all fail to recognize the vital role that indexical elements play in the

construction, especially in the identification of the referents of the subject NP's in the context of use.

The representation of the meanings of sentences is a complicated business. Many different issues are called for in it. For example, there is the problem of how to distinguish between the "meanings" and the "senses" of sentences. (See Austin, 1962: 100). Montague however makes such a distinction as follows:

The intuitive distinction is this: meanings are those entities that serve as interpretations of expressions (and hence, if the interpretation of a compound is always to be a function of the interpretation of its components, cannot be identified with functions of possible worlds alone), while senses are those intensional entities that are sometimes denoted by expressions. (Montague, Op. cit.: 228).

This is interesting since it raises the question of intensionality. For the imperative, it has to do with either identifying its nature on the basis of its surface form or attempting to isolate what is understood when the sentence is uttered and this probably involves intensionality. The concept of model contained in MS can be exploited in both directions. However, it is mainly the concept of the model as described in UG that will be adopted in the present study. This becomes necessary as a result of the unique nature of the imperative, especially with regard to the entities that are involved in the type of "context of use" which it entails. Within the UG subsystem, it will also be possible to discuss fully the aspects of pragmatics, or identify the manner in which the context of use is exploited, in the organization of the imperative. Since the principle of compositional analysis will be upheld, I contend that knowing the conditions surrounding the organization of the imperative is part of knowing the meaning of it. It is thus the case that a compositional analysis of the imperative cannot pursue the notion of sense or proposition since it does not

denote truth values. Any attempt to capture the so-called "propositional content" of the imperative must thus resort to the identification of a formula. A formula and a proposition are defined as follows.

A formula denotes a truth value at each index. Hence the intension of a formula is a function from indices to truth values, and such an intension will be called a proposition. Since a function from any set into $\{0, 1\}$ is the characteristic function of some subset of that set, a proposition as just defined "characterizes" a set of indices; i.e. a proposition maps all the indices at which a formula is true into 1, and maps all other indices into 0. (Dowty et al, 1981: 147).

Such a formula can then be related to the new situation, following the execution of the action specified in the sentence, and so capture the "sense" or the "propositional content" of the sentence. Since such a "formula" is not derived from a compositional analysis of the imperative sentence itself, no attempt will be made in the present study to provide a detailed, formal analysis of the "new" state of affairs that is achieved when the action is carried out. The emphasis in the present approach, as indicated in Section 1.6 above, is to examine the conditions that determine the semantic nature of the imperative construction. After the criticism of a recent proposal on the issue of propositions and the imperative in Chapter Three, I shall comment, in Chapter Five, on why the issue of propositions in relation to the imperative is raised at all and how the quest for them has to move away from the actual surface forms of the imperative.

The use of a model-theoretic approach that will be undertaken here thus means that an imperative sentence will be seen as a token only, i.e., an instance of the construction which is interpreted in relation to the indices which make up the relevant context of use in which it occurs. An examination of it in this sense will provide an insight into the kind of semantical object that it is.

Another aspect of the proposed approach is that it will be possible to use the notion of semantic type to capture the denotations of the specific syntactic categories that make up the imperative construction. All this will make it possible to build up the "meaning" of the imperative sentence on the basis of the programme that I have outlined above.

I would like to point out that the present approach will have nothing to do with the "uses" of the imperative. This is as a result of the fact that in it semantics is seen as an aspect of generative grammar (see Wilson, 1975, and Kempson, 1977). Extra-linguistic elements will be incorporated only to the extent that they shed light on the meaning of the imperative construction. (See Halvorsen and Ladusaw, OP. cit.: 185). Notions like presuppositions and entailment will apply, again only as far as they relate to the determination of the semantic nature of the sentences.

2.5 Conclusion

We have seen that a great many of the problems that surround the imperative construction can be resolved by the use of an adequate theoretical model. Although such devices like COMP have their uses in generative grammar, they prove theoretically inadequate with regard to the identification of the imperative in a larger sentence and its function as a main unit in such a structure. The tendency to view the construction as a "relative of the indicative clause" is a bit of over-generalization since a great many of the unique features of the construction can be independently accounted for. In this regard, it is pointed out that a blend of appropriately modified GPSG and Montague Semantics can be used to reveal the real nature of the construction.

The syntactic feature [MOOD] has been proposed to capture the distinctive syntactic structure of the sentence, and it has given rise to S[IMP] being identified as the symbol that should occupy the topmost node in a Phrase Marker for an imperative.

With regard to the semantic aspects, the model theoretic approach is introduced, and the crucial role that the context of use plays has been explained. Therefore, instead of using indices of a possible world and a moment of time, we will now apply those made up of a set of contextual features like "speaker", "addressee", "objects" and other aspects of the analysis, including the use of the device of semantic type to identify specific categories in the imperative construction, and so give it a more satisfactory treatment than it has had hitherto in grammatical theories.

Footnotes to Chapter Two

1. Aspects of the imperative referred to in the above quotations will be accounted for in the subsequent chapters.
2. The symbol <> is used to identify the position of a "missing" element. In the examples in this section, the missing elements are subject NP's.
3. So, if these complementizers existed, they would probably have occurred in larger sentential structures from which imperatives would have been derived. They would also have been dropped in the original structures along with other elements. They would thus have become "empty complementizers" in the parts of the original structures that would remain, i.e., imperatives, probably leaving their traces before them (imperatives) in the deep structure.
4. Davies (1981: 310) describes the use of IMP in this example as an "ad-hoc feature". I think this is not correct. IMP here should be distinguished from the empty morpheme IMP of Katz and Postal (1964), or of any other study of that period (see Section 1.2 above). The presence of IMP in COMP seems to indicate that the different sentence types can be directly captured by base rules, and it is just that the authors mention only the case of the imperative. Others can be identified, as we shall see in Section 2.4 below.
5. The claim about the derivation of the imperative in this manner was fashionable during the late sixties as we saw in Chapter One. (See Katz and Postal 1964, and McCawley, 1968). But the association of the imperative with the subjunctive still goes on, as we have seen in Section 1.6 above. The comparisons that are made concern their verb forms as well as other aspects (see Culicover, 1976). There is also the issue

of propositions which are said to be expressed by such complement constructions and the imperative (see Huntley, 1982). So, even if we disregard the issue of derivation, it is still tempting to relate the following sentences to each other.

- (1) I order that you pass it on.
- (2) I order you to pass it on.
- (3) Pass it on.

6. It must be admitted that imperatives do have grammatical features which are very difficult to identify and describe. However, it is equally true that the general TG approach of treating the declarative sentence structure as a norm, and trying to generate all other sentence types from that structure (see Section 2.2 above) has had the undesirable effect of making those unique features of the sentences look defective and deformed. An adequate grammar of the imperative must therefore account for these features and so increase our understanding of the construction.

7. Montague's ideas about indexical expressions and the context of use are closely related to his formal approach to co-ordinate semantics, as we shall see in the next section.

8. Relating Montague Semantics to a model of generative grammar is not new. Cooper (1975) identifies some parallels between it and TG, and Partee (1975: 203-300) discusses how MS may be approached through transformational syntax. However, it can be contended that no model of generative grammar has as much similarity with Montague Grammar (as it is sometimes called) as GPSG, especially with regard to their assumptions on categories and rules.

9. This does not mean that we may now conclude that both sentences should have identical syntactic analyses.

10. The notion of the characteristic use of sentences as reflected in the forms of their main verbs (see Lyons, 1977: 746) is of considerable use in separating one sentence from another. However, it cannot do so in the case of the dependent clauses in the following examples:

- (1) The man who will go there has arrived.
- (2) The man to go there has arrived.

since the main verbs in both clauses are the same in form. What we know for sure is that both clauses have different structural configurations. So, even if certain syntactic and semantic similarities exist among sentential structures, the differences in their structural configurations should not be ignored. For sentences, as represented in TABLE THREE, the notion of grammatical mood category is meant to capture such over-all structural configurations, irrespective of the verb forms.

11. [MOOD] in this sense identifies a "sentence shape" in the same way as [BSE] (for base-form) identifies a "verb shape". None of these entities has undergone any visible structural change which the feature assignment could have tried to reflect. What is relevant here is the shape of each of them. It can thus be argued that generative grammar must concern itself not only with the categories that make up a sentence, but also with the over-all shape of the sentence.

12. For these categories, the situation is as follows:

[MOOD DECL]	(for DECLARATIVES)
[MOOD INTER]	(for INTERROGATIVES)
[MOOD EXCL]	(for EXCLAMATIVES)
...	...

and as in the case of imperatives, they may be abbreviated as [DECL], [INTER] and [EXCL] respectively.

13. Since the contrasts which exist among the extensions of the feature [MOOD] are fully specified, I see no need to attach the values, + and -, to them wherever they may occur in the present study.

CHAPTER THREE

SUBJECT AND VOCATIVE NOUN PHRASES IN IMPERATIVES

3.0 Introduction

As pointed out in the previous chapter (Section 2.1), the imperative construction has a constituent structure which is quite different from those of other sentence types. This difference has to do with the apparent separation between the subject and the predicate elements in the sentence. The situation is such that we cannot regard the predicate as a functor which accepts the subject NP as an argument. To do so would amount to denying the difference between the following sentences.

- (3.1.1)(a) The boy in the corner runs. [DECLARATIVE]
 (b) The boy in the corner run! [IMPERATIVE]

Only the VP in (3.1.1)(a) can function as a functor which accepts its subject NP as its argument. The reference to the verb of the imperative as having a "base-form" does not obstruct the fact that there are no discernible grammatical relationships between the subject and the predicate elements of an imperative as there are between those of a declarative. As we shall see later, it is this aspect of the imperative that underlies some of the features that it has.

As a result of this state of affairs, it is pertinent to

find out

- (a) why only a subset of the NP's in English can occur as subjects or as vocatives in these sentences,
- (b) what syntactic, semantic and pragmatic features characterize the NP's that do occur in these positions in the sentences, and,
- (c) what insight we might gain into the nature of the imperative construction itself from the analysis of these NP's.

This chapter is aimed at resolving these problems. The issues I want to pursue are thus more fundamental than many of those that concerned linguists who have looked at subject and vocative NP's in the imperative before. As we saw in Chapter One (Sections 1.2 and 1.3), they were mainly interested in the classes of NP's that could occur in these sentences as subjects and vocatives, and the type of semantic features which they should possess in order to occur. (See also Thorne, 1966; Huddleston, 1971; Stockwell et al, 1973, and Davies, 1981). I would also like to show that a purely syntactic approach to these problems (like those of these linguists and others) is grossly inadequate, if not misleading, and so it would be worthwhile to examine the various issues that arise within the broad framework that has been outlined in the previous chapter.

3.1 The Grammatical Relation of Subject

I would like to begin the analysis with a close look at the concept of grammatical relations in order to see if it can be extended to the notion of subject in the imperative construction. I shall make passing references to the vocative. I consider two of the recent theories about the concept of grammatical relations in the sentences of natural languages. One is contained in Chomsky (1981) and the other in Dowty

(1982)(a) and (b).¹ They both claim to have a universal application across natural languages. In relation to imperatives in English, we expect these proposals not only to identify the NP's that are subjects in these sentences but also to resolve the controversy about their role as agents of the actions specified in the sentences. I examine the proposals in turn.

Chomsky claims that NP's are particularly affected by a number of subsystems, including the Θ -theory, the binding theory and the control theory. He explains:

Θ -theory is concerned with the assignment of thematic roles such as agent-of-action, etc. ... Binding theory is concerned with the relations of anaphors, pronouns, names and variables to possible antecedents Control theory determines the potential for reference of the abstract pronominal PRO. (Chomsky, 1981: 5-6).

In this system, subject NP's are obligatory for clauses as demonstrated by the following rule (p. 25):

(3.1.1) $S \rightarrow NP\ INFL\ VP$.²

Chomsky contends that notions like "agent-of-action" have to do with semantic description and so belong to the Logical Form (LF). Therefore, expressions like "the man", "John" and "he" are assigned Θ -roles (i.e., thematic roles) at the LF. According to him, the head of the VP does not subcategorize an NP as subject. It is the entire VP that Θ -marks it as such. This system thus postulates that subject NP's are derived from the D- and S-structure in line with the rule in (3.1.1), but they become Θ -marked later at the LF. . . Chomsky gives the following construction (p. 40) as an example of an expression in which NP's are assigned Θ -roles.

(3.1.2) persuade John to leave

If we provide the example in (3.1.2) with a referring NP as its subject and treat it as an imperative sentence along the

lines of Chomsky's proposals, we will derive the sentence in (3.1.3).

(3.1.3) The lady in front persuade John to leave.

Chomsky's system thus appears to have made a correct prediction with regard to the ability of the entire VP to θ -mark an NP in subject position (in this case, "the lady in front") for the role of agent-of-action. The traditional assumption is that the subject of an imperative is the agent of the action mentioned in the rest of the sentence. Chomsky (Ibid. : 35) compares this assumption with the notions in the case relations of Fillmore (1968), the semantic relations of Katz (1964) and the thematic relations of Jackendoff (1972) and Gruber (1967). Nevertheless, I would say the ability of the θ -theory to account for the problems presented by the imperative subject NP ends here.

The theory leaves many questions unanswered. For example, it fails to tell us under what conditions the VP of a sentence assigns θ -roles to its subject. In other words, it has nothing to say about the phenomenon that allows only a small subset of NP's to occur as subjects in a sentence like an imperative. It could be said therefore that the problems we are facing here are more complex than what can be treated under the θ -theory.

Chomsky's subsystem also fails to account for the role of the vocative NP in the imperative (as well as in other sentence types). If the semantico-thematic role of agent-of-action must be assigned to the subject of an imperative, so must it be assigned also to the vocative in the sentence. The reason for this is the fact that on purely semantic grounds, the vocative NP does nothing in the sentence but identify the addressee of the sentence and so the agent of the intended action. But since the vocative NP does not stand in any grammatical relation to the verb, it does not get

6-marked, yet it occurs in the imperative as the agent-of-action. The theory does not seem to have anything in the D- and S-structure to distinguish between an NP that ends up as a subject and one that becomes a vocative.

Perhaps it should be assumed that the vocative NP is not transformationally inserted into the structure. If so, it must then be present in the D- and S-structure along with the subject NP. What is not known therefore is how the theory can sort out the complex relationships between these two elements at its various levels of analysis in view of the fact that they both refer to the same entity in the world when they co-occur in the same sentence, as the examples in (3.1.4) show.

- (3.1.4)(a) John, you come over here.
- (b) You stop that taxi, John.
- (c) Don't you behave like that again, John.

Therefore, even if we were to accept that subjecthood is a θ -role assigned at the LF, we would still be left wondering how the vocative NP would be treated at the various levels -- the D- and S-structure and the LF.

This question of the relation of "subject" was earlier discussed by Chomsky when he observed:

It might be suggested that Topic-Comment is the basic grammatical relation of surface structure corresponding (roughly) to the fundamental Subject-Predicate relation of deep structure. Thus we might define the Topic-of the Sentence as the left-most NP immediately dominated by S in the surface structure (Chomsky, 1965: 221).

There is considerable doubt about treating imperative subject NP's as Topics and the predicates as Comments. However, it does appear that only those sentences in which subject and predicate elements are syntactically linked are open to Topic-Comment analysis. Again, declaratives fit into this class, but imperatives do not. (See Keenan, 1976; Schwartz,

1976, and Givon, 1976, for the notion of Subject with regard to Topic and Comment). Nevertheless, this earlier suggestion by Chomsky gives no clue about the factors that qualify NP's to occur as subjects in these sentences.

Dowty, for his part, channels his proposals via the general theory of Montague Grammar. His main contention is that the relations of "subject", "indirect object" and "direct object" are simply the results of the inter-relationships between syntactic categories in the sentence. His argument hinges on a principle which states that

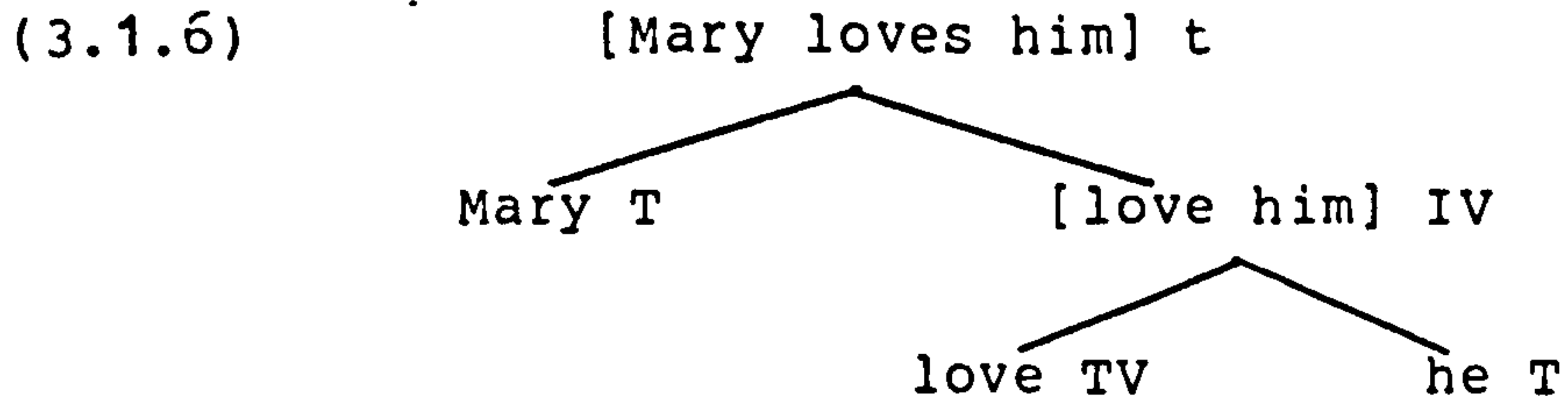
a function of N arguments can always be equivalently represented as a function of one argument that yields a function of N - 1 arguments as its value. (Dowty, 1982(a): 84).

According to this principle, a verb that takes N arguments will be able to produce, with the help of a rule of one argument, the same phrase as a verb that takes N - 1 arguments. In order to find out how the principle actually works, we first of all look at the rules that are involved. They possess two important aspects: their structure and their operation. Here are some examples (Dowty, Ibid.: 85).

(3.1.5)(a) S1 : $\langle F_1, \langle IV, T \rangle, t \rangle$ [Subject-Predicate rule].

(b) S2 : $\langle F_2, \langle TV, T \rangle, IV \rangle$ [Verb-Direct Object rule].

Each rule has three main sections. The first contains F_1 or F_2 , and represents the syntactic operation of the rule. This specifies the relevant relationships that obtain between the categories in question. The second contains the categories themselves which are the inputs to the rule. The third contains the result of the syntactic operation of the rule, i.e., the phrase that the rule yields as its value. Let's take Dowty's illustration of this with loves, a verb of two arguments (p. 86).

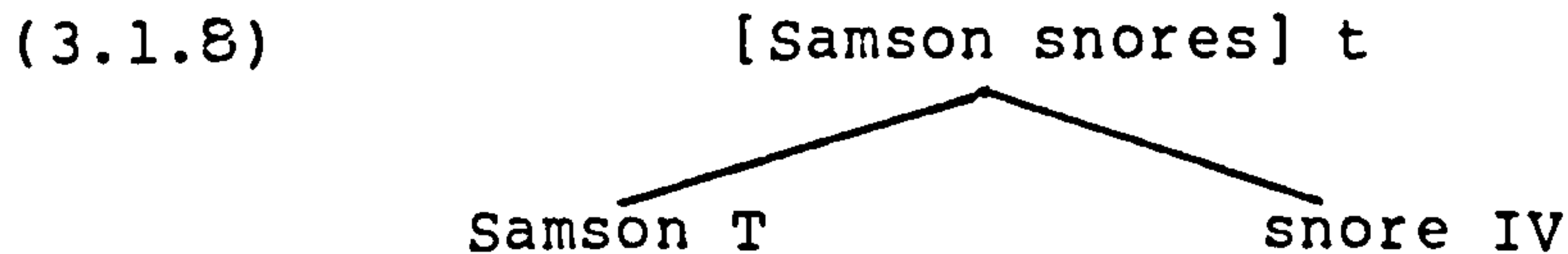


The combination of loves and him yields the category IV (i.e., a VP, as is usually the case in generative grammar).

We now take another verb, the intransitive verb snores, which is a verb of one argument.

(3.1.7) Samson snores.

Since loves represents a function of N arguments, snores is thus a function that yields N - 1 arguments.



What the analysis trees in (3.1.6) and (3.1.3) have revealed is that whereas you need two syntactic operations to capture the predicate relation (represented by IV) in the **former**, you need only one in the **latter**. As rule S1 in (3.1.5)(a) shows, the combination of T and IV phrases yields a t, a sentential expression. It thus appears that a function of N arguments (represented here by the analysis in (3.1.6) has the same value (i.e., t) as a function of N - 1 arguments (represented here by the analysis in (3.1.8)). It is the relationships between the categories, that is, the way and order in which they combine, which, according to Dowty, determines the relation of "subject" and others. The subject NP is thus the category that is an argument to an IV as a functor.

Like that of Chomsky, Dowty's system recognizes the

Subject-Predicate dichotomy, although they arrive at it in different ways. Also like that of Chomsky, it does not in any way help us to resolve the problem of selecting NP's for subjecthood in the imperative construction. We are not simply interested in identifying the NP that is subject in an imperative sentence, we also want to know what such an NP can reveal about the imperative construction itself, as explained above.

On the question of the functor-argument relationship (in this case, the combination of IV- and T-phrases) as the basis for the creation of the relation of subject, we would like to say that the imperative construction appears to present a counter example. It seems necessary to distinguish between sentence types where there are grammatical relations (see, for example, Bach, 1979, and, Klein and Sag, 1982) between subject and predicate elements on the one hand, and on the other, those where there seem to be none.³ One can cite a declarative as an example of the former and an imperative of the latter.

It can also be noted that Dowty's proposals make no attempt to describe the internal structure of each NP, an aspect which, I suppose, is quite significant in determining whether or not an NP can occur as a subject or as a vocative. Of equal importance is the nature of the constituents that make up each NP, as the examples in (3.1.9) indicate.

- (3.1.9)(a) *The boy come here! [IMPERATIVE].
- (b) *He, what are you doing?
- (c) *John, he must go there. [DECLARATIVE].

As we shall see in the next Section, the subject NP in (3.1.9)(a) must be specified further for it to be subject in the imperative sentence. As for the vocatives in (3.1.9)(b) and (3.1.9)(c), I am assuming an identity of

reference between them and the subject NP's in each case. Except in the case of you, vocatives are not pronominalized as (3.1.9)(b) shows, and what is more, any NP that will be subject, where the above identity of reference is relevant, must be such that can reflect this identity. Thus, there is more to the organization of subject than the syntactic relationship between subject and predicate that Dowty has tried to describe.

From the point of view of the imperative construction, we can say that Dowty's system, like that of Chomsky before it, is grossly inadequate as a model for the treatment of the notion of "subject" and "vocative". The issues raised by these entities in the imperative are more wide-ranging than can be handled by both theories, with all their emphasis on syntax.

On this issue of grammatical relations, Gazdar, Klein, Pullum and Sag (1985) make a number of suggestions in relation to the incorporation of aspects of semantics. Firstly, they point out that notions like "subject", "direct object" and "indirect object" should be related to sentences which express truth values. Secondly, they propose a system in which NP's playing these roles in sentences should be identified as subject, direct object and indirect object according to the order in which they become arguments to functors in structures which express truth values under translations into intensional logic (IL). On this principle, therefore, they identify the subject of a sentence as a "1 - argument". (The direct object and the indirect object are thus "2 - argument" and "3 - argument" respectively).

It is also significant to consider the issue of S-meaning, apart from that of propositions, in the characterization of Subject. Therefore, it appears that Dowty's proposal

can only be realistically applied to sentences which clearly express truth values in translation. The issue that arises now is which sentences actually express truth values in this way. This has thus thrown back at us the question as to whether or not imperatives express truth values.

What we are now beginning to see for the first time is the fact that the notions of subject and vocative NP's in the imperative are closely related to the long-standing controversy about S-meanings, truth-values and propositions in sentences. As we have seen in Chapter One (Sections 1.5 and 1.6), there has not been any satisfactory solution to the problem that the question raises.

The present analysis has tried to demonstrate the inadequacies of approaching the issue of grammatical relations of (and other notions about) subject and vocative solely from the point of view of syntax, whether or not it tries to incorporate thematic notions like "agent-of-action" which I shall examine more closely later in this chapter. We must now try an alternative approach which can take account of the fact that subject and vocative NP's in imperatives are distinct syntactic categories which, in the same sentence, would have an identical referent and perform the same semantic function. In order to cover as many aspects of the problem as possible, it is pertinent to allow the present approach to include certain aspects of pragmatics as suggested above. All this, I hope, will lead us to a fuller understanding of the imperative construction than before.

3.2 Syntax

A) Structural Configurations of Imperative Subject NP's.

We can identify about four subsets of NP's which can be

subjects in the imperative construction. Most of them contain indexical expressions which capture the fact that the referent in each case must be present in the context of use.

ONE: The common features of this sub-group are that each NP must

- (a) begin with a definite article, and,
- (b) end with a post-modifying expression.

There is an important aspect of the structure of these NP's which must be made clear. This has to do with certain elements which function as adjectives in them. Let's begin with an adjective like tall, as in the following examples.

- (3.2.1)(a) A tall boy is waiting for you.
- (b) Jackson is quite tall.

It occurs in a pre-nominal position in (3.2.1)(a). In (3.2.1)(b), it is used predicatively. This is however not exactly the way that the expressions like in the corner behave. We have,

- (3.2.2)(a) The girl in the corner is sitting down.
- (b) The girl is sitting down in the corner.

and there is no case where any such expression can occur in a pre-nominal position like tall. With regard to the imperative subject NP, it is necessary to draw a distinction between adjectives like tall which occur in a pre-nominal position, as in (3.2.1)(a), and expressions like in the corner which occur in a post-nominal position, as in (3.2.2)(a). The point is that this expression can only be a post-modifier of an NP, not a pre-modifier, with a unique relationship with the rest of the NP in which it occurs as we shall see soon.⁴ Therefore, the term "qualifier" [QUA] can be used to describe an adjective which occurs in front of a noun and is a sister to it, and the term "modifier" [MOD] for any expression which occurs in a post-nominal position in a noun phrase and is a sister to the Head N.⁵

The significance of the above characterization consists in the distinction it makes between elements which are sisters to nouns and those which are sisters to noun phrases, without referring to the possibility of their occurring predicatively. Imperative subject NP's which contain the post-modifiers thus have the following configurations.

- (3.2.3)(a) The boy who arrived late yesterday
 (b) The lady to be crowned
 (c) The men standing by the window
 (d) The students in the room

We can represent these noun phrases in the following NP-expansion rules.

(3.2.4) NP -----> Det H

\bar{N} -----> H ({S[+R], VP[+INF], VP[+PSP],
 VP[+PRP], VP[+PAS], PP, ADVP})

where "H" is a symbol representing the head daughter. (See Gazdar et al, 1985).

Examples of expressions which constitute these categories are as follows.

S[+R] : who arrived late yesterday,
 and other relative clauses.⁶

VP[+INF] : to be crowned, and other
 infinitival expressions.

VP[+PRP] : standing by the window and
 similar participial phrases.

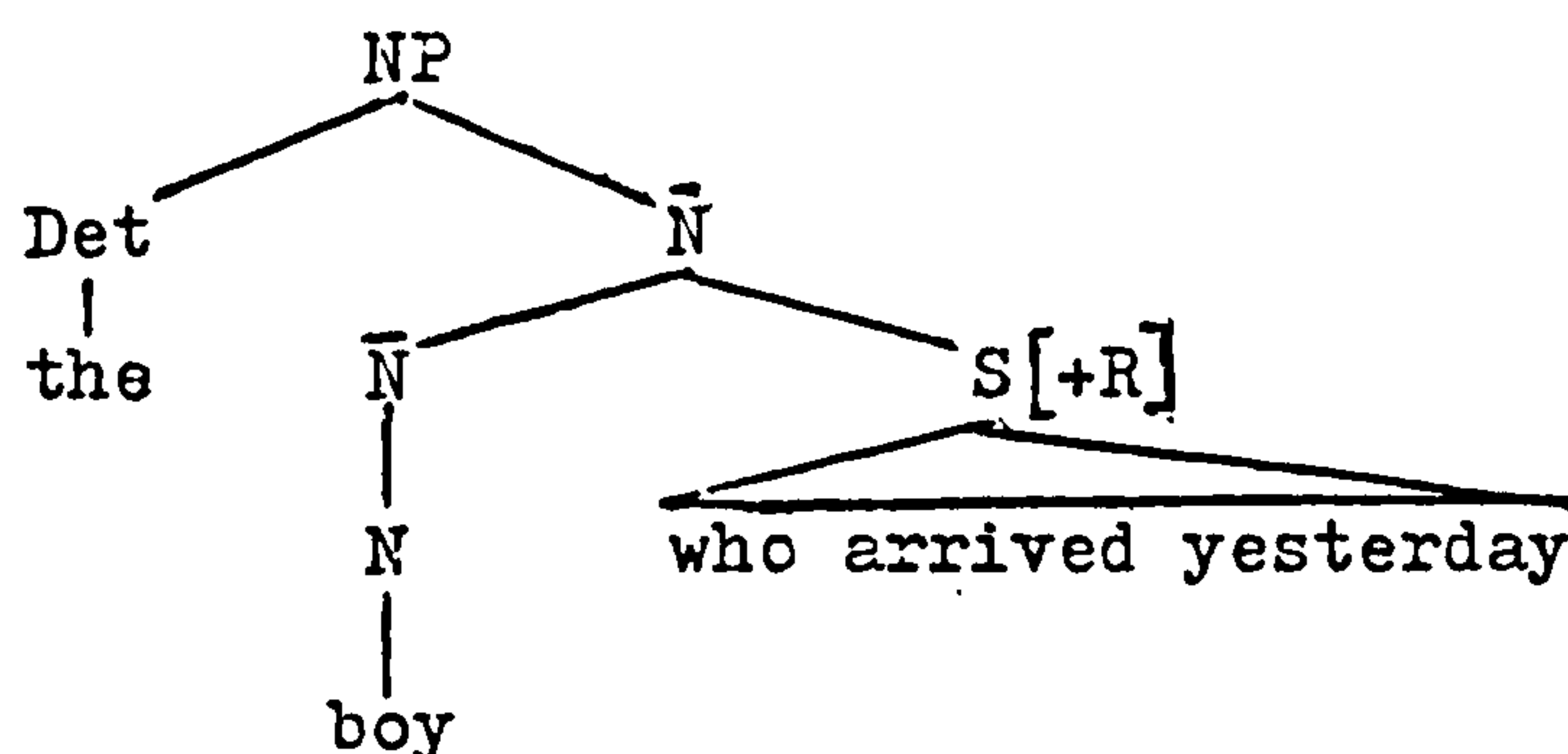
PP : in the room and similar expressions.

N : boy, driver, and similar nouns.

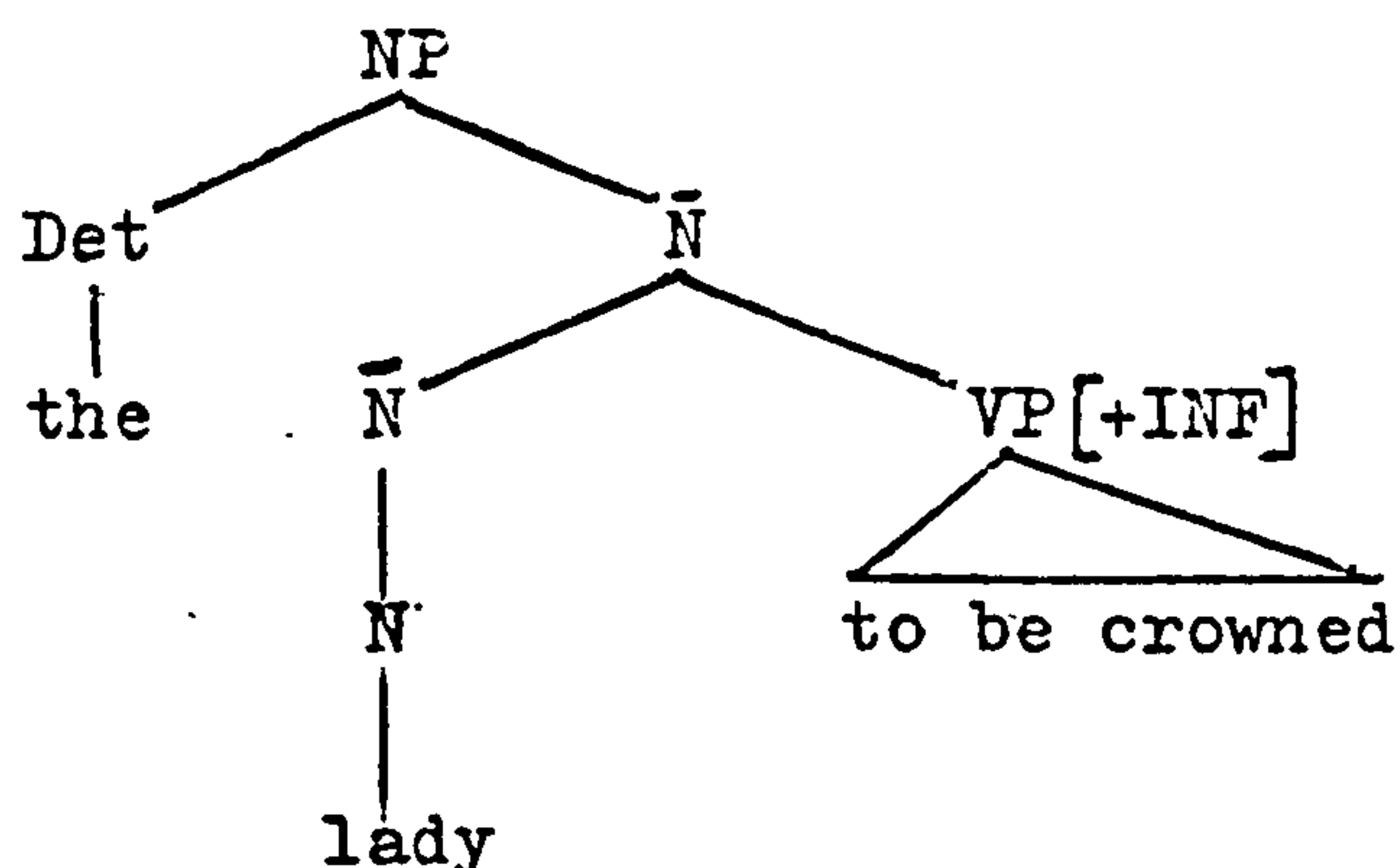
Det : the, some, etc.

We may represent them in the tree diagrams in (3.2.5). We can note that although the post-modifying expressions are varied, the over-all configurations of the NP's are similar.

(3.2.5)(a)



(b)



TWO: This sub-class of NP's is composed of expressions some of which are traditionally referred to as partitives. They include the following:

- (3.2.5)(a) Some of you.
 (b) Five of you.
 (c) The tallest of you.
 (d) Somebody among you.
 (e) The youngest (boy) among you.

There are many varieties of these expressions but most of them are not truly or fully partitive in nature. For example, Selkirk (1977: 302-303) distinguishes between those she calls "simple noun phrases" like

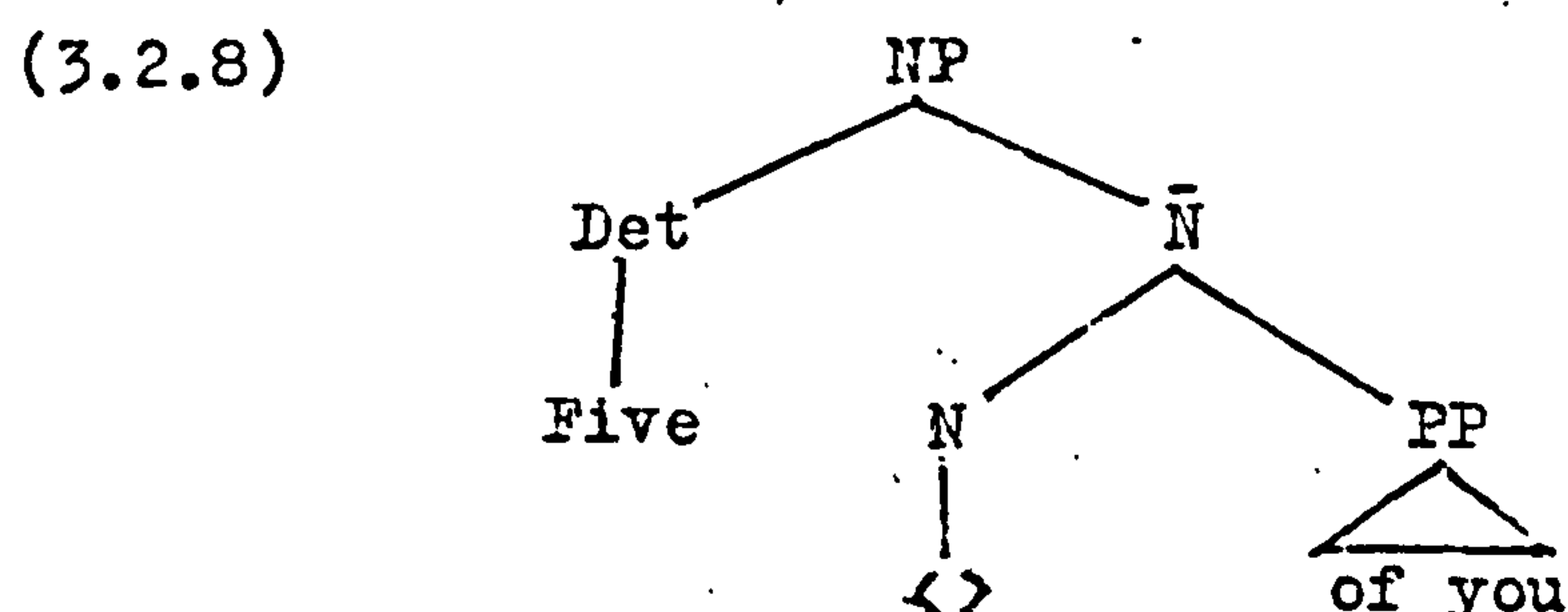
- (3.2.6)(a) a number of objections
 (b) three pounds of that stew meat
 (c) a bushel of the apples
 (d) loads of them

from those she regards as "quantifier phrase partitives".

Her examples of the latter include the following (Ibid.):

(3.2.7) many of $\left\{ \begin{array}{l} \text{the} \\ \text{those} \\ \text{her} \end{array} \right\}$ apples

I quite agree with these distinctions and I would like to say that it is not always the case that an of-phrase modifying a quantified noun would turn it into a partitive NP, as the examples in (3.2.6) show. A tree diagram for an example with of you looks like this.



Proper partitives tend to have ordinary nouns in the positions where we have you in (3.2.8), as we can see in the examples in (3.2.7). As Selkirk has also indicated (p.303), true partitives do tend to have the options of simple forms.

(3.2.9) many apples

but we cannot have

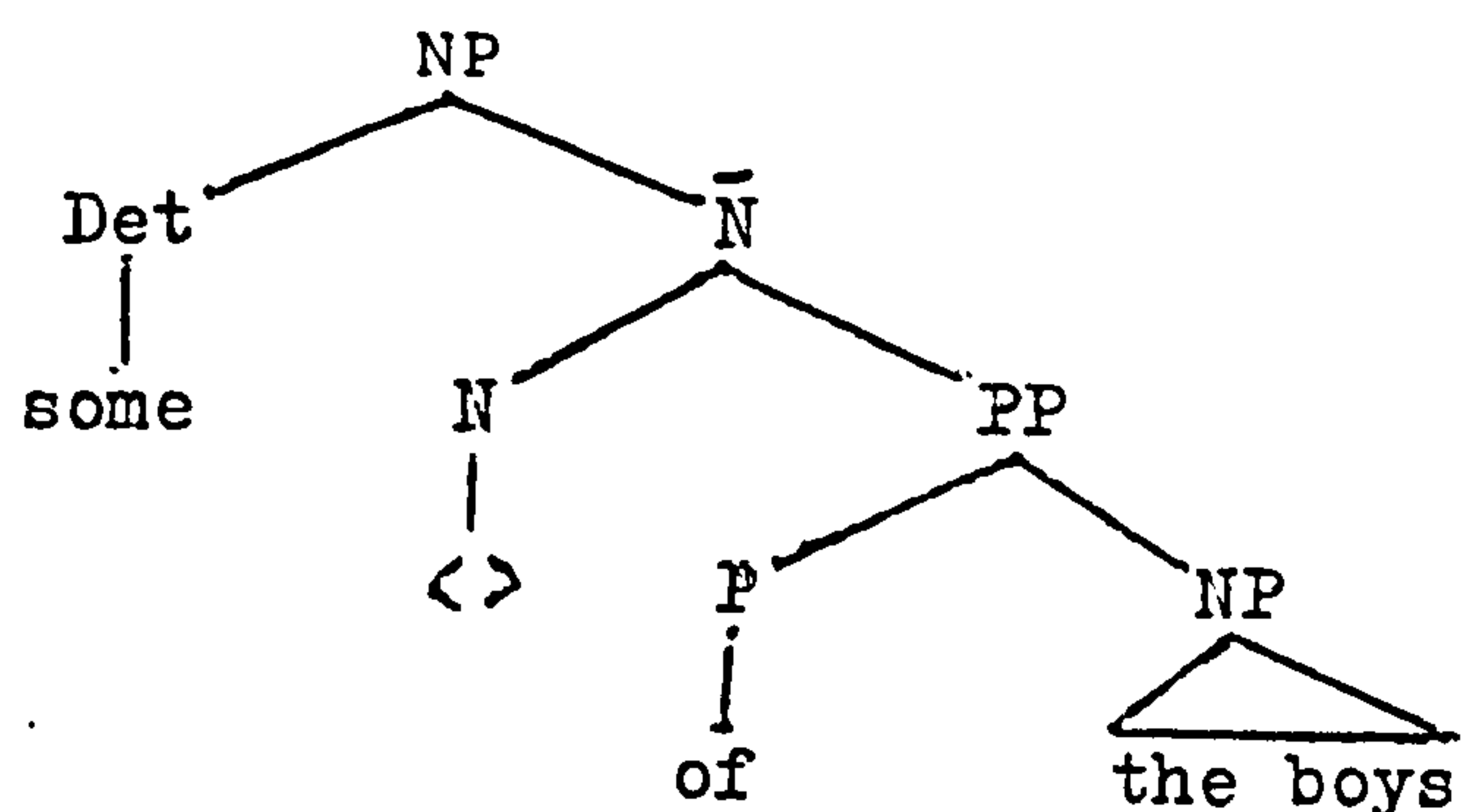
(3.2.10) *Many you.

We must accept though that all of these NP's are what have been called "measure phrases". However, it may be contended that with regard to the imperative construction, the of- and among-phrases are mere modifiers of the noun phrases that go with them. They are thus on the same footing as the modifiers we came across in sub-group ONE of imperative subject NP's above. It is the initial N's that are heads of the phrases; it is they too that carry the quantification, where that is relevant. We shall see later in the chapter what all these modifiers can tell us about the semantic and

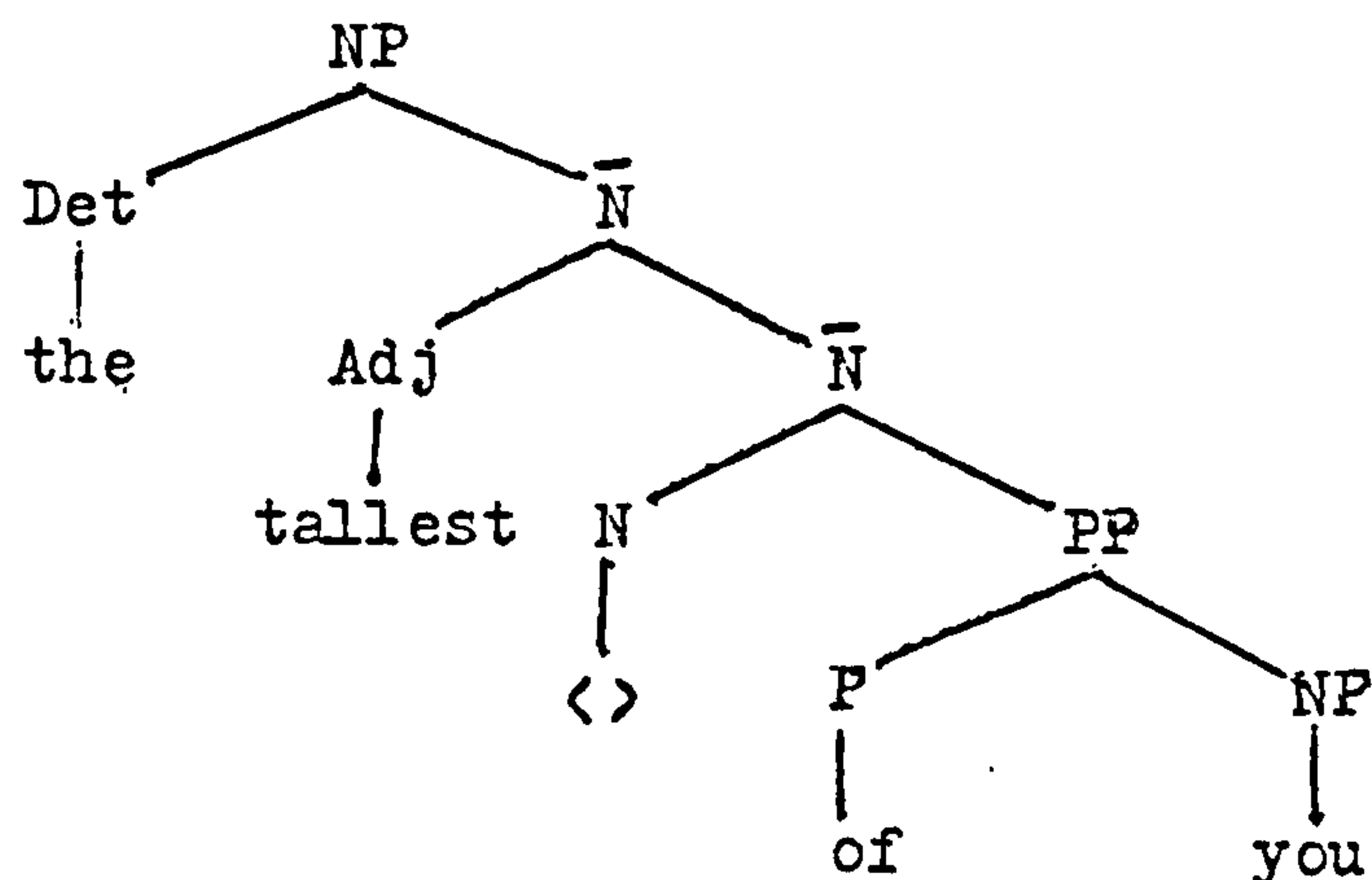
pragmatic conditions in which the imperative occurs.

We can therefore represent these NP's in tree diagrams that are quite similar to those provided for sub-group ONE.

(3.2.11)(a)



(b)



A curious aspect of these NP's is the absence of the Head N's in expressions like the strongest of you, five of you and many of you, as the examples in (3.2.11) show.

THREE: This subset comprises NP's like those in (3.2.12) which ordinarily have the syntactic features [NP +PRO, -DEF, +PER]

(3.2.12)(a) Everybody

(b) Someone

I doubt very much if these NP's should be distinguished from

some of those treated under TWO above. Although it appears to be the case that the phrase among you is presupposed or understood (see Schmerling, 1982: 208) when they are used, each of them now seems to have an individuality of its own as a possible imperative subject. If this is correct, it will be pertinent to examine the semantico-pragmatic conditions that warrant this development in order to determine, among other things, whether or not it is obligatory for the addressee of the speech event to be present in the context of use. We shall return to this in the next section.

FOUR: This last subset consists of the following:

(3.2.13)(a) You boy

(b) You

As we saw in Chapter One, Thorne (1966) has argued that you, as it occurs in (3.2.13)(a), is behaving as a definite article, and so, it is a replacement for the in that environment. Postal (1966: 203) has also expressed a similar opinion. I would however like to say that the issue raised here is more subtle than is generally realized. There appears to be a strong connection between you boy and you as subjects of imperative sentences. The you in (3.2.13)(a) seems to be a pre-modifier that enables its NP to play the same grammatical role as the structure [the + N + MODIFIER] does in the case of the NP's in sub-group ONE. That this should happen is a reflection, I believe, of the nature of the imperative itself. We can therefore say that in that environment, you is more than a definite article, contrary to the views of Thorne. It still carries with it that aspect of its nature which enables it to occur alone as a subject in a position where other NP's would require identifying modifiers to do so. This is a feature of you that makes its characterization as subject in the imperative very problematic.

Therefore, it is clear that in this position, being a definite article or functioning as a part of a definite description is only one of the requirements for imperative subjecthood, as we have seen in the structures (3.2.3) above.

We look at a number of NP's which are similar in structure to some of those we have examined above but which cannot occur in the imperative construction. Our first observation is that the following structure

(3.2.14) [the + N + MODIFIER]

seems obligatory for NP's which look like "identifying descriptions". Consequently, the NP's in (3.2.15) are incapable of becoming subjects in imperatives.

- (3.2.15)(a) A girl who likes swimming.
- (b) A man to plant the flowers.
- (c) Some people looking at it.
- (d) Two men in the car.

It may also be observed that NP's containing demonstratives cannot occur as subjects in the sentences

- (3.2.16)(a) *This boy come here.
- (b) ?That girl sit down.

That these NP's cannot be subjects is not strange because, as noted above, a structure configured as [Det + N] is incapable of occurring as subject unless the first element in the structure has the same grammatical role and semantic interpretation as the example in (3.2.14) above. Similarly, NP's like the (tall) girl do not normally occur as subjects.

We can also note that whereas the addition of modifiers to the structure [the + N] enables the resultant NP's to occur as subjects, this cannot happen in structures like [this/that + N], except perhaps in the dubious case of

(3.2.17).

(3.2.17) ?That boy looking at me come here!

The last group I want to consider cannot also be helped by any post-modifying expression: for example,

- (3.2.18)(a) *My son stand there.
- (b) *My son in the room come out!
- (c) *Your children listen to him.
- (d) *Your children here keep quiet!
- (e) *Their students report for games later.
- (f) *Their students with us keep quiet!

All these NP's raise an important question about the nature of the imperative which I shall return to in Chapter Five. The above patternings of the NP's are given in TABLE ONE.

TABLE ONE

SUB-SET	DET	QUALIFIER	NOUN	MODIFIER
ONE	the		boy	who came late, to sit there, looking at it, in front/there
TWO	the	tallest		of you
	the	youngest	boy	among you
	some			of you
	one			of you
THREE			nobody everybody	(here)
FOUR	you		boy	
			you	

B) Vocative NP's.

Vocative NP's usually constitute separate tone groups in sentences. They are traditionally regarded as "nouns of address"; and, as we have seen in Section 3.1 above, they do not enter into grammatical relations with the verbs of the sentences in which they occur. They seem to divide into two groups. Group (i) consists of proper nouns, personal names.

(3.2.19)(a) Sue, put on your hat!

(b) Wait a minute, Mr. Anderson.

Group (ii) comprises common nouns used as "titles" either in a derogatory manner, as in (3.2.20)(a), where they seem to occur only in sentence-final positions, or as a mark of respect, as in (3.2.20)(b), or for the purpose of showing affection, as in (3.2.20)(c).

(3.2.20)(a) Keep quiet, fool.

(b) Your Excellency, send them away!

(c) Leave that to me, my son.

Vocative NP's are very simple in structure. They rarely exceed two words in length, and so constructions like those in (3.2.21) are unacceptable.

(3.2.21) (a) *A group of boys, stand up!

(b) *Stop that, some boys over there.

However, some expressions which begin with wh-words stand out as clear exemptions to this simplicity of form.⁷

(3.2.22)(a) Open the door, whoever you may be.

(b) Whoever wants to buy one, call
KOKO, freephone 000.

The above expressions contrast with the following, which have to do with actions or words identifying not the addressees of the imperatives but some other objects that participate in the commanded events.

(3.2.23)(a) Whatever you're doing, stop it.

(b). Don't listen to him, whatever he says.

C) Similarities and Differences between Subjects and Vocatives.

It may be argued that as structures used for the purpose of address, vocatives need to have short, simple forms. A preponderance of possible vocative NP's seem to have these forms. However, subject NP's also have such forms, as subsets THREE and FOUR in TABLE ONE show. Therefore, simplicity of form is not restricted to vocative NP's. If the structures in (3.2.22) are anything to go by, the similarity in form between subject and vocative NP's is greater than may be expected. (See Davies, 1981).

- (3.2.24)(a) Alfred, kick that ball away.
 (b) Somebody kick that ball away. [SUBJECT]
 (c) The captain of the team, take it!
 (d) The man at the back come forward. [SUBJECT]

Despite the similarities observed above, the differences between the two groups of NP's are remarkable. Still on the question of form, there is no doubt that subject NP's have a wider range of configurations than vocative NP's. Of particular interest is the nature of the elements that make up each category of NP. Whereas vocatives invariably choose non-locative post-modifiers like on call, in charge and of the team, in examples where such expressions occur, subjects regularly choose locative ones.⁸

- (3.2.25)(a) The owner of this bike, come here!
 (b) The lady in the room answer that call, please.
 (c) The man in charge, come back tomorrow.
 (d) The boy in front stop shouting!

This takes us to the use of comma to mark off the

vocative NP from the rest of its sentence -- one of the most obvious features separating it from a subject NP. The presence of this punctuation mark in the imperative tells us a great deal about the nature of the imperative. It carries the strong impression that the vocative is natural to the imperative construction with regard to form. The nature of this sentence type is such that it does not need to have the subject NP or the vocative NP overtly expressed. The form without any of these is thus said to be the basic form of the imperative. If that is the case, the presence of these two entities in these sentences must be in response to certain needs. It will suffice to claim here that the conditions that necessitate the existence of the vocative are just as strong as those that call for that of the subject, even though it is the latter that has got all the attention in generative grammar.

Another area where there are differences between subject and vocative NP's has to do with intonation patterns. What is significant here is the extent to which they modify the range of intonation contours of a variety of imperatives.

Generally, imperative intonation contours vary in accordance with the specific attitudinal meaning that the speaker wishes to convey. (See O'Connor and Arnold, 1973; Schubiger, 1972, Bolinger, 1977 and 1982). It appears that vocative NP's more readily fit into the pattern that O'Connor and Arnold call the High Drop than subject NP's, except, of course, you.

- (3.2.26)(a) \Burn it. (O'Connor and Arnold, Ibid.: 56).⁹
 (b) \John, |\burn it.
 (c) The'boy who arrived today \burn it.

Although burn still receives the nuclear stress in the sentence, the scope of the pitch fall seems to be smaller.

It is however doubtful whether any subject NP with a shorter structure would have been suitable. Those like nobody and everybody do not seem quite appropriate in such a context. This thus brings us to the case of you.

In most cases, no matter which tone is used (O'Connor and Arnold have identified ten of them), the imperative verb receives a primary stress. But the presence of you as a subject does, at times, shift stress prominence away from the verb to the subject, a feature that vocative NP's do not seem to have. This is often referred to as "contrastive stress". The contrast is believed to exist between the referent of the subject and another entity in the context of use. It could be the speaker, but it need not be.

- (3.2.27)(a) 'You °fight your ^own °battles. (O'Connor and Arnold, Ibid.: 81, using the "Jackknife".
 (b) 'You su°ggest an al^terna,tive!

This kind of stress also represents a significant feature that intonation has in the imperative. It shows the uniqueness of this sentence type. For example, it is probably the only means of separating the declarative in (3.2.28)(a) from the imperative in (3.2.28)(b).

- (3.2.28)(a) You 'drive your °car to \work.
 (b) 'You °drive°your °car to \work.

The contrastive stress on you combines with the falling tone on work to mark out the sentence in (3.2.28)(b) as an imperative. The declarative in (3.2.28)(a) has some of the general intonation features generally associated with imperatives: a primary stress on the verb and a falling tone.

To summarize, I would say that by and large NP's that can occur in imperatives as subjects tend to have certain

structural configurations and use certain post modifying expressions in order to do so. Other NP's which have similar configurations, but lack the appropriate post modifiers, cannot occur as subjects. (See TABLE ONE above). Quantifiers associated with such modifiers, even though they are not overtly expressed, can also function as subjects. Vocatives do not have these post modifiers and so it is not the case that subject and vocative NP's can inter-change positions in the imperative.

Like subject NP's, vocatives also come from a highly restricted set of NP's which are made up of those which are either personal names, or nick-names or other forms of address used for a variety of reasons.

There is a great deal of similarity in form in some of the NP's. But the differences are notable. They occur not only in their syntactic functions but also in their deployment of the intonational conventions of English. It has also been noted that the use of contrastive stress by the imperative subject NP you is one of the means by which the imperative sentence type can be distinguished from other sentence types.

3.3 Semantics

A) Compositional Semantics of Subject and Vocative NP's.

The principle of compositional semantics rests on the claim, noted in Chapter Two, that the meaning or sense of a complex expression is a function of the meanings or senses of its parts. One consequence of this principle is the need to identify the parts that make up such complex expressions. They are then assigned logical TYPES which serve as inputs to the rules for forming such a complex expression.

I intend to apply this principle here mainly to subject NP's in imperatives. The vocatives of the sentences will also be considered, at least for the purpose of ascertaining the kinds of logical TYPES which they are. Nevertheless, it is the subject NP's that present the main problem in this aspect of the analysis.

(1) CATEGORIES

Montague Grammar has a set of expressions for some non-empty expressions, which include the following (see Montague, 1973).

(3.3.1)	e	=	{an individual or entity}
	t	=	{sentence category}
	IV	=	{run, walk, talk, rise, change}
	TV	=	{find, lose, eat, love, date, etc.}
	IAV	=	{rapidly, slowly, voluntrarilly, etc.}
	T	=	{John, Mary, Bill, ninety, he ₀ , etc.}
	CN	=	{man, woman, park, fish, pen, etc.}
	DET	=	{every, the, an}

All of these expresions, except the first two, are basic expressions. One interesting aspect of the expressions is that most of them are categorially defined to combine with certain categories only. For example, the category T is defined as t/IV. By the rule of functional application, it can combine only with IV expressions to produce an expression of category t, as in Dowty's Subject-Predicate Rule in Section 3.1. Another example is the relationship between the basic expressions man and the. The category DET is defined as T/CN whereas man belongs to the category CN. The complex expression the man will then be a member of the category T, again by the rule of functional application as follows:

$$(3.3.2) \quad T/CN \cdot CN = T$$

For example, from the members of categories T and IV (see (3.3.1) above), the following sentences can be produced through the rule of functional application:

- (3.3.3)(a) John sings.
- (b) The man smiles.

I have gone into some detail about the formation of complex structures in Montague Grammar in order to show that its rules (which relate to declaratives) are unsuitable for the imperative construction. This is not a rejection of the theory itself, but a realization that the imperative is unique (and problematic) among sentence types, especially with regard to the categorial analysis of its subject NP's and VP's. I elaborate.

- (a) It does not appear to be the case that imperative subject NP's combine with their verbs as T's and IV's to produce t-expressions. Combinations of this sort, as pointed out in Section 3.1, are suitable for sentences that express propositions which may be described as true or false.
- (b) T-phrases in Montague Grammar can be subjects, objects etc., but this is not so in imperatives; e.g., a boy.
- (c) Although it is the convention in this theory to see NP's like the man, and John as members of the same category, it fails to capture the situation in the imperative where such expressions do not perform exactly the same range of syntactic functions as they do in declaratives. The grammatical relation of subject in imperatives is an example.

We are again confronted with the fact that grammatical principles and devices that are suitable for declaratives may

not be so for imperatives. It is thus pertinent to find out the nature of the categories that make up possible imperative subject NP's on the basis of the principle of surface compositional analysis. (See von Stechow, 1980, and Janssen, 1981).

I would say that a compositional analysis of imperative subject NP's must reflect two features of the constructions, (a) the fact that they are related to the context of use of the sentences, and (b) the fact that they do not enter into any functional relationship with their co-occurring VP's as it is the case in declaratives. To simplify the discussion, I shall analyse only the following construction

(3.3.4) the man in the corner

as a possible imperative subject. The consequence of having the feature (a) is that the translation of the (which exists in MS and some varieties of predicate logic) as

(3.3.5) $\lambda P[\lambda Q\exists y[\forall x[P\{x\} \leftrightarrow x = y] \wedge Q\{y}]]$

(Dowty et al, 1981: 195).

must be ignored since it fails to capture the semantic nature of the the that occurs as the first component of the above expression. So, this translation, which reflects Russel's (1905) characterization of the, does not make any reference to any particular context at all. On the contrary, it appears to be just suitable for the interpretation of the where it occurs in sentences which express truth values, as the last section of it shows (see also Strawson, 1950, and, Johnson-Laird and Garnham, 1980). This brings in the feature (b) above, i.e., that the NP's are not defined to function as arguments to predicates as functors. The immediate consequence of taking the above aspects of the NP's into account is that it justifies the treatment of imperative subject NP's as partial functions. In this sense, they are interpreted here as functions from the Context of Use, designated by the

symbol s, to a set of individuals.

Let's regard the set of possible imperative subject NP's as members of a set represented by the semantic type T^{im} , for the sake of convenience. (Other symbols representing two other components are given in TABLE TWO below). It can then be said to belong to the semantic TYPE defined as $\langle s, e \rangle$. As explained in Chapter Two, Section 2.4 above, the notion of the Context of Use is crucial for the imperative construction. It is for this reason that I hesitate to characterize the TYPE $\langle s, e \rangle$ simply as a denotation of an individual concept as it is done in MS. The analysis desired here is the type which will not only be sensitive to modifiers like

(3.3.6) {who came here yesterday
 {looking at the window
 {in front of the door
 {to take up the posts

but also the semantic features that mark out the imperative in the following sentences.

- (3.3.7)(a) The man in the corner sweeps the roads.
 (b) Will the man in the corner sweep the roads?
 (c) The man in the corner sweep the roads!

Whereas the NP the man in the corner is subcategorized in the declarative and, probably, the interrogative in (3.3.7)(a) and (3.3.7)(b) respectively to combine with their VP's, it is a different matter in the example in (3.3.7)(c), as I shall explain further in Chapter Five.

We now have to provide a categorial definition of possible imperative subject NP's on the basis of the rule of functional application.¹⁰ The essence of the present description of the phrases which are members of the Category T^{im} consists in the fact that they will not be defined to combine with IV-phrases in imperatives as T-phrases do in other sentences.

The various elements in the NP's of the imperative which we have been discussing are set out, with their categorial definitions, in the following table.

TABLE TWO

Category	Semantic TYPE	Expression
Tim	$\langle s, e \rangle$	the man in the corner the shortest man among you the prettiest of you Five of you Somebody among you nobody (among you) everybody here etc.
K	$\langle s \langle e, t \rangle \rangle$	man who came here yesterday woman to sit on the chair man sleeping on the sofa boy in the kitchen $\langle \rangle$ of you girl among you girl here etc.
X	$\langle s \langle e, t \rangle \rangle \langle s, e \rangle$	the

We would like to put vocative NP's under a similar category as those of subject NP's. This category may be called Category v^m . The significance of this will become obvious later. Members of this category are normally not defined to combine with any verbal category by any rule.

FORMATION RULE

Although the rule of functional application has been rejected as a means of capturing the subject-predicate relationship in the imperative, it is quite adequate for defining the internal structural set-up within each subject NP. I can therefore provide a recursive definition of the categories as follows:

- (3.3.8) If A is a syntactic category, and B is a syntactic category, then A/B is also a syntactic category.

In the present proposal, the definition in (3.3.8) ensures that expressions of the various categories are combined in appropriate manners in algebraic operations similar to the example in (3.3.2) above.

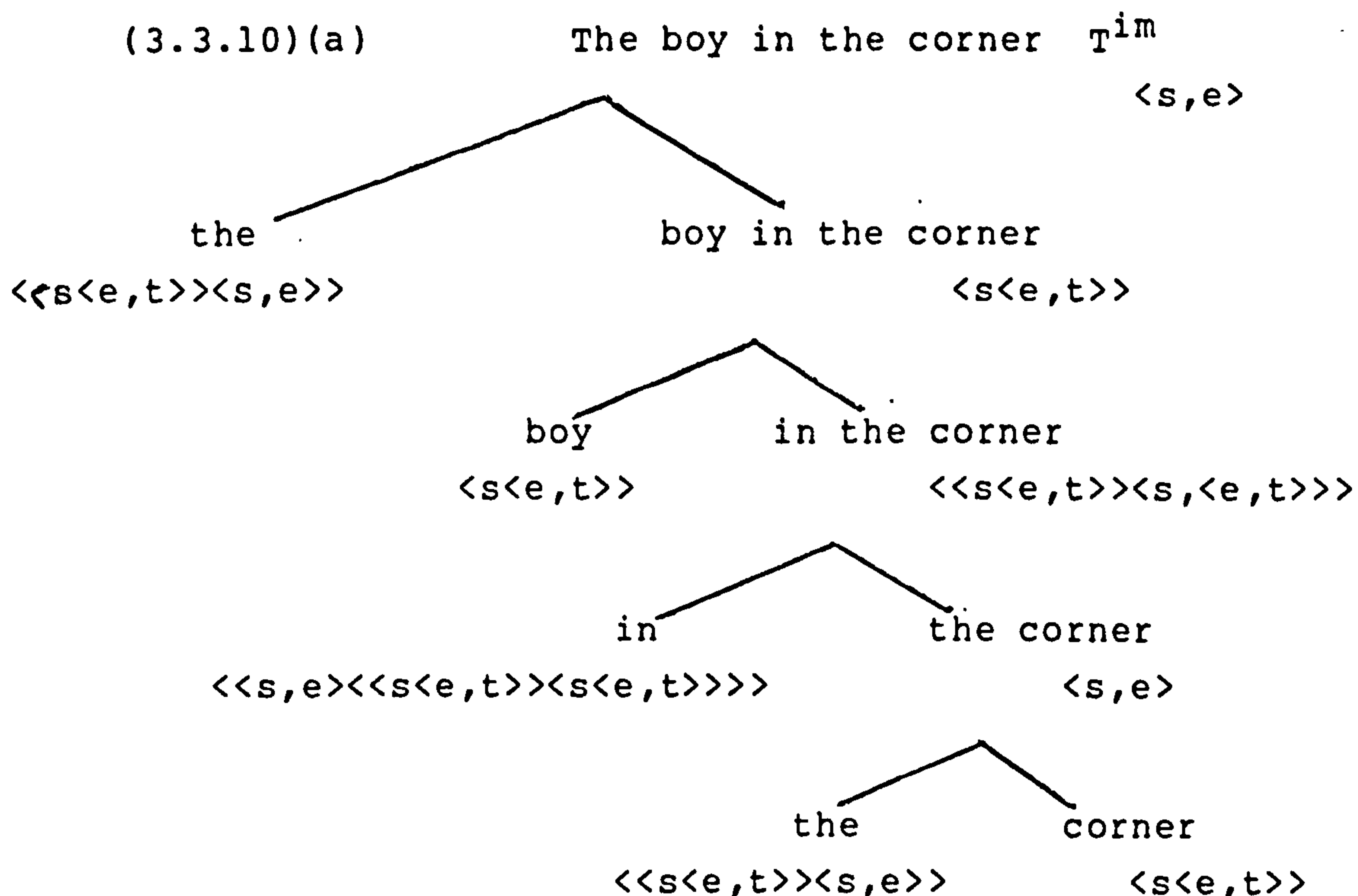
Quite unexpectedly (in view of their restricted syntactic functions in imperatives), vocative NP's present a tricky situation here. I do not want to claim that a proper noun like John has a different meaning as a vocative in imperatives from what it has as a vocative in declaratives or some other sentences. At the same time, it is not the case that when you say,

- (3.3.9) John, wait for me.

you may possibly be using the sentence within an "oblique context" in the sense that in any possible world in which there is John, you want him to wait for you! Therefore, the indexical conditions which surround the use of NP's like John as vocatives in the imperative, as pointed out in Chapter Two, Section 2.4, must therefore be considered. I therefore represent vocatives by the syntactic category v^{im} as stated above.¹¹ I shall return to the issue of what semantic type which the category v^{im} should have shortly. I shall consider the notion of the context of use, and how the above logical TYPES fit into them, when I attempt a model theoretic interpretation of these sentences in Chapter Five.

The above formation rule is a rule of functional application that applies to subject NP's in imperatives. It cannot be applied to vocative NP's like John and Sue if they do not form complex expressions with other entities.

The rule also motivates the analysis tree in (3.3.10) in which the semantic TYPES are specified.



The name of the category that represents expressions which function as vocatives in imperatives is given as v^{im} . There is reason, however, to suppose that the semantic TYPE of vocatives may not be different from that of subjects in imperative sentences. The reason for this is the fact that although the two sets of NP's are distinguished syntactically, they perform the same semantic role in imperatives (i.e., that of agent-of-action). Furthermore, since Group (ii) vocatives (see Section 3.2 above) are related to the Context of Use in the sense that their specifications may be dictated by the state of affairs in such a Context, e.g., the leader of this team, it may be claimed that their semantic TYPE is the same as that of T^{im} , i.e., $\langle s, e \rangle$ -- functions from the contexts of use to individuals. Group (i) vocatives, i.e., personal names, are problematic since names are fixed designations and so are not determined by the Context

of Use. It is therefore uncertain whether they have the semantic TYPE $\langle s, e \rangle$, like Group (ii) vocatives, in view of the fact that they may not refer to possible worlds as stated above, or (since they are fixed designations), the semantic TYPE $\langle \langle s, \langle e, t \rangle \rangle, t \rangle$ -- a set of properties of individuals -- which T-Phrases have in Montague Grammar. Consequently, The category name V^{im} is used here as a convenient device for referring to both sets of vocatives; otherwise, at least Group (ii) vocatives are subsumed under the same semantic TYPE as T^{im} , for different categories may have the same semantic TYPE in Montague Grammar.

(3) SEMANTIC INTERPRETATIONS

As stated above, the sort of semantic TYPES which we assign to these NP's demonstrate the types of semantical objects which they are. Let's consider, in some detail, why these NP's cannot correctly be said to have been quantified into intensional contexts.

- (i) none of them obligatorily occurs within the scope of \Diamond , \Box , P or F : entities which are known to have the capacity to create intensional contexts.¹²
(See McCawley (1981: Chapters 10 and 11) and Dowty (1981: 162-170).
- (ii) It is generally agreed that the imperative does not denote truth values (see Chapter One, Section 6). Therefore, its propositional content is not as definite as that of the declarative.
- (iii) It is obvious, from the members of Category T^{im} that the imperative can only be interpreted at CURRENT INDEX and so any NP that is to be subject or vocative in it must be related in some way to this current index which has to do with the Context of Use.

- (iv) Finally, I must thus give subject and vocative NP's in imperatives extensional, not intensional, interpretations, as I have done with the nature of the semantic TYPES which I have assigned to them, where (a) subject NP's refer to individuals that are indexically specified, and (b), where vocative NP's refer to entities which do not exist in every possible world or at every index, but at the current index (or in the context of use). Consequently, official or affectionate forms of address and, possibly, personal names are to be given such interpretations as are described above.

The semantic interpretation of the imperative is therefore a problem which requires a modification of the traditional approach to doing a model-theoretic analysis. If the issue is to be pursued, it must be clear that the conception of the nature of the relevant intensions that will be characterized for the purpose of determining the propositional content of the imperative is distinguished from the conception of the nature of the intensions which are characterized where the entire sentence is susceptible to a surface compositional analysis as in the case of the declarative. It may be observed that whereas the identification of the propositional content of the imperative seeks to capture the way in which the imperative may be said to be understood or the semantic function it is used to perform, a surface compositional analysis of the construction seeks to identify not only how the various parts of the sentence are interpreted, but also how the sentence organizes the denotations of such components, as the example in (3.3.10) shows. Whereas the notion of the Context of Use is given prominence in the latter approach, it is not so in the former, as we shall

see in Chapter Five, Section 2 below.

B) Semantico-Pragmatic Characteristics of Subject NP's.

Some of the aspects of imperative subject NP's that an adequate account of imperatives cannot ignore concern the rather dominant role that you plays in the imperative and the ever-present issue of the so-called zero-subject. As for the first issue, I tried, in Chapter One, to cover the arguments about the involvement of you in Reflexivization, Deletion, Tag-Construction and the claim that it might perhaps be the only real subject NP for imperatives. (See Sections 1.1-1.3). What most of the views expressed lack is an attempt to consider the semantico-pragmatic features that may at least in part be associated with the role that you plays in the sentences

Examples like those in (3.3.12) have been used to try to justify the claim that you was indeed the "understood" subject in subjectless imperatives. (C.f. Chomsky, 1955, 1975; Wasow, 1979; Helke, 1979).

- (3.3.12)(a) Love yourself.
- (b) *Love myself.
- (c) *Love himself.
- (d) *Love herself.

A semantico-syntactic approach to these sentences cannot hold, as the syntax-based approaches of the above-mentioned linguists have done, that only you could have been subject in (3.3.12)(a). In the first place, the subject of this imperative sentence does not have to be you for yourself to occur grammatically as the object of love in the sentence as the following examples show.

- (3.3.13)(a) The boy making that noise behave yourself.
- (b) The girl who broke the glass present yourself to your teacher.

The question we really have to ask is why does yourself occur in these sentences even though the second person pronoun you has not been used. I agree with Hausser (1981: 251-258) that the occurrence of the as in each sentence in (3.3.13) induces an existential presupposition. As I have argued above, this means, in the present case, that the referent of the NP must be present in the context of use. It follows therefore that in relation to the speaker, such an individual occupies the position of second person. So, the subject does not have to be you for the object of the verb to be yourself. Since the referent of the subject is present, the form of the subject is thus determined by the manner s(he) is identified by the speaker.

The significance of this analysis lies in the fact that it resolves the problem of requiring every subject of every imperative sentence to have a [+ II person] feature (see Stockwell et al (1973: 646), a condition which raises the problem of how to make third-person NP's have second-person features and at the same time keep their identities as third-person NP's. Furthermore, it exposes the inadequacy in the suggestion of Culicover (1976: 149) that you deletion was possible in imperatives because they were AUX-less. The examples in (3.3.13) cast a serious doubt upon the correctness of this claim. (See Chapter One, Section 1.3).

The problem raised by zero-subject can be resolved in the same way. Since the presence of the speaker and the addressee in the context of use is no longer in doubt, it is pertinent to find out if we can see some logic or some pragmatic necessity in the manner in which the former selects the members of the set of possible imperative subjects. In this sense, it is useful to view possible imperative subjects as if they constituted something like a semantic field. Let's assume that this field is divided into three sets of subjects -- (A), the fully specified NP's, (B), the pronoun you and

(C), the so-called zero subject. (See example (3.3.14) below). It is claimed that with regard to descriptive specificity, there is a relationship between the subjects such that the subjects that form (A) are the first choice and that in (C) is the last choice. The implication of this is that the speaker is likely to use the zero subject only when there is no need to use you. It is thus the case that the speaker has two main sets of choices: (i) that between full NP's and you, and (ii) that between you and the zero-subject. We therefore do not have a situation where the speaker is confronted with the choice between the full NP and the zero-subject in any one token of the imperative sentence.

However, if such a choice were to be made, and the speaker used the full descriptive subject NP where the zero-subject would do, and perhaps be expected, it would be rather odd, at least, from the point of view of the addressee, because the zero-subject could only have been sufficient because there was no danger of ambiguity with regard to the identity of the addressee. Where the zero subject is used, a personal name may also be used as a vocative, if a specification of the addressee is required for any reason. All this is possible because both the speaker and the addressee(s) are present in the context of use, as I have explained above. The semantic field showing the relationship between the sets of subjects with regard to this descriptive specificity may be set out as follows:

(3.3.14)

A	B	C
The lady in a red gown The student to push it The boy who came today The girl sitting there	You	Zero-Subject

We now have three levels of identification (A-C) in response to the semantico-pragmatic relations between the speaker and the addressee, or in accordance with the factors at work in

the context of use. Level A represents "descriptive identification" (see Searle, 1969: 86); B, what may be called pronominal identification and C, contextual identification.

The three levels of identification need not take place in that order in the same speech context, although this is not impossible. But it is certainly the case that you have to introduce your addressee into the imperative speech event with Level A identification, where it is relevant to do so, BEFORE you can use the Level B option, thus utilizing a system that parallels the anaphoric use of pronouns. In the imperative, the emphasis is on the identification of the addressee and so the notion of a speaker's discourse model in which the speaker simply gets another person to take part in his or her speech event (see Johnson-Laird and Garnham, 1980) does not apply. It must be noted that where Level A is desirable (say in a situation where you have to pick out your addressee from a large audience), the need for contrast or emphasis cannot allow the B option to take precedence over it. So, there is some logic governing the use of the various choices that are available.

The position of the Level C option, the so-called zero identification, is now becoming clearer. It can ONLY be used when there is no need (pragmatic, socio-economic or communicative) for the B option to be used, as stated above. The common view on this, that the C option is used when there is no danger of ambiguity, is thus subsumed under the conditions for the use of this option. This is perhaps the pragmatic condition. As I have said before, I shall return to this topic in Chapter Five. It is then I shall account for how subject NP's receive denotations in the context of use of imperative sentences.

I now take up the issue of the scope of reference of imperative subject NP's. On this matter, Davies

observes:

It was seen that an overt subject is provided in an imperative only if it provides some information which could not be inferred from the corresponding subjectless imperative, and that this helps to explain why such subjects are typically understood to designate some set of people other than that of all and only the addressees. (Davies, 1981: 400-401).

This observation illustrates how difficult it is to be accurate about the things that happen in the imperative construction. Davies's observation does cover the case in the following examples:

(3.3.15)(a) Gather in the hall tomorrow.

(b) The people of this village gather in the hall tomorrow.

The inclusion of an overt subject in (3.3.15)(b) widens the scope of reference of the zero-subject in (3.3.15)(a), as Davies has said. But this is not often the case. Other elements in the sentence may come to the aid of the zero subject to widen its scope of reference "from all and only the addressees". In addition, we must not forget the important role that is played by the cultural norms of the society, an aspect that should also be covered by the principle of "mutual knowledge" (see Smith, (1982)), and also by the fact that certain adjectives have presuppositions (see Kiefer, 1978), as we can see in the example in (3.3.16).

(3.3.16) Keep your village clean.

This injunction may be addressed to a group of villagers by a government health officer. But the presence of your in the sentence not only specifies the village but extends the injunction to each and every person who lives in it, even though s(he) may not be present in the speech situation. This interpretation is reinforced by the cultural presupposition that the business of keeping the village clean is the business of all the people of the village, and even

beyond. So, again, the cultural presuppositions surrounding the word clean (encapsulated in the saying "Cleanliness is next to Godliness") enjoins the message in this sentence (3.3.16) on everybody -- those who live in the village as well as those who visit or go across it. This simply illustrates the magnitude of the problem of accounting for the nature of the imperative and the scope of its interpretation.

In sum, I would like to say that the semantico-pragmatic interpretations that can be given to the NP's that function in imperatives as vocatives and as subjects are more complex and varied than we generally suppose. It is therefore not a mark of under-development (see Schmerling 1982 and 1983) that this sentence type does not deploy as wide a set of NP's as other sentence types do. This has to do with the semantico-pragmatic conditions surrounding the nature of the construction, and the context in which it is used. We have seen that a purely syntax-based approach cannot capture all the significant factors that are at work in the organization of this sentence type, and in some cases, like the claim about you deletion, could be quite misleading.

C) The Notion of Agent-of-Action

Of increasing interest in the study of imperatives in English is the issue of whether or not the referent of the subject NP must be the agent of the action specified in the sentence. As this topic has to do with both the main topic of this chapter and those of the subsequent chapters, I shall try to discuss the appropriate aspects in each of the chapters. Here, therefore, I shall limit myself to those aspects that relate to the NP's in question as well as to general matters relating to the topic.

Schmerling (1982) refers to many of the illocutionary

forces that imperatives are used to convey. She seems to make two broad distinctions in these constructions with regard to these forces: on the one hand there are those that constitute orders or impose directives, and on the other, there are those that do not involve "the imposition of an obligation on some listener" and those she describes as

"hocus-pocus commands [in which] we cease to find any notion of subsequent intent or cognition of any sort on a listener's part, if indeed the notion of an actual listener is at all relevant". (Ibid.: 211).

The first group consists of imperatives as in (3.3.16). Her examples of the second include the following (p. 211) :

- (3.3.17)(a) Sleep well. [WISH]
- (b) Walk! [HEALING]
- (c) Hear! [HEALING]
- (d) Please don't rain. [HOCUS-POCUS]

She refers to the possible use of (3.3.17)(b) in a ritual and the use of (3.3.17)(c) to heal deafness without the addressee hearing it, and imagines a situation in which someone may utter (3.3.17)(d) when preparing for a picnic. She argues that compliance is not possible BEFORE the imperative in the (b) case is uttered, thus suggesting that it is the speaker (or even the sentence itself) that brings about a cure in such a situation, since the addressee cannot be said to have cured himself or herself. I should say that this case borders on the supernatural and so, cannot even be related to one of the felicity conditions for the use of the imperative, i.e., that an addressee may not be given an order which s(he) cannot carry out (see Searle, 1975). Schmerling also seems to claim that the imperative in the (c) case can produce a cure without the addressee being able to hear it. This is not a strong point to make because it is self-evident that the sentence would not have been used in the first place if the addressee was expected to hear it. What the facts of life demand on such occasions have been complied with, since the deaf person is present and the person with the POWER to heal

(see Austin, 1962) is there too to pronounce "the words". Finally, she uses the (d) example to argue that an imperative may be addressed to an inanimate object or an object that does not exist. Indeed, this is a good example of the use of a figure of speech: an apostrophe. It is certainly not the case that imperatives cannot be used in this way.

The trouble with Schmerling's examples is that they depart from the day-to-day use of the imperative in interpersonal communication for its use in areas that are not clearly understood. She thus seeks to base her linguistic theory of the imperative on data which operate on principles which she fails to explain. For example, the power to use an imperative like (3.3.17)(b) in a context similar to the one which she describes, and with the same result, does not belong to ordinary human beings, and this is an aspect she fails to consider. Therefore, with regard to the use of imperatives in cases that have to do with matters like miraculous healing, it is necessary to realize that the aspects that pertain to language and those which relate to the supernatural seem to overlap and so it will be incorrect to base a linguistic theory them. While Schmerling concedes in one sense that the addressee may be present (as the deaf person is), she claims in another that their presence or absence makes no difference as long as the sentences serve their purposes.¹³ She declares:

The uttering of a (categorical) imperative is an attempt thereby to bring about a state of affairs in which the proposition expressed by the imperative is true. (Schmerling, Op. cit.: 212).

Serious questions are raised here. What proposition is expressed? What state of affairs is to be brought about? How and when is such a proposition true (or false) if it can be? Schmerling provides no answers to these questions. However, I shall take up the issue of the propositional content of the imperative as well as other matters relating to it in Chapter Five later.

As we saw in Chapter One (Sections 1.5-1.6) nobody has claimed that imperatives have no meanings. But this is a different matter from saying that they have propositional contents or that they express propositions that are true. The analysis in Chapter One has shown clearly how unsatisfactory it is to turn an imperative into a declarative in order to capture this proposition said to be expressed by the former. As we shall see Chapter Five, it is more satisfactory to determine the "fulfilment conditions" for the organization of these sentences, which can reveal their real nature, than to suppress the grammatical mood category of the imperative in order to identify their "propositional content".

One aspect about the imperative that has been ignored concerns the relationship between the specification of an action to be executed and the actual performance of the action. There is nothing in the categorial structure of the imperative which ensures that the action specified in it must be carried out. You may well ask someone to do any of the following:

(3.3.18)(a) Mike, wash my shirt.

(b) Close your eyes, Mike.

but the addressee may simply disobey the order. But the sentences are not less of imperatives because the addressee has not made them "true". This explains why a categorial analysis of imperatives must be kept distinct from a speech acts analysis of them. In the latter, we can identify the exact illocutionary forces that have been expressed, the extent to which they have been complied with, and on the Pragmatic Principle of Relevance, (see Sperber and Wilson (1982)) draw conclusions like this:

the propositional content of a request is any proposition; however, a request, (as opposed to a mere

wish) is an explicit attempt to get the requestee to behave in such a way that the proposition will be true.
(Sperber, 1982: 47)

and the propositions that would be "true" in the cases of the sentences in (3.3.19), I dare say, would be denoted by declaratives like the following:

- (3.3.19)(a) Mike washes my shirt.
- (a') Mike has washed my shirt.
- (b) Kate closes her eyes.
- (b') Kate has closed her eyes.

I shall return to this topic later.

To summarize, I would say we have seen that the addressee, where it is physically and pragmatically feasible, is always the agent-of-action. This is so because the imperative is related to the context in which it is used. It is true that an action or a set of actions may or may not follow its use, but none of these can add to, or subtract from, its form as a sentence type, nor from the motivation of the speaker in using the sentence in the first place. It has also been argued that the identification of a propositional content of the sentence involves tracing it from source to execution, and that this entails the use of declarative sentence form to convey. It has been stressed that the state of affairs that is achieved when the specified action is carried out does not form a proper part of the study of imperatives as a syntactic mood category. It is thus the case that we must interpret imperatives like declaratives, broadly speaking, if we intend to compute the set of possible worlds in which they may be true or false.

3.4 Conclusion

We have seen in this chapter some aspects of the imperative construction which have proved that they properly

belong to a unique sentence type. For example, we have seen that the Θ -theory of Chomsky and Dowty's theory of grammatical relations are quite incapable of handling the situation presented by the imperative construction. It has been revealed that the ability of referring NP's to occur as subjects or as vocatives is constrained by certain conditions. These include the need for common nouns to be either preceded by a definite article and then post-modified by mainly context-related expressions or to be indefinite third person nouns with a capacity to accept some addressee-related post-modifiers. It has also been observed that you can occur either alone or as a ~~determiner~~ to a common noun because it satisfies the condition of relating the subject NP to the context of use.

The imperative vocative has been seen to be equally context-oriented. Possible vocatives come from two small subclasses of NP's - personal names and other forms of address - which, like the subject NP's, are syntactically detached from their predicates, but stand in no weaker position than subjects as possible agents of the actions specified in the sentences. We have noted the other similarities and differences between these imperative elements not only with regard to their structural configurations and functions, but also in relation to the unique role that intonation plays in using the phrases (especially you as a subject) to separate imperatives from other sentences as a separate mood category.

The compositional analysis of the phrases has revealed that the current proposals about the various categories of English complex expressions fail to make correct predictions about the semantic nature of imperative subject NP's. It has been demonstrated that it is the semantic functions of the categories that delimit them into minimum units. Those of

imperative subjects were found to be again different from those of other sentences in the language. **Certain basic** categories were identified in each complex subject NP, and they combine by means of the rule of functional application.

The semantic TYPES to which imperative subject and vocative NP's belong were established and they reflect the fact that the noun phrases are not quantified into intensional contexts. Both as categories and as semantic TYPES, all these NP's reflect the fact that unlike declarative subject NP's, they cannot enter into functional relationships with the predicates of the sentences. The present analysis sees this as the most significant feature that distinguishes the imperative as a unique sentence type. It underlies the form of the verb as well as other more apparent aspects of the construction.

In addition to the syntactic and semantic features of the NP's, I have also examined their semantico-pragmatic characteristics and the role of the addressee as the agent of the action specified in the sentence. With regard to semantico-pragmatic factors, I have identified some semantic relationships in the deployment of subject NP's in the sentences and established the basis for the apparent, dominant role that you plays as a subject NP in imperatives. The claim that you deletion paved the way for the so-called zero-subject was found to be unacceptable. Certain factors that warrant the existence of a zero-subject in the imperative and its relationships with other subject NP's have been proposed.

As for the notion of agent-of-action, it was discovered that a distinction must be made between the semantic organization of the imperative (which calls for the presence of an addressee and semantically marked him or her out as the

intended agent-of-action) and the pragmatic facts of life that may prevent such an agent from carrying out the action. It has also been seen that a clear distinction must be made between the organization and expression of the sentence on the one hand, and, on the other, the action (or the lack of it) that is subsequent to it.

From a close examination of all the various aspects, we have been able to learn more about the nature of the imperative sentence itself, especially with regard to the relationship between the subject and the predicate of the sentence, its orientation towards extensional contexts and not intensional contexts, and how the syntactic categories of subject and vocative NP's in the sentence are structured to reflect these features.

Footnotes to Chapter Three

1. It is in place here to say that Chomsky's proposals on this issue emerge from his theories on Government and Binding. Since he treats the thematic function of a subject NP in relation to the rest of the sentence and its derivation from D- and S- structure etc., he is thus addressing some of the questions raised by the notion of the grammatical relation of subject.
2. INFL (inflection), he says, shows whether a clause is finite or infinitival. However, it may, at the level of LF be a mood indicator. This is an aspect I would like to return to in the next chapter.
3. The grammatical relations in question here are those associated with syntax: concord and other agreement features between subject and predicate elements in the sentence.
4. It may be argued that "the girl in the corner" is transformationally derived from "the girl who is in the corner". However, neither the present approach nor GPSG accepts such a thesis about transformational derivations and so expressions are being treated as they appear on the surface.
5. It is thus the case that we may regard the features [QUA] and [MOD] as referring to adjectives and modifiers which are not used predicatively. (See Quirk et al, 1972: 258).
6. What we are beginning to see is that it is the same semantico-pragmatic conditions that govern all the NP's that occur as subjects, irrespective of their structural configurations and lexical choice. I shall examine this in detail in Section 3.3 below.
7. These expressions also show that the range of constructions that can function as vocatives may not be as

narrow as it is generally thought.

8. The expression "the man in the street" has acquired something of an idiomatic meaning - "the ordinary man". However, the plural form "the men in the street" has not got this sort of meaning and so it is a possible imperative subject.

9. The symbols used for marking intonation patterns in these examples are the same as those used in O'Connor and Arnold (1973). They are to be interpreted as follows:

- \ (3.2.26)(a) : "High Fall"
- ' (3.2.26)(c) : "High Head"
- ° (3.2.26)(c) : stress mark
- ^ (3.2.27)(a) : "Rise-Fall"

See O'Connor and Arnold (Ibid.) for details.

10. Although this rule is quite unsuitable for the prediction of the subject-predicate relation in an imperative sentence, it is quite adequate for doing the compositional analysis of these phrases.

11. It may be the case that all vocatives in all sentence types belong to the same category since they are, by nature, related to the contexts in which the sentences where they occur are used.

12. \Diamond , \Box , \underline{P} and \underline{F} respectively refer to modal logic notions of Possibility, Necessity, Past and Future. The issue of whether or not the imperative refers to the future (see Bolinger (1977)) will be discussed in the next chapter.

13. Schmerling fails to take into consideration the fact that the spiritual healer has to have the deaf person in front of him or her before he or she can pronounce the relevant sentence. Furthermore, it is necessary, in this sort of event, for the healer to be in a position to judge whether or not s(he) has achieved the desired result.

CHAPTER FOUR

VERB PHRASES IN IMPERATIVES

4.0 Introduction

Verb phrases in imperatives have something like a dual nature. On the one hand, there is no reason to suppose that they may not have the same range of structural variations with regard to verb complementation as other sentences. On the other, so distinctive are the forms of their verbs and their exclusion of modals that they indeed pose a major problem for analysts. The task in this Chapter therefore is to find out

- (a) what the syntactic behaviour of be, do and negation is in the VP's;
- (b) what the semantico-pragmatic characteristics of the VP's are, and,
- (c) whether or not they are susceptible to a compositional semantic analysis like their subject NP's.

I hope the examination of these issues here will not only lead to the resolution of the current problems about the description of imperative VP's (see Chapter One, Section 3), but will also enhance our general understanding of these substructures of the construction.

I intend to take up the problems as they are listed above, as far as possible. Before this though, it seems desirable to examine the general notion of verb phrase in relation to the imperative in view of some of the problems raised by the subjectless varieties of the sentence.

4.1 The Notion of Imperative Verb Phrase

In Chapter Two (Section 2.1) I pointed out that it is unacceptable to characterize the imperative as a mere clause type. By using a number of criteria, I demonstrated that it is a full sentence, fit to be contrasted with other sentences like declaratives and interrogatives.

(4.1.1) All of you salute your national heroes.

We may also note that although we can separate the imperative VP from its subject NP in (4.1.1), this is not quite obvious with regard to the forms without such NP's, and this is a situation which tends to blur the distinction between the VP- and the S-structures in the construction.

(4.1.2)(a) Keep in touch.

(b) The men keep in touch.

The problem with these examples is the fact that the structural shape of a subjectless imperative in (4.1.2)(a) is not different from that of the VP in (4.1.2)(b). Thus, the structure of the former, without any intonation marking, could well be the VP of the latter, the declarative construction. The postulation of a zero-subject does not change the fact that the structure in (4.1.2)(a) looks like a possible declarative VP. It is therefore necessary to find out what linguistic factors, other than intonation, can separate

the imperative VP from those of other sentences.

(1) THE IMPERATIVE VP AND IMPERATIVE S COMPLEMENTATION

One such factor is probably the constraint that restricts imperatives to occurring only as main clauses in complex sentential structures. Different varieties of declaratives can occur as main clauses and as subordinate clauses. Imperatives cannot occur in subordinate positions even when such positions may not involve any adverbial functions. This situation seems to lend support to the characterization of the imperative as a clause type, apparently complementing the subjunctive which occurs only in subordinate positions in complex sentences. (See Huddleston, 1984: Chapters 1 and 11).

The issue I want to examine here is the nature of the constraint that prevents the construction from occurring in such positions. It will be contended that it has to do mainly with the general nature of the VP's. The imperative verb phrase is such that it cannot be in a construction which occupies a subordinate position in a larger sentential structure. If this can be demonstrated, it would be reasonable to conclude that it is inappropriate to expect the sentences to behave, for example, as declaratives. Secondly, it will enable us to understand certain syntactic and semantic characteristics which are unique to the VP's, as we shall see later.

The examination of the subject NP in the previous chapter shows that it is not grammatically linked with its VP (see Section 5.1 below). Therefore, the VP is most likely to possess almost the same degree of independence. There is no better element than the head of the VP to exhibit this grammatical independence. Current grammatical theories have

not gone beyond simply claiming that in structures like the example in (4.1.1), the section from the verb salute to the end constitutes the VP and that the verb itself is "tenseless". We would like to see what such a VP can generally do which declarative VP's cannot do.

(2) THE IMPERATIVE VP AND THE NOTION OF COMMAND

In the examples in (4.1.3),

- (4.1.3)(a) (John) may go there
- (b) (John) is to go there
- (c) (John,) go there

we notice that the verb do can co-occur with the verb in example (4.1.3)(c) but not with those in the others.

- (4.1.4)(a) *(John) do may go there.
- (b) *(John) do is to go there.
- (c) (John,) do go there.

However, as an auxiliary, it is possible for do to replace may in (4.1.4)(a), although the meaning of the sentence would change.

- (4.1.5)(a) (John) does go there
- (b) (The men) do go there

What is noticeable in the imperative VP in (4.1.4)(c) and the declarative ones in (4.1.5) is that even though the grammatical function of do is the same in all of them -- i.e., the expression of emphasis -- it seems to share the notion of COMMAND with go in the former but expresses that of CERTAINTY with go in the latter. This seems to show that despite the apparent similarity in form between the VP in the imperative and some of those in the declarative as we have seen in the examples in (4.1.2), the interpretation of do is not the same in all of them.

With regard to the example in (4.1.4)(b), it appears no placement of do in its VP can make it grammatical and so become a declarative like each of those in (4.1.5). It can be argued that what we have here is a feature which appears to support the claim that the imperative VP has some grammatical independence from its subject NP and other structures. It seems to be the only structure which can accept do when the main verb is the copula verb be.

- (4.1.6)(a) (The men) $\left\{ \begin{array}{l} \text{are} \\ *do\ be \end{array} \right\}$ there today
- (b) (The girl) $\left\{ \begin{array}{l} \text{will} \\ *does \end{array} \right\}$ be there today
- (c) (Everybody) do be there today

This feature of the imperative VP also separates it from the subjunctive construction that is often compared with it in relation to do. (See Culicover, 1976).

- (4.1.7)(a) It is necessary that he be consulted
- (b) *It is necessary that he do be consulted.

It does appear that it is the notion of an order or a command which the imperative VP possesses that enables do to co-occur with be where other sentences cannot have it with the verb. Where this notion is shifted from the verb and placed in other elements of the sentence as in the examples in (4.1.7) where it is conveyed by the adjective, necessary, do would then be unable to co-occur with be. It is this factor that prevents it from co-occurring with the subjunctive verb in (4.1.7)(b). Therefore, the ability of the imperative VP to retain its sense of order or command all the time is another mark of its grammatical autonomy. This is also partly responsible for the non-occurrence of the construction in subordinate positions in complex sentences, as we can see in (4.1.8).

- (4.1.8)(a) *It is necessary for, John, go there.
 (b) *What I want is all of you go there.
 (c) *He says the boy behind the table go there.
 (d) *I have decided that (you) go there.

All this will however change when we bring in the elements that can grammatically integrate the imperative VP's with their own subject NP's in the sentences, thus stripping the VP's of their autonomy. These elements include the for-to complementizer, modals and the expression is to.

- (4.1.9)(a) It is necessary for John to go there.
 (b) What I want is for all of you to go there.
 (c) He says the boy behind the table $\left\{ \begin{array}{l} \text{will} \\ \text{is to} \end{array} \right\}$ go there.
 (d) I have decided that you should sit down.

What we have seen therefore is the fact in these subordinate positions in the sentences, the structures had to be converted into FULL declarative VP's before the sentences could become grammatical. For example, the vocative NP in (4.1.8)(a) has become a prepositional complement in (4.1.9)(a), and the optional subject you in (4.1.8)(d) has changed into an obligatory subject in (4.1.9)(d), in order to achieve the integration between them and the VP's that have now lost their structural disjunction from the subject NP's in the sentences.

(3) THE IMPERATIVE VP AND THE PRINCIPLE OF EXTRACTION

The last aspect of the VP in the imperative which I want to consider is the fact that it does not allow any extraction. There is thus no fronting of any element.

- (4.1.10)(a) (You) stop dancing! [IMPERATIVE]
 (a') *Dancing, (you) stop!

- (b) He may be dancing. [DECLARATIVE]
- (b') Dancing, he may be.
- (c) (You) be the king! [IMPERATIVE]
- (c') *The king, (you) be!
- (d) You are the king. [DECLARATIVE]
- (d') The king, you are.

As we shall see in the next chapter, it is however possible for VP adverbs to occur either before or after the verb in the imperative, as long as they remain part of the VP of the sentence. This occurrence should not therefore be seen as an example of extraction from the VP in the sentence.

- (4.1.11)(a) (You) repair to your divided city.
- (b) (You), to your divided city, repair.

We might therefore conclude from all the aspects discussed above that the VP in the imperative is a unique and separate entity, both structurally and semantically. One crucial consequence of this state of affairs is that because the constituent is unique, its head, the verb, is also unique. Therefore, it is not the base-form of this verb that separates the VP from other VP's; rather, it is its relationships with do and be as well as its notion of command and its resistance to the fronting of any of its verbal complements, as we have seen above, that mark it out as unique.¹ I shall return to the phenomenon of the structural detachment between the subject and the VP in the imperative in the next chapter.

To summarize, I would like to say that the general notion of VP in the imperative must be one that recognizes it as a unique entity which possesses certain unique features. All this reflects the unique nature of the imperative sentence type itself. We must therefore be prepared to have an analysis of these constituents which, while capturing their

nature, must be differentiated from those that characterize other sentence types, in line with our intention to do the syntax and the semantics of the sentence type in a way that can expose its true nature. I shall now consider in turn the various aspects of the VP, under the broad headings of syntax and semantics, in order to expand on the ideas I have introduced above.

4.2 Syntax

A) Be, Do and Negation

In addition to the observations about be and do in the previous section, I intend to examine their syntactic behaviour here, to begin with, in order to show that the current proposals about them with regard to the imperative are inadequate. In the present system, the question of Do-Insertion does not arise. It is base-derived. However, it is not that sort of do that exists in the "initial structure" of Pullum and Wilson (1977), which may be deleted. Also, we are not saddled with the problem of deciding whether or not the imperative has an AUX constituent. This can be seen from fact that both do and be are base-derived (see Gazdar et al, 1982). However, there is a subcategorization problem raised by their placement in imperatives and other sentences. Davies (1981) fails to resolve this problem, as noted above in Chapter One (Section 3), but it can be resolved by the specification of the syntactic features of the verbs which may be in the same environment as these verbs in the sentences.

I also intend to show that the provision of a uniform description for both do and be by Davies is inadequate because it fails to capture the real nature of these two verbs in the imperative. It will be much clearer, as already noted in Section 1.3 above, to devise PS rules to

predict the various imperative structures. It should have been possible for such rules to capture the situation presented by the imperative and so rule out sentences like those in (4.2.1). These sentences are not blocked by the "condition" that do should be allowed to occur in front of be only in imperatives, as proposed by Davies (Op. cit.).

- (4.2.1)(a) Do be polite!
- (b) *Not do be polite!
- (c) Do not be rude!
- (d) *Not do be rude!

In all the examples in (4.2.1), the condition that do be allowed to occur in front of be in -THAT, -TO complement is met. But the condition is grossly inadequate since it does not, for example, cover the relationship between do and not in the imperative. I examine the verbs in turn.

(i) Be.

The problem that be raises as an imperative verb is quite complex. First, it must be made clear whether be only occurs in the sentence as an auxiliary, as Akmajian et al (1979) have claimed, or not. Second, it must also be investigated whether or not the imperative verb system actually involves the progressive aspect, as the following examples seem to indicate.

- (4.2.2)(a) Be running after me.
- (b) Be jumping up!

(1) BE AND IMPERATIVE MAIN VERB

The above-mentioned analysts have also characterized be in examples like those in (4.2.2) as an auxiliary. In this sense, therefore, they are claiming that the present progressive occurs in the imperative, although they have

rejected the past progressive in the construction. The issue raised with regard to the nature of be is whether or not it is the same type that occurs in all environments in the imperative, i.e., whether the type that is followed by present participles as in (4.2.2) is not different from the one that is followed by adjectives, noun phrases, adverbs and prepositional phrases as in (4.2.3),

- (4.2.3)(a) Be brave!
- (b) Be a man!
- (c) Be there at Five.
- (d) Be at your desk when I arrive.
- (e) Don't be rude!
- (f) Do be a persuasive salesman.

or there should be two types of be: the one, a main verb, traditionally known as a copula, like those in (4.2.3), and the other, an auxiliary, the type that usually features in the progressive aspect as in the examples in (4.2.2). What complicates this problem is the issue about the role of the progressive in the imperative.

The general theoretical stance on this issue in the literature, which usually reflects what obtains in the declarative construction, appears to be clear. Only as an auxiliary verb can be combine with a main verb to form the progressive aspect. It is in this sense perhaps that Akmajian et al have characterized be as an optional element in the imperative. (See Chapter One, Section 3). On the contrary, it will be argued here that

- (a) only one type of be occurs in the imperative,
- (b) the entities that occur after this be in the sentences are complements, and,
- (c) the present progressive aspect cannot occur in the imperative construction.

(2) BE AND GERUNDS

The claim I intend to make here is that the "ing-words" which occur after be in imperatives, unlike those in other sentence types, are gerunds, and so are NP's. In English syntax, it is the case that gerunds and infinitives can function as subjects, as the following examples show.

- (4.2.4)(a) To work is to pray.
 (b) To get there is the problem you face.
 (c) To love is something she fears!

These NP's can also convert into gerunds, as the following examples show.

- (4.2.5)(a) Working is praying.
 (b) Getting there is the problem you face.
 (c) Loving is something she fears!

We can notice in the following examples that infinitives and gerunds also occur as objects in imperatives. In this respect, both constructions can occur as objects to a host of verbs, as demonstrated by the examples in (4.2.6) and (4.2.8) below.

- (4.2.6)(a) Be singing.
 (b) Be joyful.
 (c) Be a good boy.
 (d) Continue to run.
 (e) Don't try to break it.

We thus have in the imperative a system in which be can have complements which are as varied as nouns like a good boy and gerunds like singing, as well as adjectives like joyful, as some of the examples in (4.2.6) show. According to this characterization therefore, this be in the imperative cannot be an auxiliary verb. It is thus a copula, a main

verb in the manner that continue and try are main verbs in (4.2.6).

Independent support for our proposal is provided by the relationship between this verb and do. We have already observed above that do can only occur as the first element of the imperative verb in every imperative sentence that has it. And do is a auxiliary. It is in this manner therefore that it occurs in the following examples in relation to be as the main verb.

(4.2.7)(a) Do be mindful of them each day.

(b) Do be returning the proceeds to her at the end of the day.

Another evidence in support of the occurrence of the gerund as a complement to be in the imperative VP is the fact that be is not the only possible imperative verb that can govern it in that environment. We also have verbs like keep, stop, continue, and others.

(4.2.8)(a) Keep on singing.

(b) Stop singing.

(c) Continue singing.

(3) BE AND THE PROGRESSIVE ASPECT

Finally, as I shall explain more fully in the next section, the imperative construction makes a distinction between these two sentences,

(4.2.9)(a) Run!

(b) ?Be running!

each of which commands the commencement of an action: the former, the commencement of the process of running; the latter, the commencement of the process of continuing the

effort of running. In neither of these cases does the construction refer to the period from the past up to the time of speaking, since the role of be there as a main verb is to emphasize the new idea: the continuation of the action in question. (See Chapter Two, Section 2.2 : (3) and (4) above).

All that we have seen above shows clearly that the progressive aspect does not occur in the imperative VP, contrary to the claim of Akmajian et al; the verb accepts a number of complements -- gerunds and infinitives functioning as NP's, ordinary noun phrases, adjectives and locative adverbs -- doing so as a single, main imperative verb.²

(ii) Do

Although there is a considerable amount of agreement on the nature of the verb in the imperative, this is not the case with regard to do, a verb which has an enormous syntactic capability (see Egbe, 1981). There is no problem here about Do-Insertion as we have seen in the other analyses (see Chapter One, Section 3), since it is predicted by rules. It is however doubtful as to whether or not it behaves in the imperative as Davies (1981: 313) has claimed it does. The only restriction on the behaviour of do, according to her, is that it should not occur in front of be and have except in imperatives. Since this restriction only affects the occurrence of do in other sentences, it thus gives the mistaken impression that the only feature that marks the behaviour of do in the imperative is its ability to occur before be and have there. Davies offers no reason for this feature, and so has failed to account for the syntactic nature of this verb in the imperative. Furthermore, her claim about treating the verb as a "main" verb tells us nothing about the syntactic relationship between it and other verbs in the imperative other than that it puts them in -THAT, -TO complement position. It is mistaken to describe do in these terms in her account

which thus overlooks an important aspect of the verb in the imperative, i.e., its relationship with not and n't. Secondly, to see do in this way would also overlook its role as a bearer of emphasis in the imperative. The point is if do is simply a main verb like sit and send, why should it constantly co-occur with negation and bear the emphatic stress in the imperative! Since do has these relationships, my argument is that contrary to Davies's proposal, it cannot function as a main verb in the imperative for it is not predicted by rules in the same way as other verbs (see (4.2.26)).

As I have observed in Chapter One, it is more realistic to treat do as a "periphrastic verb" than as a main verb. The reason is that even if n't was seen as no more than a morpheme attaching to do to form don't, the fact remains that not cannot occur in the imperative without it, (and not conversely) as the following examples show.

- (4.2.10)(a) Do not cancel the orders.
- (b) *Not cancel the orders.
- (c) Do cancel the orders.

We can also notice that don't always occurs in a pre-subject position in imperatives like the following.

- (4.2.11)(a) Don't you drive like that again!
- (b) Don't drive like that again!
- (c) *You don't drive like that again!

In view of the above facts, it is clear that do, in the imperative, cannot be characterized as a main verb.

It is indeed not correct to say at all that do has any verb in a -THAT, -TO complement in the first place. Similarly, it is not the case that don't cannot be considered along with do as Schmerling (1980) seems to be suggesting. What appears to be significant about do, syntactically, in

the imperative are

- (a) its relationship with the elements that can occur AFTER it in the sentence, and,
- (b) its relationship with negation and the consequence of this for the VP.

These are the issues that will be examined with regard to do in this Section. However, for the sake of orderliness in presentation, I would like to take up problem (b) in full under negation below.

(1) DO AND ITS COMPLEMENTS

As for problem (a), the claim I am making is that in all imperative sentences, do and don't occur before the subject NP's which are of two kinds: you and the so-called zero-subject. In other words, ONE of these subject elements (see the FS rules in (4.2.26) below) is likely to interpose between do (or do not or don't) and the main verb in the sentence.

- (4.2.12)(a) Sit up!
- (b) <> sit up!³
- (c) You sit up!
- (d) The girl in the corner sit up!

The examples in (4.2.12)(a) and (4.2.12)(b) are the same except that I have tried to represent the zero-subject with the sign <>. (4.2.12) thus contains imperatives without do. However, the presence of do imposes certain limitations, as the following examples indicate.

- (4.2.13)(a) Do sit up!
- (b) Do <> sit up!
- (c) *<> do sit up!
- (d) *Do you sit up!

- (e) *You do sit up!
- (f) *Do the girl in the corner sit up!
- (g) ?The girl in the corner do sit up!

These examples show clearly (i), that do selects as its immediate sister not a V, as Davies has suggested, but an S, and (ii), that the subject element in this S-category is the zero-subject as in (4.2.13)(b).

The choice of the zero-subject is not surprising since it helps, structurally, to separate imperatives of this form from interrogatives of the same form. This is so because interrogatives do not have such a zero-subject.

(4.2.14)(a) Do <> sit up, $\left\{ \begin{array}{l} \text{all of you} \\ \text{Kate} \end{array} \right\}!$

(b) Do all of you sit up?

Thus, only vocatives (third person NP's) can occur in these forms in the imperative. Even elements like all of you which have the potential to be subjects in the imperative (see Chapter Three) can now only function as vocatives, as (4.2.14)(a) indicates. Their appearing in their usual subject position in the sentence (in front of the VP) would structurally turn the construction into an interrogative, as (4.2.14)(b) shows. I should briefly add here that the presence of negation in the imperative does alter this situation, as we can see in (4.2.15)(c).

(4.2.15)(a) $\left\{ \begin{array}{l} \text{Do not} \\ \text{Don't} \end{array} \right\} <> \text{sit up, } \left\{ \begin{array}{l} \text{all of you} \\ \text{Kate} \end{array} \right\}!$

(b) Don't all of you sit up?

(c) Don't anyone go!

The second case (where you must occur as subject) involves don't and takes the following form.

(4.2.16)(a) Don't you sit up again!

(b). *Don't the girl in the corner sit up again!

This is separated from an interrogative of the same shape not only by the presence of don't instead of doesn't but also by the nature of the intonation pattern that it has. (See Chapter Three, Section 3.2). When the subject NP is you, for example, the shapes of both types of sentences are similar, as the examples in (3.2.28) above and those in (4.1.17) below show.

(4.1.17)(a) Don't you sit up!

(b) Don't you sit up?

As we shall see in the next section, there are more factors at work here than I have identified so far. As for the role of intonation in the structures, a falling contour marks the imperative, in addition to the emphatic stress on don't, while a rising one marks the interrogative.

(2) DO AND THE MAIN VERB IN THE IMPERATIVE

The issue that is now raised has to do with the relationship between do and the main verb in the sentence. The question is whether do is really an auxiliary to it or is functioning on its own in another capacity. As for the first part of the question it may be argued that do cannot be subordinate to the main verb as, for example, may is in the following examples,

(4.2.18)(a) Mike may call tomorrow.

(b) Henry may not call but Sam may.

where (i), as in (4.2.18)(a), it is in the same clause as the main verb, call, and (ii), it can also function as a pro-form for the main verb, as we can see in (4.2.18)(b).

It is not the case however that do can function as a pro-form in the imperative, even though it can do so in the

declarative.

- (4.2.19)(a) Mike plays football but Sam doesn't.
 (b) Sam doesn't play football but Mike does.
 (c) *Do open the door, John, but Mike, don't.
 (d) *Open the door, John, but Mike, don't do so.
 (e) *Don't you say that again, Kate, but Mabel,
do.

The constraint on do here cannot be linked with the structural shapes of the imperatives; it seems some semantico-pragmatic issues are involved. It would appear that after you have related an order or command to a certain person, you cannot extend or nullify such an order with respect to another person, as in the imperatives in (4.2.19), without having to repeat the full verb. Thus, the forms that repeat the full verbs are in order.

- (4.2.20) Don't you say that again, Kate, but Madel,
 please keep quiet.

We shall return to the other issues raised by these sentences in the next section. (See Chapter Two, Section 2.1 above).

It is the case therefore that the do that occurs in the imperative is syntactically different from the one that occurs in the declarative. As we have seen above, it is neither in the same clause with the main verb in the sentence nor can it function as a pro-form for it. (See Huddleston, 1978).

(3) DO AND BE

Our discussion of do and be does clearly show that they behave differently in the imperative. Whereas be operates as a main verb within the VP, do (for imperatives in which it occurs) functions as the carrier of emphasis, where it is (at times) modified by negation in front of the entire imperative

construction.

- (4.2.21) (a) Do wait for your turn please.
 (b) Don't you lift it up again please.
 (c) Somebody, do open the window please!
 (d) You be orderly please!
 (e) The boy in the corner be prepared to run.
 (f) *Be turning over the pages for me please.
 (g) Be a good boy and stop that noise!

Another area of difference between the two verbs is the type of complement they take. As the examples in (4.2.21) show, be, as an ordinary verb positioned in the VP, takes a host of entities as complements — adjective, gerundive, NP and PP — whereas do, as pointed out above, has the imperative S only as its complement.⁴

What we have observed about these two verbs has accounted for one phenomenon in the verb system in the imperative, i.e., the fact that do always occurs BEFORE be in the construction. This has to do with what they can accept as complements and the segment of the imperative where they must function. Therefore, there is no question of treating these verbs in the same way as Davies (1981) has proposed. Similarly, the rules that have been proposed elsewhere to predict them (see Emonds, 1976; Culicover, 1976, and Akmajian et al, 1979) cannot correctly apply to their behaviour in the imperative, in spite of their TG theoretical assumptions.

(4) TENSEHOOD AND FINITENESS IN THE VERBS

One nagging problem with regard to the verbs in the imperative, as we have seen in Chapter One, is the question whether or not the imperative has TENSE. Associated with this is the issue of finiteness. What the position had been was the division between those who argued that the imperative was

both AUX-less and tenseless on the one hand, and on the other, those who held that it had an AUX constituent but was tenseless (see Section 1.3 above). This problem is particularly difficult to resolve because the base-form of the verb gives us no clue whatsoever as to what the situation really is. Furthermore, the situation is complicated by the tendency of some analysts to relate it to the bare infinitive.

The idea of aspect occurring in the imperative has already been rejected in the present analysis. Therefore, if we are to consider the question of AUX, it will only have to do with the verb do. In view of the fact that do occurs in a unique position in the imperative, we are left with two choices:

- (a) either it is characterized as an auxiliary or as a verb that functions as a periphrasis in the imperative construction, or,
- (b) it would be characterized as a unique imperative verb.

The issue to examine now is how to provide an acceptable justification for the choice of the one over the other. Whichever alternative is chosen should be able to make it possible to resolve the the part of the problem that relates to tensehood and finiteness.

The choice of alternative (b) would have the significant implication of postulating do in imperatives. This would, as it were, turn do into a super verb which dominates an entire imperative S which might thus be said to elaborate it. This do would then be the head verb of the imperative construction and also the carrier of the emphatic stress as well as of negation. Thus, since in this sense do would be a

full verb, it could be said to have put the construction in a subordinate position, turning the imperative into an essentially complement construction.

The main weakness in the above description of do is the fact that it cannot explain why or when this do cannot occur in the imperative. If its role is so central to the verbal system of the construction, one would expect it to occur in all tokens of the sentence. As for its relationship with emphasis and negation, it may be pointed out that this can also be performed by a do that is a periphrasis.

It is objections like those above that make alternative (a) a much better description of the do that occurs in the imperative. In the first place, as an auxiliary, do may or may not occur in an imperative, since many such sentences without it occur. Secondly, as an auxiliary, it is easier to associate it with the rest of the verb in the construction and so it simply serves as a means by which negation (both affixal and non-affixal) can relate to the main verb in the construction, as we shall see in the next Section. Thirdly, as an auxiliary, it can be seen as a verb which occurs in order to carry the strong stress that is at times desired in the imperative. This not only separates the relationship it has with negation from the one it has with intonation, but also takes in its train the fact that both negation and the emphatic stress are optional elements in imperatives. When do is not present, the main stress falls on the main verb. Finally, in the sense of alternative (a), do can still be an auxiliary verb in the imperative just as it usually is in other sentences, except that in the imperative, it occurs in front of the subject NP; it is used to convey a strong stress, and it regularly co-occurs with negation, as it has been demonstrated above.

From what we have seen so far with regard to do, it is quite obvious that it is not FINITE when it occurs in the imperative. A finite verb, as we know, must be capable of being specified in relation to number and person concord. Such a specification is generally known not to exist in the verbal system in the imperative. As for TENSE, what is clear is that the imperative does not refer to past times. It refers to both present and future times, as we can see in the examples in (2.4.22).

- (4.2.22)(a) Pick up those papers now!
 (b) Return them to me next week!
 (c) *Leave them there yesterday!

It is however necessary to distinguish between TENSE and TIME. If TENSE is an element that must be morphologically marked on the verb, as it usually is in other sentence types in English, it can be said that none is marked in this way on the verb in the imperative VP. It must thus be concluded that the imperative is TENSE-NEUTRAL. The fact that it does not refer to the past is not symptomatic of any idea that it has tense which is non-past. This is rather due to certain semantico-pragmatic factors which will be discussed in the next chapter. Do therefore is tense-neutral.

(iii) Negation.

(1) PLACEMENT OF NEGATION IN THE IMPERATIVE

Negation in the imperative occurs in the following manner:

- (4.2.23)(a) Don't switch off the light.
 (b) Don't you sit on the table again.
 (c) Don't { ^{*John}
 ?somebody
 *the lady in a red gown } cry again.
 (d) Do not stand up yet.

- (e) *Do not { ^{you}
 John
 somebody } shut the window.
- (f) *{ ^{You}
 Somebody
The man wearing a hat } don't (do not)
 sit down there all day!

From the examples in (4.2.23), it is clear that some of the constraints on do also apply to negation in the imperative. These are as follows:

- (a) It can occur before the zero subject or you as a subject, as in (4.2.23)(a) and (4.2.23)(b) respectively. It cannot occur before other subject (or vocative) NP's as (4.2.23)(c) indicates.
- (c) A feature which it does not share with do is the fact that when it occurs in the form of a non-affixal negation (i.e., not), it accepts only the zero-subject just after it, as in (4.2.23)(d), but cannot have any overt subject NP in that position as we can see in (4.2.23)(e).
- (c) As we can see in the example in (4.2.23)(f), negation cannot occur after subject NP's of all sorts, a feature which it shares with do.

(2) NEGATION PLACEMENT IN OTHER SENTENCES

As we shall see soon, these aspects of negation have certain semantic consequences with regard to its scope of application in the sentence. This distribution of negation in the imperative stands in clear contrast to what we have in other sentences, as the following examples show.

- (4.2.24)(a) He has not been sleeping.
 (b) He has been not sleeping.
 (c) He is not sleeping.
 (d) You don't see such things nowadays.
 (e) Will you not go to sleep?

(f) Who won't go to sleep yet?

(g) Can't you go to sleep now?

In these examples, negation occurs in a variety of positions. The fact that this is not the case in the imperative construction demonstrates clearly that the rules that can predict the examples in (4.2.24) cannot predict those in (4.2.23).

B) Phrase Structure Rules.

It is in place here to work out the phrase structure rules that can capture the situation presented by both the VP- and the S-structures that are possible in the imperative sentence type. As pointed out in Chapter Two, Section 4, the rules will be set out to relate to varieties of imperative sentences which will be classified into subsets (i), (ii), (iii), etc.⁵

It must however be pointed out that the provision of these rules is necessary even though there is really no grammatical cohesion between the subject and VP elements in the sentence. The reason is that since the construction psychologically represents a sentence structure, as I shall argue in the next chapter, a surface, monostatal analysis like the present one must provide syntactic rules that correlate with the situation. The structure is therefore being treated as if the usual subject-predicate relationship existed in it.

One difference between the role of PS rules and that of the rules of semantic compositional analysis is the fact that whereas the former can characterize structures solely on the basis of their appearance, the latter does not do so. Thus, it is a surface compositional analysis that can reject the treatment of the imperative as a single S-constituent because imperatives do not denote truth values.

I shall first of all introduce the PS rules for the S-structures along with example sentences which they predict and then go on to provide expansion rules for the VP's along with their example verb phrases, and then give examples of tree diagrams for a number of imperative sentences. I shall then go on to discuss the issues that are raised by the PS rules drawn up for the S-structures.

(1) IMPERATIVE PS RULES FOR S-STRUCTURES

It is necessary to indicate the relations between some of the features under the Feature Co-occurrence Rule (FCR). This is stated in the rule in (4.2.25).

(4.2.25) If an S is [IMP], its AUX and Head V are also [BSE].⁶

FCR: [IMP] \supset [+BSE]

The PS rules and their example sentences are as follows:

(4.2.26) (i): S $\begin{bmatrix} \text{IMP} \\ -\text{AUX} \\ -\text{NEG} \end{bmatrix}$ =====> (NP) \bar{V} ⁷

(a) (All of you) stand up!

(ii): S $\begin{bmatrix} \text{IMP} \\ +\text{AUX} \\ -\text{NEG} \end{bmatrix}$ =====> V \bar{V}

(b) Do stand up.

(iii): S $\begin{bmatrix} \text{IMP} \\ +\text{AUX} \\ +\text{NEG} \end{bmatrix}$ =====> V \bar{V}

(c) Don't drink it fast.

(iv): S $\begin{bmatrix} \text{IMP} \\ +\text{AUX} \\ +\text{NEG} \end{bmatrix}$ =====> V NP \bar{V}

(d) Don't you drink it fast again.

(v) $S \begin{bmatrix} \text{IMP} \\ +\text{AUX} \end{bmatrix} \text{ =====> } V \begin{bmatrix} \text{ADV} \\ +\text{NEG} \end{bmatrix} \bar{V}$

(e) Do not step backwards.

(vi): $S \begin{bmatrix} \text{IMP} \\ -\text{AUX} \\ -\text{NEG} \end{bmatrix} \text{ =====> } \text{ADV} \quad (\text{NP}) \quad \bar{V}$

(f) Never say die!

(f') Certainly, (you) get there before noon.

(vii): $S \begin{bmatrix} \text{IMP} \\ +\text{AUX} \\ +\text{NEG} \end{bmatrix} \text{ =====> } \text{ADV} \quad V \quad \bar{V}$

(g) Certainly don't go late.

In these rules, negation [NEG] is expressed in two ways. First, it is used in relation to affixal negation which occurs in don't in the imperative. It is captured by the use of the feature [+NEG] stated in the Rules. Second, the non-affixal negation, not, is generated as an adverb. The notion of negation is still represented by the feature [+NEG], except that it is now marked on the node ADV. This will thus exclude other adverbs from occurring under the node, while enabling not to be generated as a full word. The advantage of this approach, therefore, is that it not only successfully distinguishes between imperatives with affixal and non-affixal negation with regard to structure but also allows the distinction between not and never, with regard to syntactic behaviour, to be made.

(2) IMPERATIVE \bar{V} -EXPANSION RULES

We can see that in each of the rules in (4.2.26), \bar{V} stands out as a distinct syntactic unit. It represents the verb phrase (VP) in the construction. Its expansion takes the following forms.

(4.2.27)(i). $\bar{V} \implies V$

(a) smile

(ii) $\bar{V} \implies V \text{ NP}$

(b) touch it

(iii) $\bar{V} \implies V \bar{V} [\text{INF}]$

(c) try to walk

(iv) $\bar{V} \implies V \text{ S}$

(d) say what happened

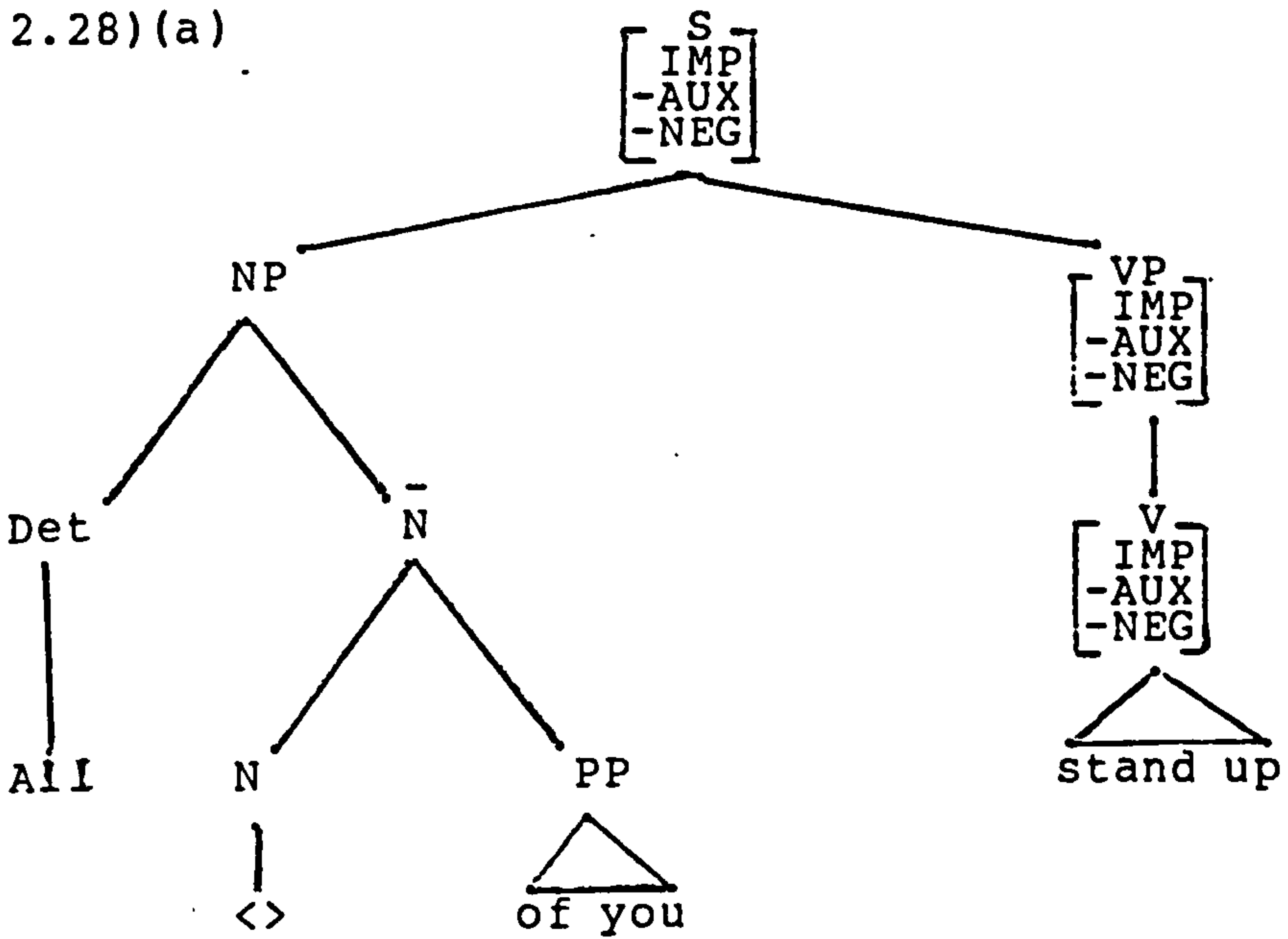
(v) $\bar{V} \implies V \text{ NP } V [\text{INF}]$

(e) use it to walk

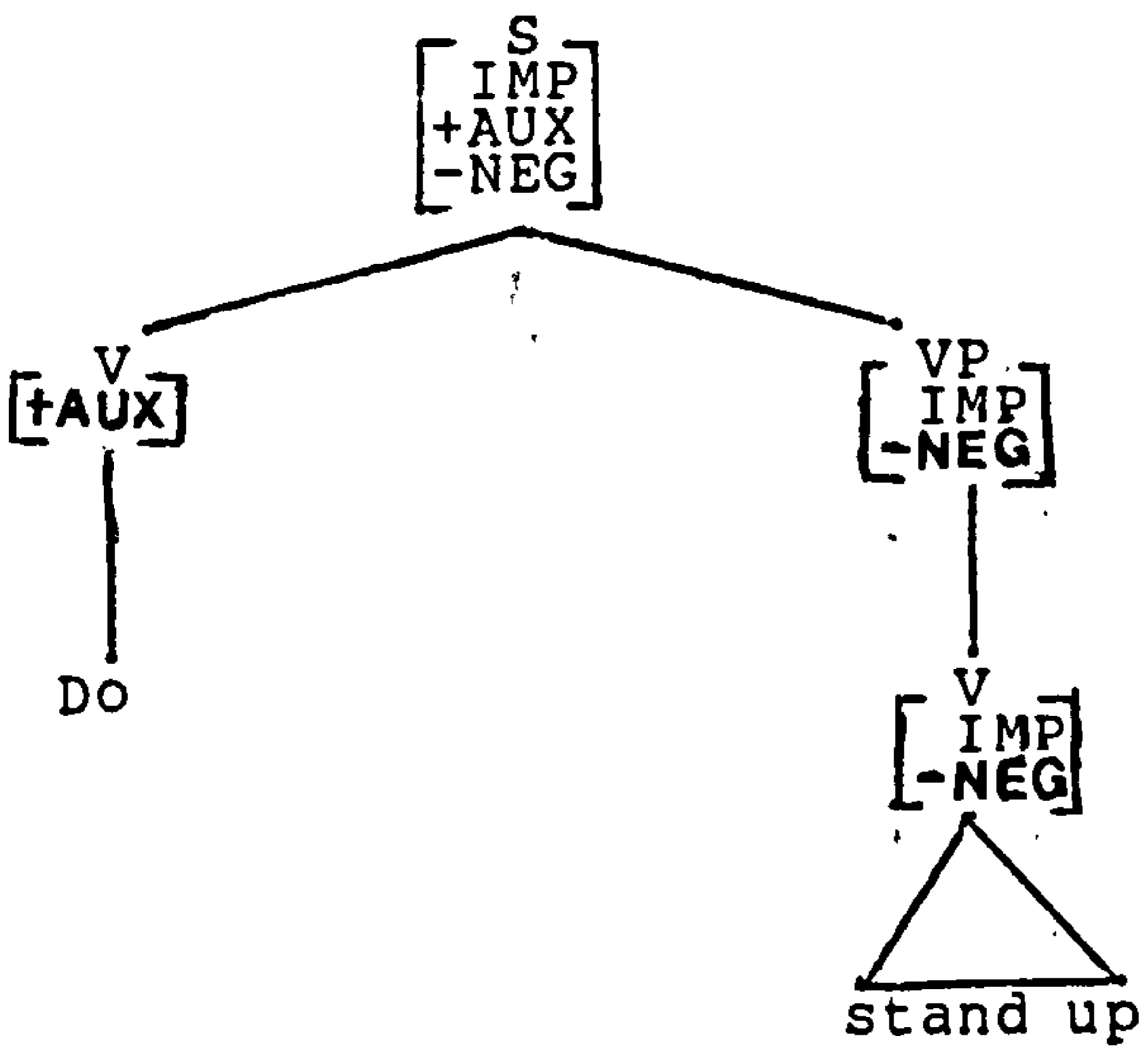
Thus, the verbs that occur in imperatives take the same complements as they do in other sentences. Although the scope of the imperative VP expansion is basically the same as those of the other sentences, it would be a mistake to think that this VP is not different from those of the other sentences. As pointed out above, the major difference is the fact that unlike, for example, the VP in the declarative, the one in the imperative cannot combine with its subject NP to form an actual, syntactic s-constituent which is liable to a compositional analysis, as we shall see in the next section. However, as argued in Chapter Two, it will be very misleading to regard the VP as the entity that is the imperative itself. What the VP has turned out to be is an element that is syntactically independent of subject NP's. As a verb phrase, it must of course be open to modification by adverbs, do and negation.

Examples of tree diagrams for constructions predicted by the rules in (4.2.26), which subsume those in (4.2.27), are as follows.⁸

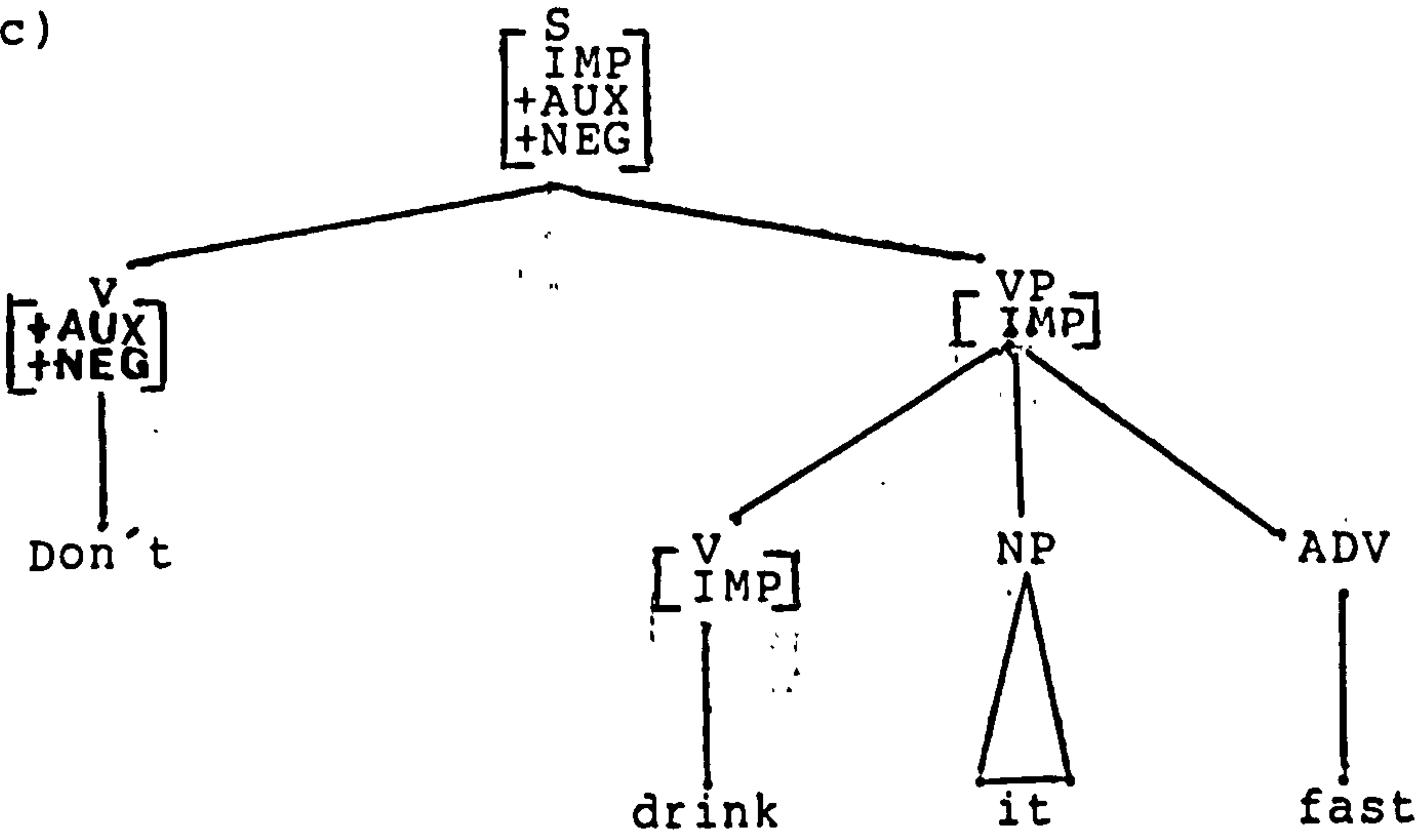
(4.2.28) (a)



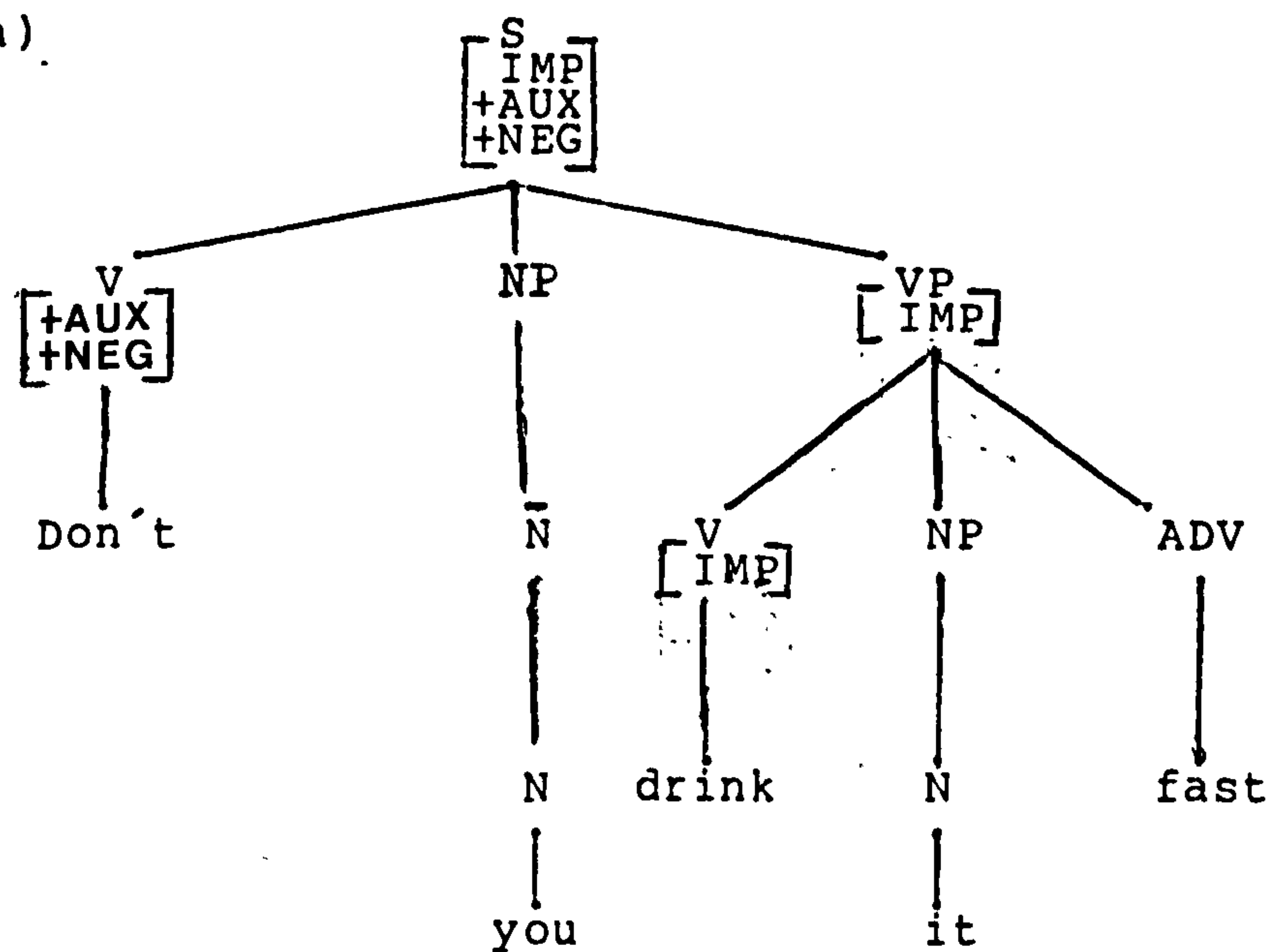
(b)



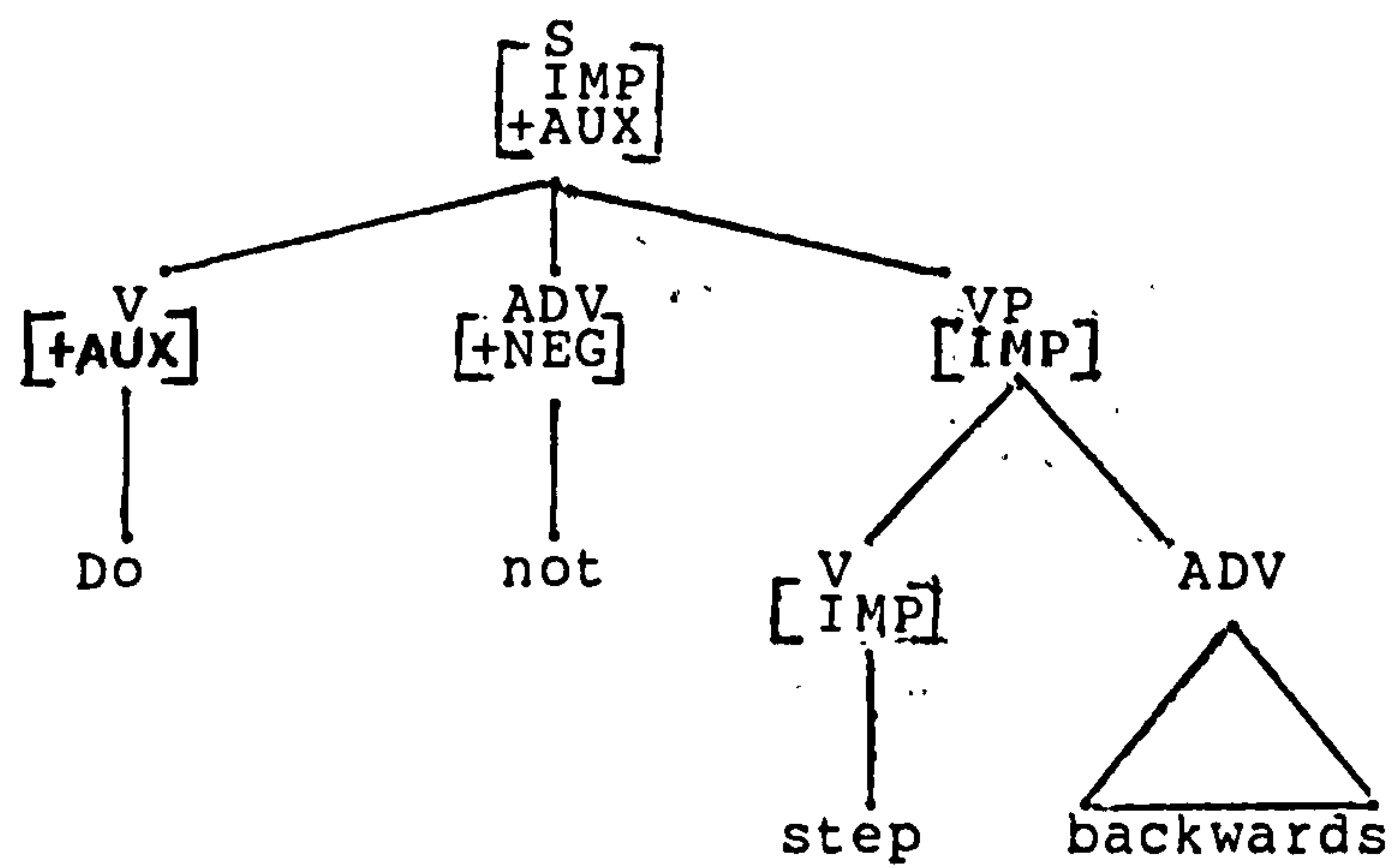
(c)



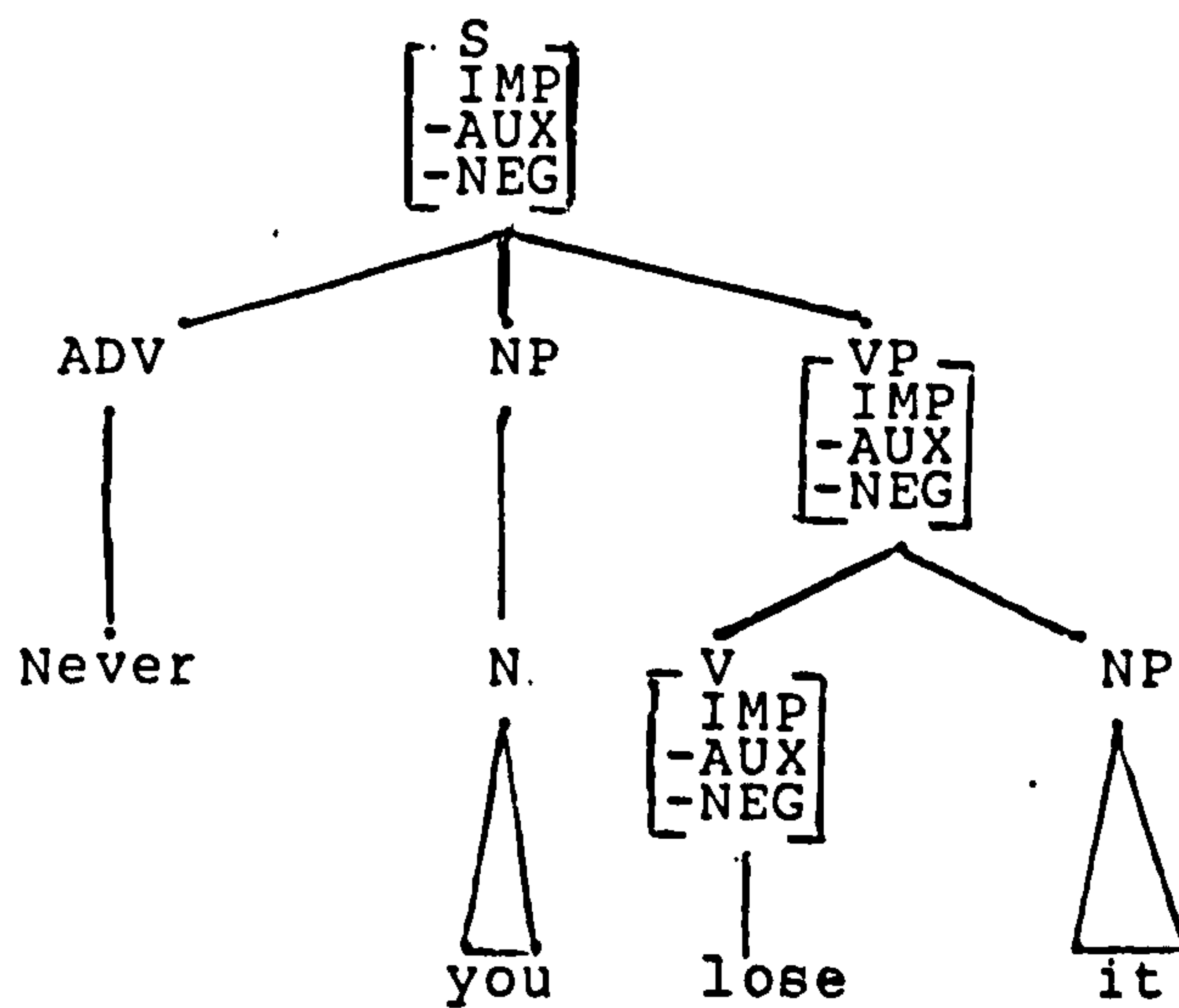
(4.2.29) (a)



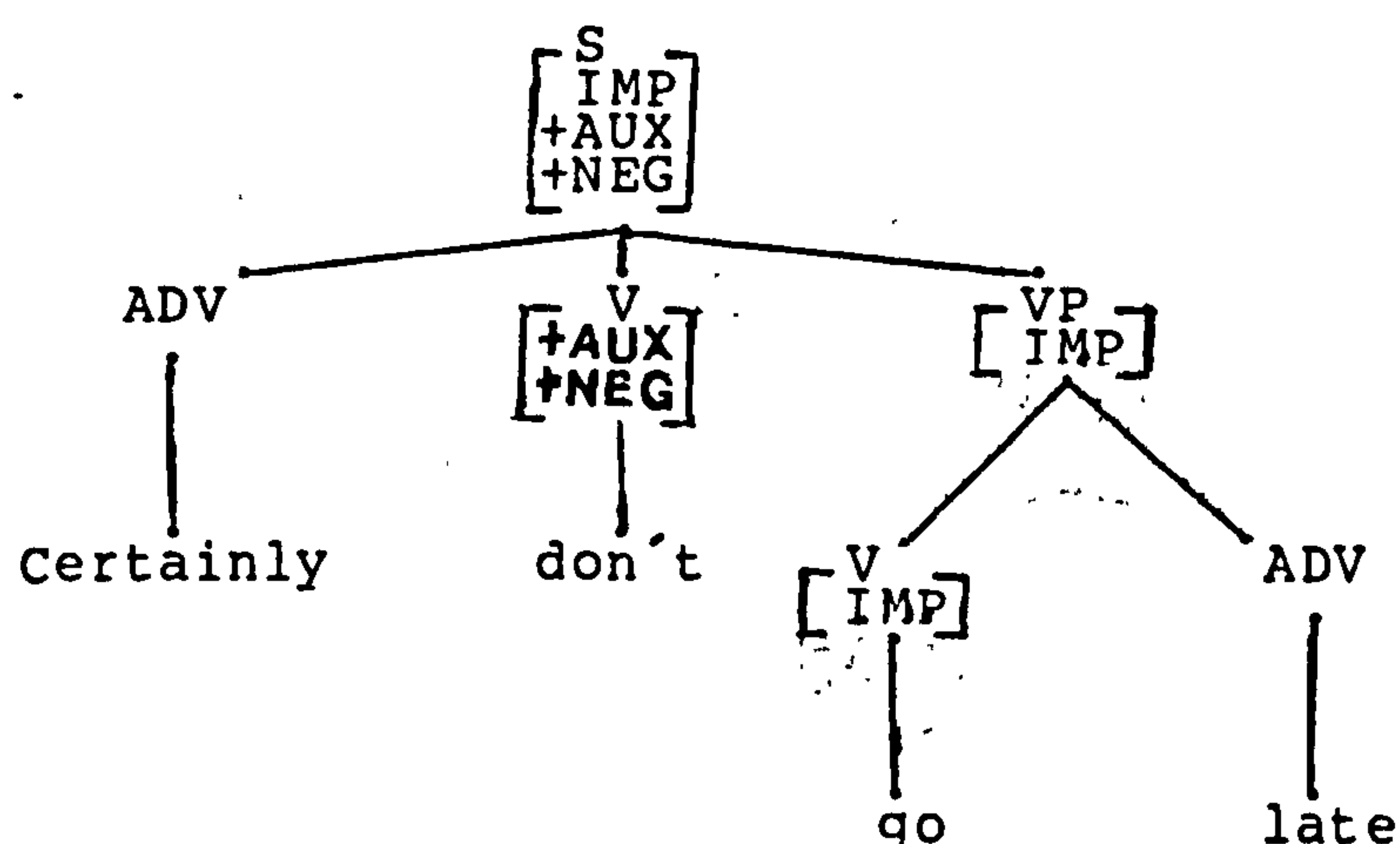
(b)



(c)



(d)



To summarize, it could be said that in this section, there have been attempts not only to examine the individual elements that occur in the imperative VP but also to demonstrate that the entire VP constitutes a unit that is syntactically disjuncted from the subject NP. The discussion of be and do has revealed their syntactic behaviour in the sentence, and that of negation has shown its distribution. Phrase Structure rules for some varieties of imperatives have been proposed, and it has been argued that such rules must be provided for the sentences in a one-level analysis like the present one, even though the imperative does not form a syntactically integrated constituent structure.

4.3 Semantics

A) Semantico-Pragmatic Characteristics of Imperative VP's.

The problems to be examined here revolve around the questions (a) what the scope of negation in the imperative is, (b), what exactly is the semantic relationship between do, negation and the main verb in the VP, and (c), what factor determines the selection of subjects for imperative VP's containing negation. I begin with (a).

(1) THE SCOPE OF NEGATION IN THE IMPERATIVE

The treatment of negation in the previous section was concerned with structural matters, but here I shall discuss issues which could not be captured by PS rules. It is pertinent to examine the scope of negation in the imperative in view of its placement in the sentence. I shall therefore try to determine whether or not the imperative subject always lies within this scope, and the semantic implications of the situation that is presented, especially with regard to the recalcitrant problem about imperatives and propositions.

Negation occurs in the imperative in the following forms and positions, apart from its occurrence in the tag of the sentence, as Rules (iii) - (v) above indicate.

- (4.3.1)(a) Don't waste your talents.
 (b) Don't you waste your talents.
 (c) Do not waste your talent.
 (d) *The boy in the corner don't waste your talents.⁹

It is difficult to claim in the imperative that both the subject and the predicate of the sentence lie within the scope of the negation that it contains. The point is that with regard to sentence meaning, there is no link between the subject and the predicate and so there is no sentence-wide idea which don't or not may be said to negate as they do in the examples in (4.3.2). (See Chapter Five, Section 5.2 (C)).

- (4.3.2)(a) You waste your talents.
 (b) You do not waste your talents.
 (c) The boy in the corner wastes his talents.
 (d) The boy in the corner doesn't waste his talents.

Consequently, it can be claimed that the imperative subject NP lies outside the domain of the negative element in the sentence. However, there appears to be a counter example: the sentence in (4.3.3).

(4.3.3) Don't you waste your talent again.

However, this sentence, by incorporating the adverb again, clearly expresses the presupposition that the addressee has been wasting his talents before. But this does not in any way suggest that this sentence is actually negating any one of the propositional functions,

(4.3.4)(a) x wastes his talents.

(b) x does waste his talents.¹⁰

Thus, the difference between the examples in (4.3.1) and the one in (4.3.3) consists in the presupposition which the latter expresses but the former do not. It is not the case therefore that any entire sentence is negated in both groups.

If negation in the imperative does not have the subject NP within its scope, then it must be semantically posited in the predicate of the sentence. Here, it has to do with the verb of the sentence. The question that arises therefore is whether it negates only the verb or the verb and its complements.¹¹ Let's begin with the following declaratives.

(4.3.5)(a) Sam loves Susan.

(b) Sam does not love Susan.

A translation of the sentences into intensional logic gives us the following.

(4.3.6)(a) $\wedge\text{Love}'(\text{Susan}')(\text{Sam}')$.

(b) $\sim \wedge\text{Love}'(\text{Susan}')(\text{Sam}')$.

It is the case that both the subject of the sentence Sam and the direct object of the verb Susan lie within the scope of the negation in (4.3.6)(b). However, in the imperatives in (4.3.7) and their translations in (4.3.8), it is not even possible to convey positive propositions as in (4.3.6)(a), let alone trying to negate them as indicated in (4.3.6)(b).

(4.3.7)(a) Call Sam.

(b) Somebody call John.

These cannot translate as follows:

(4.3.8)(a) $* \lambda x [\text{'Call'}(\text{'Sam'})(x)]$.

(b) $* \text{'Call'}(\text{'John'})(\text{'Somebody'})$.

The reason for this is two-fold. (i), with regard to the example in (4.3.8)(a), it has been pointed out in Chapter Three (Sections 3.2 and 3.3) that the agent is always present in the context of use and that the sentence has to do with the current index. Therefore, it is NOT the case that the speaker can utter an imperative for which the subject may be represented by a variable, especially in view of the great effort that goes into specifying the referent of the subject, where it is not pragmatically self-evident in the context of use who the referent is. Therefore, we cannot have a case where the negative element relates to a propositional function in which the referent of the subject NP is unidentified, contrary to what is normally required by the imperative construction.

(4.3.9) $* \neg \lambda x [\text{'Call'}(\text{'Sam'})(x)]$, or

$* \lambda x [\neg [\text{'Call'}(\text{'Sam'})(x)]]$.

(ii), a fundamental principle of Montague Semantics characterizes an argument as an element that can be within the domain of a functor. Consequently, such an argument is said to have the property of that functor. If, as it will be demonstrated in Section 5.1 below, the subject NP has no structural link with the predicate and so with the verb of the sentence, it cannot be said to have the property of the predicate as a functor.

The crucial thing here is that the object NP CAN validly function as an argument to the verb. This means therefore that the verb must be separately modified by any element

which can do so before it can function as a functor to the object NP. Among these modifying elements are do, negative elements and, as we shall see in the next chapter, non-sentential adverbs. It can therefore be claimed that in the imperative construction, the verb is fully determined, semantically, before it can act as a functor to the object NP.¹²

(2) NEGATION AND THE VERBS IN THE IMPERATIVE

The issue to resolve now is how to determine the manner in which the negative elements relate to the verb, in view of the presence of do in the sentence whenever any of them occurs. It is not one of the conventions of both GPSG and MS to entertain the idea of Do-Insertion into a sentence structure, where there is no auxiliary verb, in order to give "support" to the negative element that occurs in the sentence. On the contrary, all the elements that occur in the sentence are base-derived, and so do has been characterized as a modifier of the verb. (See Dowty, 1979: 348-350). I agree with this position. It would appear however that the negative elements that occur in the imperative do not modify the lexical verb directly, rather, they modify do which in turn modifies the lexical verb.

- (4.3.10)(a) Don't forget to call me at Five.
- (b) Do not forget to call me at Five.
- (c) Don't you again forget to call me at Five.

There is thus/no difference in the semantic roles of n't and not, even though the former attaches to do while the latter takes the position immediately after it.

- (4.3.11)(a) *Do you boy not forget to call me.
- (b) *Do frequently not call me.
- (c) *Do at home not forget to call me.

But the following are grammatical.

(4.3.12)(a) Do not now raise the issue again.

(b) Do not at once send for them.

(c) Do not here draw a conclusion.

It is therefore reasonable to come to the conclusion that the negative elements (both n't and not) are inseparable from do, which they modify.¹³

(3) NEGATION AND SUBJECTS IN THE IMPERATIVE

As pointed out in the previous section, there are some restrictions on the types of NP's that can occur as subjects in imperatives containing negation. This has to do not only with the structural configurations of the NP's but also their Person. For example, the following sentences sound odd.

(4.3.13)(a) *Don't the boy who arrived late yesterday make that noise again.

(b) *Don't the girl in the class sing it again.

(c) *The boy who arrived late yesterday do not make that noise again.

(d) *The girl in the class do not sing it again.

It is not due to the fact that the NP's are rather long. Even much shorter ones also sound odd.

(4.3.14)(a) *Do not somebody open the door!

(b) *Don't the boy there open the door!¹⁴

(c) Don't you boys open the door!

There must therefore be a basic principle which constrains the occurrence of subjects in imperatives with negation. What we are seeing here is the case where not all the subject NP's that can occur under Rule (i) can do so under Rule (iv). This has two implications: (a), that in addition to identifying the referent in relation to the

context of use, as was argued in the previous chapter, there is also another requirement which is imposed by negation; (b), it is clear from this state of affairs that even though there are no structural relationships between the subject NP and the predicate of the imperative, there are semantico-pragmatic ones, as we shall see soon.

The type of subjects that co-occur with negation in the sentence are the zero-subject and the second person pronoun, you or NP's like all which can accept of you post-modifiers.

(4.3.15)(a) Don't <> open the door.

(b) Don't you open the door.

It does appear that the occurrence of these elements as subjects in these imperatives depends on the idea of a prior identification of the referents. The crucial point here is the degree of specificity in the reference to the individuals in question. (See the chart in (3.3.14) in Chapter Three). It is however the case that an individual who has previously been associated with an action by the speaker is deemed to have reached the highest level of identification by him or her. It is this fact that limits subjecthood to only the zero-element and you in the imperative that contains negation. It is an aspect of the nature of language that you cannot tell an individual not to swim or not to jump down if you do not (before speaking) associate that individual with such an action, or if s(he) is not about to do so. It is this fact that justifies the occurrence of you, thus creating a context of two parties: the speaker and the addressee as we shall see in the next chapter. It also justifies the use of the zero subject since an individual in the process of performing an action could already have been uniquely identified by the situation that s(he) has thus created.

The full descriptive NP's and the indefinite NP's cannot function in such sentences since their semantic nature clearly shows that they are being identified or associated with an action for the first time.

(4.3.16)(a) The boy holding the rope jump down!

(b) Somebody jump down and pick it up.

(c) Don't $\left\{ \begin{smallmatrix} \langle \rangle \\ \text{you} \end{smallmatrix} \right\}$ jump down (again)!

It is the same factor that warrants the occurrence of the adverb of frequency, again, in imperatives containing negation as in (4.3.16)(c). It shows that there is even the possibility that the addressee could already have performed the action in question before the imperative with negation is uttered. This thus provides independent justification for the above claim. Under these circumstances, therefore, we cannot possibly have an imperative like

(4.3.17) *Don't somebody come in again!

Finally, the situation created by negation thus supports the claim in Chapter Three that when the zero-subject occurs in the imperative, it might be doing so as an alternative to you. The only exception to this is the class of imperatives that are captured by Rule (v). These are those with do not.

(4.3.18) \Do not $\left\{ \begin{smallmatrix} \langle \rangle \\ * \text{you} \end{smallmatrix} \right\}$ say that a\gain!

It would appear however that the needs of intonation and stress placement, as indicated in (4.3.18), make the presence of you just after not obtrusive and so unacceptable.

In sum, it may be said that the examination of the various aspects of the semantic nature of the imperative has revealed that the subject NP does not lie within the scope of the negative elements that occur in the sentence. Negation

is thus a semantic limitation on the verb. Similarly, no propositions are expressed by the verb phrase component of the sentence even though it is syntactically detached from its subject NP. It is thus the case that the semantic nature of the predicate is such that negation attaches directly to the main verb through the auxiliary verb do.

It was also noticed that not all imperative subject NP's can occur in the imperative which has a negation. The choice is usually between you and the so-called zero-subject since negation presupposes that the referent is already well identified. Thus within the NP's that can occur in the imperative, only a small subset made up of these two elements can be related to the notion of previous identification that can provide the level of identification which negation generally requires in subject NP's. One of the implications of this state of affairs is that in imperatives involving negation, there is semantico-pragmatic relationship between the subject and the predicate of the sentence.

B) Compositional Semantics of Imperative VP's.

The aim of this sub-section is to find out how far the imperative predicate is susceptible to a compositional analysis. It will also show that its semantic structure is different from the type that is usually associated with declarative VP not only with regard to some of the categories it has, but also with respect to the fact that it is susceptible to factors having to do with the context of use of the sentence. It is this facility which it possesses that enables it to form a psychological sentence structure, and a credible semantic relationship, with its subject NP. It is therefore the case that previous analyses of the imperative in English (see Huntley, 1980 and 1984; Hausser, 1979; Schmerling, 1980, and Lewis, 1972) which fail to account for all these aspects, are grossly inadequate.

(1) CATEGORIES

It is true, as the previous chapter shows, that the occurrence of "non-basic" categories may vary from one sentence type to another. This thus supports the idea that the rules of the grammar of natural language are best formulated if they are in accordance with the differences that exist between sentence types. While this has been the case with the subject NP's, it is certainly not so with regard to most of the individual elements that occur in the imperative, including elements like adjectives, and prepositions. Also, the manner in which verbs dominate their object NP's do not seem to vary from one sentence type to another. What seems to vary in the case of the imperative is the outcome of such a relationship, i.e., the imperative VP. Therefore, most of the "basic" categories for verbs and their complements that already exist in the literature (see Montague, 1974), and which are originally devised for declaratives, also hold good for imperatives. (See example (3.3.1) in Chapter Three).

It must however be made clear that whereas T-phrases in Montague Semantics are categorially defined to combine with TV- as well as IV-expressions in order to form verb-object relationship and subject-predicate relationships respectively, they cannot be so in the imperative. There is no subject-predicate relationship in the imperative which can be subjected to a compositional analysis. It is for this reason therefore that I have set up a separate category of NP's, T^{im} , to represent possible imperative subject NP's.

The NP's that can function as subjects in the imperative construction constitute only a subset of the NP's in English. Furthermore, they can also function as objects to verbs in the construction just as much as those which cannot be subjects, as the following examples show.

- (4.3.19)(a) Consult the man in the corner.
 (b) The man in the corner listen to me!
 (c) Give this to a man.
 (d) *A man listen to me!

We can see that whereas the man in the corner can occur both as an object and as a subject, a man can only occur as an object but not as a subject in (4.3.19). Yet, the category T covers both types of NP's in Montague Semantics. The complication that must thus be resolved is how to integrate the two types of NP's as entities that can function as complements to verbs and also separate them according to whether or not they can occur as subjects in the construction, and, while doing all this, making sure that none of them is categorially defined to combine with IV-phrases.

Leaving aside the issue of IV-phrases for the moment, I believe the best way to resolve the problem is by putting the NP's in two different categories which would then be associated with specific functions. Although such functions would overlap with regard to the ability of the NP's to occur as complements to verbs, they would also separate the NP's that can be subjects from those that cannot. As a consequence, the Category T must be dropped completely as inadequate for the situation presented by the imperative.

The Category T^{im} would still remain as one that comprises NP's that can function as subjects in the imperative. Then, T^{um} may be regarded as the one that is constituted by NP's that can function as complements to verbs in the imperative. One of the implications of this is that NP's like somebody belong to the two categories. But then this is what it usually does in English, as we can see in the

the following examples.

- (4.3.20)(a) Somebody clean the floor.
 (b) Tell somebody.

As a member of Category T^{im} , somebody occurs in (4.3.20)(a) as a subject, but it is a direct object in (4.3.20)(b) as a member of Category T^{um} .

Another implication of the classification is the fact that an NP like a boy, which can only function in the sentence as a complement to the verb, would simply be a member of Category T^{um} only.

- (4.3.21)(a) Ask a boy to clean the table.
 (b) *A boy clean the table.
 (c) Tell your son to apply for it.
 (d) *Your son send a reminder at once.
 (e) Persuade this boy to go to college.
 (f) *This boy stand up.

The final implication of the arrangement is that it does not in any way affect the normal verb-complement relationship which, as pointed out above, does not vary from one sentence type to another. Thus, the usual relationships still obtain, e.g., transitivity and predication.

On the question of IV-phrases of Montague Semantics, my argument is that they are simply inapplicable to the imperative construction. The imperative predicate exhibits such a level of uniqueness in many respects that it must belong to a category that can reflect this fact. One of these aspects is the need for it to be a suitable fragment with which the subject NP can relate semantically. Consequently, since the subject NP, as already pointed out, refers to the context of use, it is not surprising that the VP also has an aspect of this feature. The evidence for this comes

from (i), the fact that all the verbs have to do with actions, things to be performed, (ii), the sort of relation to time which they all have, and (iii), the morphological shape of the verbs which leaves no doubts about the semantic relationship between the VP and the subject NP.¹⁵

Another reason why there must be a separate category for the imperative predicate is that unlike IV-phrases, it cannot function as a real predicate to its subject for reasons which will be discussed in Section 5.1 below. So, while the Category IV works for declaratives, it cannot work for imperatives, otherwise it will be impossible to separate a declarative predicate from an imperative one, from the point of view of form.

(4.3.22)(a) The youngest girl here sits down.

(b) The youngest girl here sit down.

The imperative predicate might therefore be regarded as a member of the Category IV^{im} . It would thus be of the logical TYPE $\langle s\langle e, t \rangle \rangle$ -- a function from the context of use to a set of individuals. Since the symbol s stands for the context of use, it is not a category. Therefore, V^{im} is not categorially defined to combine with any other category. This is in consonance with the real nature of the imperative predicate, which, as pointed out above, does not really form a unified syntactic category with its subject NP.

As a non-basic category, V^{im} would, for example, be the result of the operation of the rule of functional application involving categories TV and T^{um} .¹⁶ Consequently, TV must be defined to take T^{um} as an argument to yield IV^{im} .

The various elements of the imperative predicate that have been introduced so far may be represented in the following TABLE.

TABLE ONE

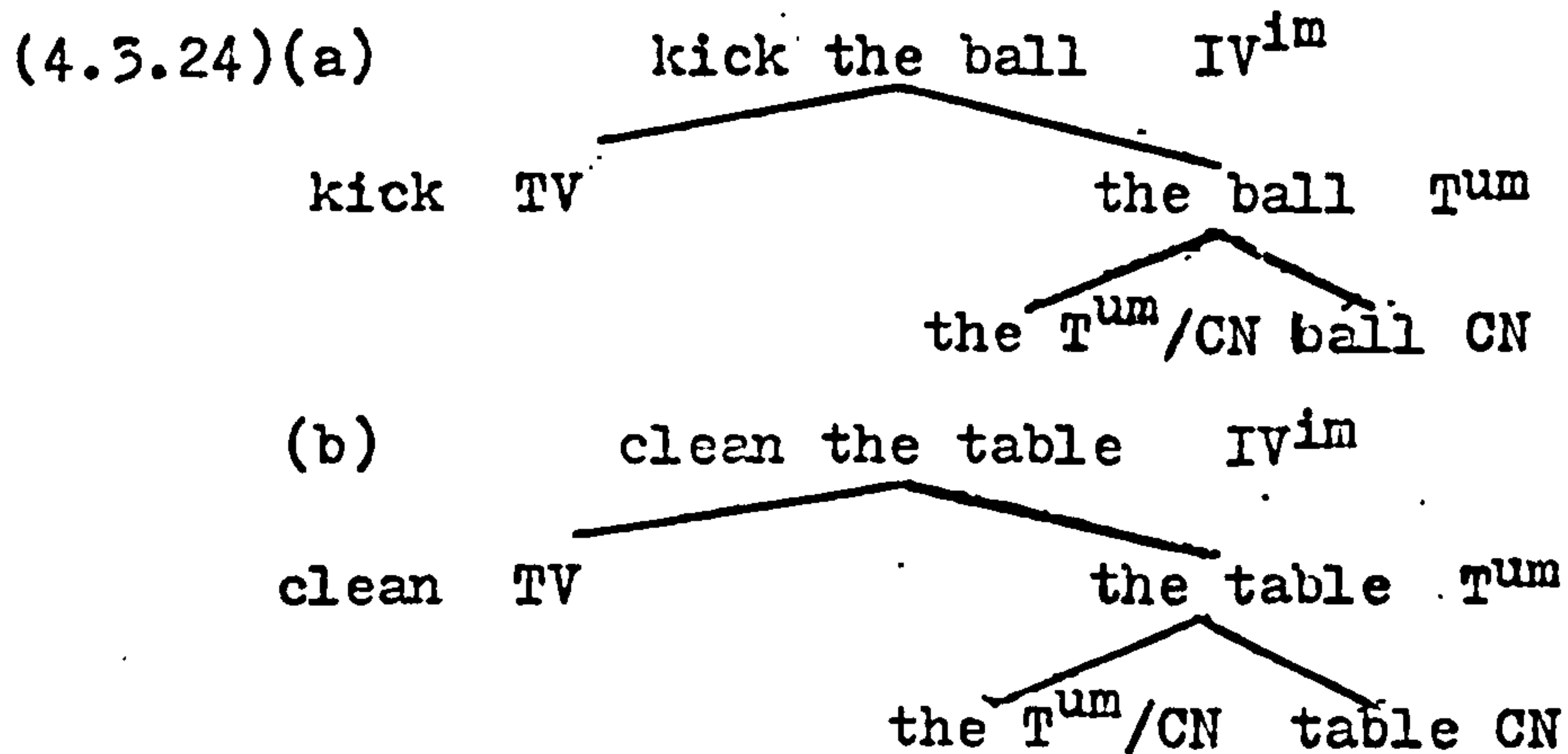
Category	Semantic TYPES	Expression
IV^{im}	$\langle s\langle e, t \rangle \rangle$	open the door try to open it sit on the that chair be polite tell her what you want etc.
TV	$\langle \langle s\langle \langle s\langle e, t \rangle \rangle t \rangle \langle s\langle e, t \rangle \rangle \rangle$	open try touch kick ₁₇ hold etc.
T^{um}	$\langle s\langle e, t \rangle \rangle$	Peter a boy this girl your son a table etc.

(2) FORMATION RULE

The formation rule for the example which I have chosen will thus be one of functional application like the type in (3.3.10) in Chapter Three.

(4.3.23) If \underline{x} is a semantic TYPE $\langle T^{um}, IV^{im} \rangle$ and \underline{y} is a semantic TYPE T^{um} , then the function $\underline{x}'(\underline{y}')$ will yield the semantic TYPE IV^{im} .

The Rule in (4.3.23) can predict only imperative predicates which contain transitive verbs and their direct objects. Other rules will be required to predict other structures which the predicates may also have. For example, separate rules will be needed for the verbs be and try to. Note that the logical TYPE for T^{um} is the same as in Montague Semantics and so category names are used in the following diagrams instead of logical types. (See example (3.3.1).



For the examples in (4.3.25), the predicates are members of Category IV^{im} without involving the Rule in (4.3.23).

- (4.3.25)(a) stop IV^{im}
 (b) smile IV^{im}

A significant aspect of the present proposal is the fact that it is able to identify the predicate of the imperative as an element which is suited to function with the rest of the sentence. It might be argued that since it is related to the context of use as the subject NP is, it can therefore be categorially defined to combine with T^{im} -phrases to form the unique sentence structure, the imperative.

The above argument is flawed on many grounds. First, the subject NP and the predicate are not related to the context of use in the same way. While the referent of the subject NP has to be present in the context of use, the action in the predicate, as pointed out above, does not have to take place in that context. Its real connection with the context is the fact that it is MENTIONED in it. Second, if a compositional analysis were provided for the imperative as suggested above, it would be impossible to describe the real nature of the construction, i. e., the semantico-pragmatic relationships between the two main segments that make it up, especially the fact that they are independent entities being

correlated by the processes of identification and specification, as will be explained in the next chapter. Thirdly, there is no new insight to be gained by providing such an analysis which the approach that has been pursued here has not revealed. Finally, I would say that the analyses of the subject and vocative NP's as well as that of the predicate have made clear what they all have in common. However, while it is the role of surface syntax to represent the imperative as if it were a single unit, it is that of semantics to reveal the fact that, in relation to the external world, such a union does not exist in the sentence.

In sum, I would say that this subsection has revealed the semantic nature of the imperative VP. The logical TYPES of the categories that constitute it have been established, and the NP's which can appear as complements of the verbs have been identified. The VP itself has been characterized as an entity which has to do with the context use, but which has no compositional relationship with its subject NP.

4.4 Conclusion

In this chapter, many aspects of the verb phrase in the imperative have been examined. The idea of a unique imperative VP has been established on the basis that it cannot occur in a clause that is in a complement position in a sentence; it carries a strong sense of order or command, and it does not allow any extraction of any of its parts.

In the main section for syntax, the verbs have been discussed and PS rules provided. With regard to certain elements that occur in the VP, be has been found to occur only as a main verb, accepting a host of complements including the gerund. There is thus no aspect in the construction. Do occurs in the initial positions in

imperatives which have it, bearing the emphatic stress, and at times, the affixal negation. Also, along with negation which as a word occupies a fixed position after it, it behaves in a way that limits the types of subjects that can occur in the imperatives which contain it to you and the zero-subject. On the whole, the verbs have been characterized as non-finite and tense-neutral. The PS rules cover all the structures, capturing not only the constituent structure of the VP, but also the various surface forms of the imperative.

With regard to semantics, it has been demonstrated that since there is no assertion linking the subject NP and the VP, the subject NP is outside the scope of negation in the construction. Negation is thus limited to the VP only, where, along with do, it is a semantic modifier of the main verb. The compositional semantics of the VP identifies it as an entity which cannot serve as a functor to the subject NP. It is thus a unique VP, capable of containing as objects or complements both noun phrases that can function as subjects and those which cannot, and also capable of having some relationships with the context of use.

Footnotes to Chapter Four

1. As a result of this, I shall henceforth be using the term "imperative verb" to refer to any member of this class of verbs in the language.
2. Since be remains a copula in all its uses in the imperative, these complements that it takes may properly be described as "predicates". It thus cannot be an auxiliary and still be able to have such "predicates". Any complements that may occur in such circumstances will be governed by the main verb to which it is an auxiliary.
 - (1) Jim is examining them.
 - (2) Mabel may also be going there.
3. I am using the symbol <> to represent the zero-subject.
4. Be, like do, has become an interesting verb to study in the generative approach to grammar. The functions of this verb have traditionally been divided between being a "linking" verb and being "helping" verb. In the former role, it would, for example, have an NP or an adjective as its complement. In the latter role, it would, for example, be an element in the formation of the progressive aspect. Recent developments in generative grammar have been inclined towards regarding be as a main verb. The principle behind this is simple enough: it simply collapses the two roles I have mentioned above by getting rid of the latter. Where there is controversy is the manner to bring this about. We have seen (in Chapter One) the attempts of those who want to treat be along with do in some form of Raising Transformation. There has also been the more recent attempt of Gazdar, Pullum and Sag (1982) to use feature specification system to identify the sort of elements that can occur after it as well those that occur after certain other verbs. According to this

method, in the instances in which the verb has NP's, PP's and Adj's as complements, it would have the feature specification [+PRED]. Their functions in aspect and passive constructions, for example, have different feature specifications (see Gazdar, Pullum and Sag, Op. cit.: 598-599).

What we have observed about be with regard to the imperative is not whether or not it takes an NP or an adjective as a "linking verb" or as a "predicate", but whether or not the progressive aspect is relevant to the imperative sentence in English. My proposal above is that it is not, and so the so-called "-ing" word that occurs in the imperative is just a gerund, an NP. In conformity with GPSG approach to the relationship between be and NP's in such a position, the verb must be subcategorized with the feature [+PRED] in the imperative. This feature thus holds good for all its functions in the construction, as the examples in (4.2.3) demonstrate.

5. It must be reiterated here that varieties involving tags are not being included. (See Chapter One, Section 2 above).

6. As stated in Chapter Two, Section 2.4, the Feature [IMP] is an abbreviation for [MOOD IMP]. (Also, see footnote 12 in Chapter Two). Since all imperatives have their main verbs in the base-form, [IMP] appropriately subsumes this syntactic aspect of the verb. This fact is thus captured by the FCR in (4.2.25). [IMP] is also used as a devise that captures the basic structural shape of the imperative, which is one of Subject NP + VP. This excludes vocatives since they can occur in different positions in the sentence. The so-called zero-subject occurs in the same position as lexical subject NP's and so the structure stated above holds for many varieties of the construction. Since [IMP] is a sub-classifica-

tion of sentence mood, it is linked with the subject-predicate relation in the imperative also. Thus, in the imperative where the relation is not expressed by aspects like modality and concord, as I shall explain in Chapter Five, the feature [+BSE] appropriately represents this fact. Just as [IMP] relates to the base-form of the imperative verb, so can the features [DECL] and [INTER] (for declaratives and interrogatives respectively) be said to relate to [+FIN] (see Gazdar, 1982) in their main verbs.

7. It must be recalled that GPSG allows neither an underlying element like the do in Pullum and Wilson (1977) nor the deletion of any entity as in TG, and so Rule (i) in (4.2.26) cannot be regarded as a case where do is underlying or deleted. Rules (i) and (iii) become (vi) and (vii) respectively through the operation of the meta-rule relating to Sentential Adverb Placement (SAP). (See Gazdar et al, 1982 and 1985).

8. Syntactic features have been left out of the following PM's for the sake of simplicity. They will however be included in the next set of PM's which will actually include examples that contain do.

9. The noun phrase "the boy in the corner" is not being treated as a vocative in this example.

10. McCawley (1981) examines the problem of deciding which propositions in declarative sentences not or n't may be said to negate. He notes that quantifiers, among other things, may bring in some complications. His examples of such cases include the following (p. 16).

- (1) Some people aren't afraid of dying.
- (2) Some people are afraid of dying

None of the sentences, he observes, is a negation of the other.

Here, the subject NP's are clearly within the scope of the negation in the sentences, and so they are able to influence the interpretation of the sentences in relation the presence or absence of n't. But in imperatives, there are no such propositions involving the subject NP's for not or n't to negate and so the subject NP's in these sentences lie outside the scope of operation of these negative elements.

11. The fact that this question arises at all is due to the uniqueness of the imperative construction. As we shall see soon, the imperative does not express any proposition that may be said to be true or false. It has been pointed out already that there is no propositional function for not to relate to in the sentence. It might be expected that the predicate of the sentence made enough sense to serve as a sort of "proposition" that not could validly negate. It is therefore necessary to examine the role of negation in this part of the construction in order to make clear the element or a set of elements to which it may directly attach itself in the construction. (See Lee, 1974, and Hoepelman, 1979).

12. The verb is the most significant element in the predicate. Therefore, it does not appear to make any difference where these verb-modifying elements are placed in it. Thus, as we shall see in Section 5.1(B) below, non-sentential adverbs may occur either before or after the verb in the predicate. That this is not true of the negative elements in the sentence is perhaps due to the influence of do, which, as a periphratic verb, must occur BEFORE the main verb.

13. The idea of negation relating to the verb only is not without a parallel in the grammar of English. In a way, this is what is done by prefixes like dis- and de-.

(1)	<u>Positive</u>	<u>Negative</u>
	obey	disobey
	mobilize	demobilize

It is therefore the case that the following sentences have the same meaning.

(2) Do not disobey her.

(3) Do not not obey her.

It can thus be claimed that only not can occur before not after do in the imperative. If we pursue this paralellism between these two sentences further, it may be argued that whereas the first not in (3) relates to do directly as I have claimed above, the second seems to be close to the verb obey, from the way the sentence is uttered, almost like the way in which dis is related to its stem obey in (2). If this is correct, it is the case therefore that the negative element that modifies do cannot be separated from it after all, and so the "do not" in both sentences are identical.

14. I would say that even with you alone as subject, the sentences in (4.3.14)(b) and (4.3.14)(c) would still be odd as imperatives.

(1) *You do not open the door!

(2) *You don't open the door!

15. See Chapter Five, Section 2, below for a discussion of the role of action and its relation to time in the imperative. The phenomenon by which the VP is interpreted as an action to be performed by the addressee is also discussed. In this matter, the base form of the verb plays a crucial role.

16. As we saw in the previous section, there are numerous ways in which the predicate is constituted. Some of these do

not involve the rule of functional application. I am however limiting myself to cases involving only this rule in the present analysis.

17. As stated above, it will suffice for the purpose of the present analysis to cover the cases of transitive and intransitive verbs here.

CHAPTER FIVE

THE IMPERATIVE SENTENCE

5.0 Introduction

All the evidence in the present analysis so far suggests that the imperative is fundamentally different from all other sentences in the language, contrary to some of the views expressed by Davies (1981). In brief, the areas of differences are as follows:

- (a) SYNTAX: The imperative, as we have seen in Chapters Three and Four, contains two syntactically disjuncted parts -- what I have all along called subject and predicate, each of which is solely but adequately organized syntactically for the linguistic function of the sentence. As a result, these two main parts of the imperative do not exhibit features like concord, tense and modality.
- (b) SEMANTICS: Both subject and vocative NP's of the construction relate to the context of use. Whereas the VP is semantically organized to specify an action or a course of action, both the subject and the vocative are similarly specified as the only possible agents of such an action.
- (c) PRAGMATICS: We have been able to see why the

imperative can afford to drop its subject NP and yet remain a full sentence. The complex relationship between it and the external world is the one factor that underlies most of the idiosyncratic grammatical characteristics that the sentence is believed to have. It is this aspect that most generative grammarians have fruitlessly sought to explain away in their accounts (see Chapter One). Yet we cannot fully understand the sentence until adequate attention is given to it.

There are certain aspects that must not be overlooked. For example, it is the case that the imperative cannot occur in the forms of the following sentence structures: the cleft sentence, the pseudo-cleft, real passive and topicalized sentences.

- (5.0.1)(a) Open the door!
 (b) *It is open the door!
 (c) *What open is the door!
 (d) *The door open by you!
 (e) *The door (you) open!¹

The notion of the imperative as "a poorly elaborated clause type" and a "primitive relative to indicative clauses", first mentioned in Chapter Two, Section 2.1 in a quotation from (Schmerling, 1982: 203), in the context of the sentences in (5.0.1), would appear to be borne out. But this is rather misleading. It is based on the unproven assumptions that all sentences must be similar to the declarative, and that the greater the structural varieties that a sentence type displays, the "richer" it must be.

As we have seen in Chapter Two, the consequences of these views are unwelcome. For example, they have led to the virtual equation of the imperative with a clause-type, the infinitival clause type. As I have observed in Chapter

Three, there is also a suggestion that the construction is probably quantified into intensional contexts like the declarative construction. There is nothing wrong if all this was the case. But the features which we now know that the imperative lacks suggest very strongly that the construction is simply different from the declarative. What seems quite obvious now is that the old desire to seek generalizations in sentence structures and functions is still strong, and appears to be standing in the way of an adequate analysis of the imperative.

For the present study, however, the ungrammaticality of the structures in (5.0.1) and the fact that there are certain grammatical characteristics of other sentences which the imperative lacks are an index of its uniqueness rather than of its weakness. From the point of view of our intention to provide a separate analysis for the sentence in line with the suggestion of McCawley (see Chapter Two, Section 2.3), I shall proceed, in this final chapter, to examine the following aspects of the sentence.

- (i) how to characterize the relationship between the subject and the predicate of the sentence;
- (ii) how the imperative relates to adverbs, especially sentence adverbs, which occur in it;
- (iii) the sort of semantical object that it is, and,
- (iv) how to provide an appropriate model theoretic interpretation for it.

I shall treat both syntactic and semantic as well as semantico-pragmatic matters as usual. Almost all of these issues have been introduced in the previous chapters. The ensuing discussions will thus take them to their logical conclusions.

It is hoped that these problems which have remained recalcitrant in the literature on the imperative will be finally laid to rest, or removed as obstacles to our understanding of the construction.

I shall first of all discuss aspects of syntax and then go on to semantics and pragmatics after that, keeping as far as possible to the order in which the problems have been set out above.

5.1 Syntax

A) Subject and Predicate.

The subject and VP elements in the imperative were treated in Chapters Three and Four respectively. It is therefore necessary to discuss them together in this chapter. We can see that there is an aspect of the sentence which the phrase structure rules in the previous chapter cannot capture. This is the relationship between the subject and the predicate of the sentence. Until now, I have only taken it for granted that the "subject" of the imperative is syntactically disjuncted from its predicate. The question that is raised is if this is the case, why and how are such elements still subject and predicate. This is an interesting question which bears on the controversy about what is what in the sentences of natural languages in both generative and non-generative grammars. We can see this, for example, in Chomsky, 1981; Dowty, (1982a) and (b), and Perlmutter, (1982) in recent times, and also in Sandmann, (1954); Halliday, (1967); Strang (1968), and Keenan, (1976) for the earlier period. The main concern has always been the syntactic and the functional roles of these elements of the sentence.

With regard to their functional roles, the subject-predicate relationship has been described as that of Topic-Comment (as pointed out in Chapter Three), Theme-Rheme and Given-New. Almost all of these distinctions have appeared in generative grammars (we have already seen how Chomsky has made use of some of them).

As for the syntactic aspects, certain distinctions have also been made. The fact of the English word-order and the incidence of certain structural configurations have led to the following distinctions being made: grammatical, logical and psychological subject-predicate relationships. (See Lyons, 1968; Johnson-Laird, (1968); Clark and Clark, (1968); Hornby, (1971), and Chafe, (1970).¹

- (5.1.1)(a) Sam is reading a book. (Grammatical Subject)
- (b) Sam is examined by the doctor. (Logical subject)
- (c) Sam, the doctor examined. (Psychological subject)

What is significant here is the fact that some of these notions relate directly to the imperative sentence. Also, they can be theoretically accommodated by the one-level, compositional approach that the present analysis is based upon. I shall therefore try to extend some of them to the imperative construction.²

My contention in Chapters Three and Four is that both the subject and the predicate elements of the imperative are each fully integrated structurally, hence they are susceptible to the rule of functional application. But this is not true of the imperative construction as a single syntactic unit as I have suggested in Chapter Three (Section 3.0). The difference (and a very significant one it is) is that whereas this rule also works across these elements in the declarative, it cannot be so in the imperative. The reason for this,

I believe, is the fact that the imperative subject-predicate relationship is a psychological, rather than a grammatical, one. This is evidenced by the situation in the imperative in which, as pointed out in the introduction, there are, in these elements, no grammatical features like concord, tense and modality which could have established grammatical relations between them. What is there surely is the operation of the general English word-order: SVO. Thus, it is the case that in nearly all varieties of the imperative, this word-order is maintained. The subject occurs before the predicate.

(5.1.2)(a) The boy in the kitchen set the table.

(b) Somebody set the table.

(c) You set the table

(d) Set the table, won't you!

Barring the dubious case of the Let-construction, the only exceptions I know of are cases where don't occurs before the subject you. (See Chapter Four, Section 4.2, for "VP Fronting").

(5.1.3) Don't you set the table in this way again!

It is this state of affairs in the imperative that warrants the claim that the imperative has a psychological subject-predicate relationship -- subject plus predicate constitutes a sentence, with the subject occurring before the predicate.

It is perhaps in place here to comment briefly on how features of concord, tense, modality, voice and aspect grammatically unify subject and predicate elements in the sentence. It is insignificant to ask whether or not these features are syntactic or semantic. For one thing, they usually appear in syntactic characterizations, as we can see in the survey in Chapter One. For another, it is not

theoretically worthwhile to try to split up, for example, the role of may or will, as they have been used in the analysis of the imperative, between syntax and semantics. What is relevant here is the fact that what occurs in any one of the two elements (subject and predicate) has a definite consequence for the other, as TABLE ONE shows.

TABLE ONE

Sentence	Grammatical Feature and Function
John sings.	Concord: 3rd. person singular Tense: Present. Involvement: A habitual event by John.
John can sing.	Tense: Present. Modality: Ability - John has the ability to sing.
The song has been sung by John.	Concord: 3rd. person singular. Tense: Present. Voice: Passive. Aspect: Perfective - John has completed the singing.
Were you singing?	Concord: 2nd. person, singular or plural. Tense: Past. Aspect: Progressive.
Will you sing?	Tense: Present. Modality: Futurity or Volition.

Certain general patterns are discernible in the table. It seems to be the case that each sentence must choose at least two of the features. Secondly, the sentences show a choice between displaying concord or modality as a regular feature. (See Quirk et al, 1973, and Palmer, 1974 and 1979).

It has been noted in Chapters Two and Four that the imperative has its verb in the base-form. It is however not the case that this base-form does duty for all the other features already noted in the predicates of the other

sentences in TABLE ONE. The imperative does not seem to need them. The absence of these features in the sentence, coupled with the fact that the subject NP regularly occurs before the predicate, as we have seen above, points to the fact that although the general configuration of the construction is that of a sentence, there is no structural cohesion between its two major parts.

In addition to our separation of the imperative from mere clauses and verb phrases in Chapter Two, it can be argued that the characterization of the construction as a sentence is fully motivated by the fact that it has the usual structures that make up a sentence in natural languages, i.e. subject and predicate, although they are not grammatically linked as we have seen above. The question that is thus raised is whether or not a case of sentencehood based on a psychological subject-predicate relationship is as real as one based on a relationship in which features like those in TABLE ONE obtain. I have no answer to this question except to say that from what we have seen so far, it can be said that the nature of each of the two main constituents of the construction is fully adapted to the situation that it presents. While the subject NP is oriented towards the context of use, the VP is organized in a way that brings the idea of a subsequent action out clearly, thus giving us the notion of a unique type of a sentence. We shall see the semantic consequences of this state of affairs in the imperative below.

In the light of what we have seen about the nature of the subject-predicate relationship in the sentence, the notion of GIVEN-NEW (see Halliday, 1967) becomes particularly relevant. This notion appears to capture the sort of situation which the imperative presents. As Hornby (1972) has pointed out, this idea has a psychological

reality from the viewpoint of the listener. Applying it to the imperative, we will find that this sort of reality also exists. In the context of use, the referent of the subject NP is only a listener, initially. In this sense therefore, we can see the subject as GIVEN. Since what is actually being introduced, especially from the point of view of the listener, is the predicate, it is thus NEW to him or her.

There is nothing unscientific about the notion of Given-New. On the contrary, it has both cognitive and pragmatic implications. For example, whereas the listener/addressee cannot see the predicate in the imperative in (5.1.4)(a) as a "comment" about himself,

(5.1.4)(a) You boy wait for her.

(b) The boy is waiting for her.

since the idea it presents in the context of use is "new" to him, this is not the case in the declarative in (5.1.4)(b). Here, the idea of "is waiting for her" will not be "new" to referent of "the boy", if he hears the sentence, because it is he that is already doing the waiting. In this case, therefore, the predicate is a real "comment" on the subject.

The above suggestions relate to an aspect which the protagonists of the Performative Hypothesis who discussed the imperative have ignored. While they were concerned with the role of you and had no doubts that the addressee was (and still is) the agent of the action mentioned in the sentence (see Chapter One, Section 1.2), they failed to consider the nature of the relationship between the subject and the predicate of the sentence. They thus failed to identify an aspect of the construction which separates it from all other sentence types, while concentrating on the illocutionary force of the sentence as part of its structure even though it is not usually verbalized in the ordinary

imperative sentence. As we shall see in Section 5.2 below, such an illocutionary force only serves as the motivation for the uttering of the sentence.

From all we have seen above, it is pertinent to incorporate the notion of Given-New in our account of the imperative.³ We probably cannot fully understand the nature of the sentence type until we can be certain about the relation between the subject and the predicate of the sentence. All this is in line with the following observation:

Although the notion of psychological subject-predicate has been almost completely ignored by students of the generative-transformational approach to grammar, it is clear that any complete understanding of language structure and function will have to include this notion as it relates to various aspects of word order. (Hornby, 1972: 641).

To summarize, we can say that one significant aspect of the imperative sentence is the nature of the relationship between its subject and predicate. It has been observed that the kinds of grammatical relationships that we find in other sentences are absent in the construction. In light of this as well as the significance of word-order in the sentence, it has been contended that the imperative subject-predicate is psychological in nature with regard to grammar.

B) Adverbs.

Some adverbs have been identified as those which cannot occur in imperatives. These are the so-called negative preverbs. (See Chapter One, Section 1.3). Here, I take a look at adverbs in imperatives from a broader perspective. I shall consider both sentential and non-sentential adverbs and then establish their general characteristics. The aspects that have to do with the notion of negation will be taken up in Section 5.2 below under semantics, where it will be

explained why negative preverbs cannot really occur in these constructions.

(1) SENTENTIAL ADVERBS

Gazdar et al (1982) propose a rule for Sentential Adverb Placement (SAP) thus (p. 607):

$$(5.1.5) \text{ SAP: } < \left[\begin{array}{c} - \\ \bar{V} \\ [+FIN] \\ [+AUX] \end{array} V \right] \bar{V} [-NUL]] \bar{F} > \text{ =====} < \left[\begin{array}{c} - \\ \bar{V} \end{array} V \text{ ADV } \bar{V} \right], \lambda P [\text{ADV}' (\bar{F} (P))] >$$

This rule, they claim, covers varieties of English that permit adverbs only after the first auxiliary.

- (5.1.6)(a) Joe has probably not found it.
 (b) Joe may possibly have been here before.
 (c) Joe will certainly have given it up.
 (d) *Joe may have probably left there.

They observe:

A less restricted variety also exists, in which such adverbs may occur after any auxiliary verb (although the deeper they get in the \bar{V} , the worse they sound). (Ibid.).

What happens in interrogatives is quite similar, as the following examples show.

- (5.1.7)(a) Can Joe possibly find it?
 (b) Will she certainly arrive tomorrow?
 (c) Who will probably call for supper?

Again in the imperative construction, it is all different. The rule in (5.1.5) cannot be generalized to this construction because it has certain characteristics which are not captured by the rule. Let's continue with sentential adverbs for the moment. The placement of these adverbs in

imperatives is quite restricted. Where they do occur in these sentences, they seem to be constrained to occurring in sentence-initial positions only. They also sound as if the sentences in which they occur were each a part of a discourse.⁴ (See Michell, 1977).

- (5.1.8)(a) Alternatively, allow her to play until she is tired.
- (b) Preferably, get the papers typed yourself.
- (c) Obviously, you do the cooking, while I do the washing up later.

In imperatives, the occurrence of adverbs like these in post-subject positions is not possible unless their scopes do not extend over the entire sentence in each case.

- (5.1.9)(a) *You, alternatively, allow her to play until she is tired.
- (b) *The girl in a red gown, preferably, get the papers typed yourself.
- (c) *Somebody there, obviously, do the cooking while I do the washing up later.

There is certainly no chance of these adverbs occurring deeper in the sentences. As for their placement in sentence-final positions, our examples suggest that this too is ungrammatical.

- (5.1.10)(a) *Come here, certainly.
- (b) *You speak to her, possibly.
- (c) *Don't do that again, obviously.
- (d) *Listen to him, alternatively.

It is interesting to note why these adverbs appear to be possible in sentence-initial positions, but bizarre in sentence-final positions. In this regard, the fact that they do not occur even immediately after the subject NP's, as the

examples in (5.1.9) show, is significant. The reason for this is probably what we have noted above: i.e., the disjunction between the subject and predicate elements in the imperative construction.⁵ In initial positions, these adverbs are able to relate to both segments of the construction, thus unifying them to some extent. It is not unreasonable to postulate that they are probably aided in this task by the fact that they appear to have some conjunctive relationships with the sentences that could have occurred just before they could have been uttered in a discourse. But in sentence-final positions, they would have two disadvantages. First, they would be unable to extend their scope over the subject NP's. Second, they would lose the ability to relate directly with any previous sentence.

It is therefore correct to say that sentential adverbs occupy a fixed position in the imperative, unlike what they do in other sentences. This is the sentence-initial position, and this characteristic of the imperative can be captured by the rule in (5.1.11).

(5.1.11) $S[IMP] \text{ ----} \rightarrow \text{ADV } S$

This rule is of course the result of the operation of a meta-rule on a rule like the one in (4.2.26) (1) (see Chapter Four, Section 4.2) in accordance with the principles of GPSG.

(2) NON-SENTENTIAL ADVERBS

With regard to non-sentential adverbs, the imperative presents a very different picture. Since these are adverbs that directly modify the verbs of their respective sentences, they occur either immediately before the V's of the sentences or anywhere after them.

(5.1.12)(a) Softly clean the top of it.

- (b). Wake him up gently.
- (c) Don't immediately clear them up if you aren't in a hurry.
- (d) *Immediately don't clear them up if you aren't in a hurry.

It is by no means surprising that these adverbs should behave exactly as they do in other sentences. As we have demonstrated in the previous chapter, it is the grammatical cohesion which the imperative VP possesses that has enabled these adverbs to have the same freedom of occurrence in it as they have in other sentence types.

(3) NEGATIVE PREVERBS

Negative preverbs are to all intents and purposes non-sentential adverbs. Consequently, the reasons for their inability to occur in imperatives, from the point of view of syntax, must thus be found in the VP's of the sentences. As their name suggests, these adverbs (hardly, scarcely, almost, etc.) are expected to occur in preverbal positions in the VP of a sentence.

- (5.1.13)(a) They scarcely drink port, even when it is available.
- (a') *They drink scarcely port, even when it is available.
- (b) He hardly knows what to ask for.
- (b') *He knows hardly what to ask for.
- (c) She never misses her lessons.
- (c') *She misses rarely her lessons.
- (d) We barely understand the results.
- (d') *We understand barely the results.

As we can see in the examples in (5.1.13), there seems to be no syntactic constraint in the structure of each VP to prevent them from occurring in post-verbal positions as other

non-sentential adverbs do. Nevertheless, it seems highly probable that their preference for preverbal positions has to do with their semantic nature. Similarly, their inability to occur in the imperative at all may be attributed to the same reason. The whole situation therefore points to significant elements in these sentences and the adverbs themselves which it is the business of an adequate analysis of any one of these sentential structures to account for. As pointed out in Chapter One, it is not enough to say, as Davies has done, that it is all due to meaning relations in the imperative. It is necessary to point out clearly not only what actually obtains in this construction, but also what is in the nature of these adverbs that make them so special, as we shall see below.

The rule for Non-Sentential Adverb Placement in English imperatives, after the operation of the appropriate meta-rule, would look as follows:

$$(5.1.14) \quad \begin{array}{lcl} S[IMP] & \text{-----}\rightarrow & VF \\ VP & \text{-----}\rightarrow & ADV \quad VP \end{array}$$

(for structures where the adverb occurs in front of the verb).

$$(5.1.15) \quad \begin{array}{lcl} S[IMP] & \text{-----}\rightarrow & VP \\ VP & \text{-----}\rightarrow & VP \quad ADV \end{array}$$

The translations into intensional logic reveal that there is no semantic difference in the predictions of these two rules.

(4) DIFFERENCES BETWEEN SENTENTIAL AND NON-SENTENTIAL ADVERBS

A brief comparison of sentential and non-sentential

adverbs shows that they are clearly distinct with regard to the positions they occupy in the sentences. This situation does not appear to be affected at all by the presence of the so-called zero subject in the sentence. Thus, we can say that the adverbs in the following sentences do not occupy the same positions, i.e., sentence-initial positions, even though they seem to do so.

- (5.1.16)(a) Certainly, be ready to welcome him in the school premises.
 (b) Quickly be ready to welcome him in the school premises.

It is the case therefore that whereas certainly occurs BEFORE an S-category, quickly occurs before a V-category. This is an important aspect of the imperative that has been ignored in important studies on adverbs in imperatives in generative grammar. (See Chapter One, Section 1.3). This rather invisible contrast in the placement of these adverbs thus ensures that their various scopes of operations are not suppressed by the absence of superficial subjects in the sentences.⁶ Thus, both adverbs can occur together in the same imperative construction with the sentential adverb placed in front of the non-sentential one, but without any suggestion that the former may be modifying the latter.

- (5.1.17)(a) Certainly, quickly be ready to receive him in the school premises.
 (b) *Quickly, certainly, be ready to receive him in the school premises.

Thus, whereas manner adverbs can lie within the scopes of sentential ones as in (5.1.17)(a), the converse is not possible.

Another important difference between these classes of adverbs in the imperative is their relationship with do and

don't. There is a case (as pointed out in the previous chapter) where a part of the verb in the imperative occurs before its subject.

(5.1.18) Don't you play with it again.

Quite significantly, the non-sentential adverbs fail to occur before the subject NP's, along with don't. They however still have the freedom to occur in different places within the VP of the imperative.

- (5.1.19)(a) *Stupidly don't you play with it again.
 (b) *Don't stupidly you play with it again.
 (c) Don't you stupidly play with it again.
 (d) Don't you play stupidly with it again.
 (e) Don't you play with it again stupidly.

With regard to do, it is interesting to note that the adverbs cannot occur before it. This further confirms the status of do as the element that occurs in front of the entities that make up the imperative VP in which it occurs. (See Chapter Four, Section 4.2) above.

- (5.1.20)(a) *Quickly do jump down!
 (b) Do quickly jump down!
 (c) Do jump down quickly!

As for sentential adverbs, the presence of do and don't seem to make no difference whatsoever with regard to their placement. However, their co-occurrence with do in some instances sounds somehow strange.

- (5.1.21)(a) Preferably, don't you bother to apply for the job again.
 (b) *Certainly, don't you try to answer me back again!
 (c) ?Obviously, do be prepared to go there.
 (d) ?Alternatively, do send him a cheque.

To summarize, it may be said that the syntactic behaviour of adverbs in imperatives does support the claims I have made not only about the uniqueness of the sentence as a syntactic mood category, but also about the relationships between some of its constituents. Thus, sentential adverbs occupy a position in the front of the construction; other adverbs occupy various positions within the VP, and in conformity with the grammatical cleavage between the subject and the predicate, sentence adverbs cannot occur within the VP of the construction as they do in declaratives.

5.2 Semantics

A) The Semantic Nature of the Imperative.

The aim of this sub-section is to examine many aspects of the semantics of this sentence type as part of the attempt to determine the sort of semantical object that it is. I shall be concerned with the ways in which it relates to certain other objects: the concept of time and the semantic role of negative preverbs, and the semantic function of the construction, all of which have been matters of controversy and uncertainty in previous analyses of the sentence. (See Chapter One).

(1) THE CONCEPT OF TIME

In Section 5.1(A) above, I argued that imperatives do not syntactically express the concept of time through tense-marking on the verb. It has been pointed out elsewhere (see Chapter One, Section 1.1) that they do not accept past time adverbs. Yet, although future time adverbs may be absent in some of the sentences, it is generally believed that they all refer to such times. (See Grice, 1975). It is therefore

pertinent to find out what conveys this strong idea of futurity in all the sentences whether or not they contain any future time adverb.

It appears we are not simply dealing with futurity in imperatives. It has been contended above (see Chapter Three, Section 3.3) that the sentences refer to the "current index". If this is true, then we must also consider the notion of the sequence of times. The points at issue therefore are which element in the imperative actually has to do with the future time; which relates to the current time and how. The specification of the subject, i.e. the identification in semantic terms of the potential agent, does not refer to any future time, no matter how such a time is expressed.

- (5.2.1)(a) The boy who will represent us ...
- (b) The girl to run first ...

The ideas expressed in the post-modifiers in these examples (see Chapter Three) do refer to the future but this has nothing to do with the futurity which is usually part of the general meaning of each imperative sentence.

- (5.2.2)(a) The boy who will represent us come forward.
- (b) The girl to run first go and get ready for the race.

This therefore takes us to the second parts of the sentences, their predicates. The question is whether or not they refer to the future. In other words, are they different from the following forms which occur in declaratives.

- (5.2.3)(a) ... will come forward.
- (b) ... will go and get ready.
- (c) ... is to come forward.
- (d) ... is to go and get ready.⁷

There are two aspects to clarify here. First, the

imperative VP is different in form from those in (5.2.3) because it does not have the elements will and is to which these other ones have. Second, unlike those in (5.2.3), the imperative VP does not make any reference to the future directly. Rather, it relies on natural sequence of events to determine what has to do with the future. In this sense therefore, the future is indeterminate, unless it is specifically mentioned by the use of future time adverbs. Therefore, the concept of future time in imperatives can extend from a split second to any subsequent time, so long as the time of uttering the sentences occurs before the performance of the action mentioned in it. Thus, the sequence is between the uttering of the sentence and the performing of the action specified in it. It is therefore possible for the action to be performed in the context of use, without breaking the above sequence on the one hand, and, on the other, the action may never be performed at all, which still does not technically violate the sequence. Nevertheless, the general use of the sentence lies between these two extremes.

The conclusion to draw therefore is that there is nothing in the elements that occur in the imperative (apart from the instances where time adverbs are used) that specifically refers to the future, it is pragmatic reality which requires the agent of an action and the action itself to be mentioned BEFORE the former may be expected (or not expected) to carry out the latter. It is this aspect of the construction that conveys the notion of futurity in the sentence. It is necessary therefore to realize that with regard to futurity, two different concepts are involved: the sequence of time brought about by the fact that the sentence must be uttered before it can possibly be complied with, and the mere reference to the future that the occurrence of a future time adverb occasions. Since the first concept is a

basic feature of imperatives in the sense that they all have it, we can then see that any time adverb that occurs in it must be the type that can semantically be interpreted as referring to a period AFTER the utterance of the sentence. This thus explains why a past time adverb cannot occur in the sentence.

- (5.2.4)(a) Go there now!
- (b) Go there tomorrow!
- (c) *Go there yesterday!

It is interesting to note how completely the idea of sequence of times is veiled in the imperative. For example, the use of "now" in the examples in (5.2.5), one declarative and the other imperative, shows that there is a distinction to be made between what is actually happening at the time of speaking and what is not yet happening at the time of speaking.

- (5.2.5)(a) Kate is getting out of her car now.
- (b) Kate, get out of your car now!

In (5.2.5)(b) the adverb "now" thus spans the period from the time of speaking to the time the action is expected to be performed but the action is subsequent to the uttering of the sentence. In the declarative in (5.2.5)(a) however, the time the action in question covers includes the time of speaking. This thus indicates how sentence types can modify the meanings of words that occur in them.

It is therefore my contention that the imperative is set in the present even though the base-form of the verb is not said to express this. The sentence simply sets, at the current index, the conditions for the realization of the idea expressed in it. As pointed out in Chapter Three, the emphasis here is on the conditions, not on the realization or performance. The conditions are the parameters set out in

the sentence itself -- e.g., who the agent is, what the action is, and any other thing about these matters.

- (5.2.6)(a) John, hold my hand quickly.
- (b) You boy bring me the bell.
- (c) Stay here until he comes back from work.
- (d) The girls who won three prizes prepare for a civic reception in the town hall next week.
- (e) Buy a few more shares next year when they are floated again.
- (f) Build your house on the moon if you want to avoid noises.

I have tried to lengthen the time lag that may reasonably occur between the uttering of each sentence and its possible performance. I have thus gone from the one that may be undertaken in the context of use, as in (5.2.6)(a), to the one that may be attempted in the remotest (if ever) future, as in (5.2.6)(f). Other sentences fall in between. Yet, the linguistic resources of the imperative are so rich that even the performance that will take the longest time to come about has no overt adverbial time specification. But in spite of the enormous differences in their relations to time, they all share two features, namely, the current laying down of the conditions (when the sentences are uttered) and the sequence of times that must subsist between it and the possible performance of the actions mentioned in the sentences, no matter how long or short it may be.

(2) IMPERATIVES AND OTHER ADVERBS

The adverbs I have in mind here are the so-called negative preverbs, which cannot occur in the sentence. In particular, it is necessary to consider the semantic factor that relates to their non-occurrence in the construction. It can be argued that this is due to the tendency of the

construction to restrict negative elements to the verb only. But negative preverbs have to do with both the verb and other elements in the sentence simultaneously. For example,

- (5.2.7)(a) Mabel scarcely saw the train before it left.
- (b) The students barely followed what their teacher was saying.
- (c) She almost completed her course before she got married.

There is a strong sense of comparison in each of these sentences which is engendered by these adverbs:

- (i) the bit of the train which Mabel saw and the much larger portion of it which she did not see;
- (ii) the bit of what the teacher said which the students understood and the bigger portion which they did not understand, and,
- (iii) the large part of the course which she did and the little bit that she did not do.

These adverbs thus inevitably relate to both the subject and the predicate of the sentence in which they occur up to a level that fully assumes the existence of a propositional relationship between them. Consequently, it can be claimed that it is the existence of such a relationship that makes possible the notion of comparison noted above. This is a basic aspect of their meaning which effectively excludes them from occurring in the imperative construction. It can thus be concluded that the adverbs seem to require those characteristics of sentences which have no place in the imperative. Thus, a sentence type in which the subject NP is precisely identified (as a possible agent) and in which the action is then again specified (with no previous link between both units of the sentence as I have argued in

Section 5.1 above) cannot accommodate adverbs which require such links as a matter of necessity.

(3) SEMANTIC FUNCTION

It is in place here to ask what now can be said to be the semantic function of the imperative construction. The current proposals on this issue which have been found to be grossly inadequate for various reasons (see Chapters One and Three above) may be recapitulated as follows:

- (a) that it expresses a proposition (see Huntley, 1980 and 1984);
- (b) that it is a means of making a proposition come true or it is a means to bring about a state of affairs in which it is true (see Schmerling, 1982).
- (c) that it expresses both denotation and fulfilment conditions in which an entity has the property of being a hearer who is intended to make the "propositional content" (request) contained in the imperative come true (fulfilled) at a subsequent time (see Hausser, 1979).
- (d) that it functions as a paraphrase of the corresponding performative, possessing the same meaning, truth value, etc., at an index (see Lewis, 1972).⁸

The examination of the imperative so far reveals that the above proposals are vague in certain significant aspects. As for proposal (a), I have argued that the imperative could not possibly express a proposition or have a truth value the way that declaratives, for example, do. In this regard, it is necessary to note the significance of the semantic function of the subject NP (which is the identification of the referent of the subject or the vocative NP as an agent) as

well as that of the predicate (which is the specification of the action to be performed by the agent). Furthermore, it must be realized that there is no "propositional function" which involves both the subject NP and its predicate in the imperative, and this perhaps explains the inability of those who advocate the presence of such an element to represent it successfully. As has been pointed out earlier, it is not the case that the subject of the imperative construction has the property (or is in the domain) of its predicate.

Against this background, therefore, it does not serve any useful purpose to relate the imperative to intensional or oblique contexts, as proposal (b) seems to suggest. It is perhaps more realistic to refer to a future time with regard to fulfilment, and to other matters involved, almost as proposal (c) has done. The only objection I have here is the attempt of (c) to characterize such a future fulfilment as if it was dealing with sentence types other than the imperative.

It is significant though that in this regard the idea of a "request" was raised. But no attempt was made to distinguish between "propositional content" and this "request" in proposal (c), although it had been careful enough to explain the distinction between the "form" and the "use" of a sentence. However, we must distinguish the role of "request" and other illocutionary forces from that of propositions. Whereas the former belongs to the study of speech acts, the latter is related to the study of sentence forms. It is however the case (see Chapter One, Section 2) that whereas all sentence types may be indistinguishable with regard to their ability to be involved in different speech acts, they MUST be separated with regard to propositions. Speech acts studies might refer to the "propositional content" of the imperative because they are not concerned with

the form of the sentence, and above all, they never attempt to specify how such propositions are organized in the sentence.

The notion of an addressee or a hearer that is generally put forward is well motivated. However, the relationship that proposal (c) claims it has with the verb in the sentence must be rejected. As we pointed out above (Section 1.6), Hausser has given the imperative a semantic analysis that does not separate it from a declarative and so it fails to capture the essential semantic difference between the two sentence types. This in effect makes it no different from proposal (d) which argues clearly that the sentence must first be turned into performatives (which are full declaratives) before they are semantically interpreted.

It may be pointed out that the imperative VP represents "a unit of meaning", but I doubt very much if this should be seen also as the "propositional content" of the sentence. Why it cannot be such a thing is illustrated by the following constructions.

- (5.2.8)(a) Sam plays tennis daily.
- (b) *Plays tennis daily.

Both constructions obviously have "meanings". But whereas we can provide a model theoretic interpretation where there are states of affairs (possible worlds) in which the example in (5.2.8)(a) may be TRUE or FALSE, no such thing can be done for the example in (5.2.8)(b), even though it exhibits the features of tense and concord. The reason for this is that there is no entity in any possible world that can be said to perform the action mentioned in the sentence. Similarly, since the imperative VP does not grammatically attach to the subject NP of the sentence of which it is a part, as pointed out in Section 1 above, it cannot, as it stands, be

associated with a model-theoretic interpretation.

It is therefore necessary to find out how the notion of "propositional content" of the imperative is conveyed even though the sentence can neither be related to a "propositional function" involving the subject and the predicate of the sentence, as we have seen above, nor can it be said to express any truth value. The predicate alone cannot be said to express the notion either.

In the light of the situation that the imperative presents, what needs to be done in order to represent it as a unique grammatical mood category is the determination of the conditions that have to do with the semantico-pragmatic relationships which the construction has created. Consequently, a compositional analysis of the whole of a sentence as a single syntactic unit must be rejected as misleading since the characterization of the sentence as a unique mood category must recognize the fact that its subject-predicate relation is a psychological one only.⁹ Therefore, any analysis that seeks to account for the nature of the imperative on the assumption that they are grammatically unified must be doing so in the face of what we have seen in the last two chapters to the effect that the subject and VP of the sentence are separately organized both syntactically and semantically.¹⁰

In sum, it can be said that our examination of the various aspects of the imperative sentence has revealed that its semantic nature is unique. In all its forms, it involves a sequence of times between the production of the sentence and the performance of the action specified in it. It is this aspect of the sentence that conveys the notion of futurity in it. It is this fact too that prevents it from accepting past time adverbs. Even when the action is to be performed in the

context of use, the token of the sentence must be used before the performance of the action indicated can take place. It is thus not the case that the imperative is formed to convey futurity as such. The sentence has been found to be semantically set in the present time or at the current index. Consequently, it has been contended that a categorial and semantic interpretation of it must concentrate on the conditions that surround its organization in the context of use, which can reveal aspects of its possible fulfilment.

The examination of the semantic role of the so-called negative preverbs has revealed that they cannot occur in the imperative because they cannot relate to both the subject NP and the VP of the sentence, as they usually do in other sentences, because of the absence of any grammatical link between these two entities of the sentence. It has been pointed out that it is the incidence of this grammatical disjunction between the main parts of the imperative that prevents it from expressing any truth value. It is thus of great significance that a semantic analysis of the sentence takes this into consideration and so avoids providing a representation that is based on the wrong assumption that the entire sentence is a single syntactic unit.

B) Model Theoretic Interpretations

(1) THE NATURE OF THE MODEL.

In Chapter Two (Sections 2.3 and 2.4), I identified the features of the Model for the interpretation of aspects of the imperative. I argued that such a model must contain references to (i), the speaker; (ii), the addressee; (iii), the place or situation; (iv), the time, and (v), the object named, all of which have to do with the context of use. An important aspect to note here is the fact that the use of these entities and notions of the Model for the imperative

must be differentiated from their use for other sentence types. I briefly state the reasons for this.

We have noted that the subject and the predicate elements of the sentence are grammatically detached and so there is no imperative sentence which can be related to the features of the Model as a single unit. Both the subject and the predicate are therefore seen as separate units even though they are semantically and pragmatically inter-related in certain respects as we shall see soon.

It is generally agreed that imperatives do not raise the issue of truth (see Chapter One, Section 1.4) and so, in a surface compositional analysis of the constructions, there is no reason to represent a Model as a set of possible worlds. Such a view of a Model is suitable for the declarative. Thus, after observing that truth and entailment conditions are the "central concerns of syntax and semantics" in declarative sentences, Montague says this in a footnote:

In connection with imperatives and interrogatives truth and entailment conditions are of course inappropriate, and would be replaced by fulfilment conditions and a characterization of the semantic content of a correct answer. (Montague, 1974: 248).

It is for this reason, therefore, that it is inappropriate to set about doing, in the case of imperatives, the conventional Model-Theoretic interpretations in which a set of intensions are propositionally characterized as "true" or "false" (1 or 0), as noted in a quotation from Dowty (1981) in Chapter Two, Section 2.4 above. Consequently, such interpretations will not be provided in the present study. However, the issue of propositions and the imperative will be discussed in Chapter Five, Section 5.2 C.

It is thus the case that the need to relate the elements that make up the sentences to the context of use will involve references to indexical aspects of sentence interpretation that will be on a level which the interpreta-

tions of other sentences are not likely to demand.

Finally, as a result of all the above factors, we do not have to identify a single syntactic category to represent the imperative sentence in the same way as t represents sentences which can express propositions in Montague Semantics. Similarly, as it has been argued above, it will be inappropriate here to attempt to translate into intensional logic entire imperative sentences because (a) they do not constitute structures which involve intensionality in any form and (b), the psychological nature of the grammatical relation between the subject and the predicate of the sentence cannot allow it since it has no syntactic relevance; for, such a translation, according to MS, must have a syntactic motivation.¹¹

The essence of this interpretation therefore is the specification of the manner in which any token of this sentence is organized by the speaker and interpreted by all those in the context of use without any ambiguity; an aspect of the sentence type which reflects its adequacy with respect to both syntactic and semantic matters.

It is the nature of this organization, which constrains both the structural configuration and the semantic interpretation of the sentence, that should be seen as the factor which determines the "fulfilment conditions" of the sentence. Therefore, these conditions call for more than just the carrying out of the action at a time subsequent to the uttering of the sentence. Hausser (1979), as noted in Chapter One above, allows his "denotation conditions to rest on this aspect only, and so fails to consider the care with which the speaker encodes the sentence with reference to the context of use, and does not identify the elements in the sentence that help it to "place" the execution of the action (wherever possible) in a later period. The ability of the addressee to execute the order or carry out the action specified in the

sentence may depend on future states of affairs as much as on the present. (See Searle 1975, and Leech, 1971). The probabilities are so many that one wonders whether or not the speaker of an imperative would have considered all of them before he or she uttered the sentence. In any case, there is usually no evidence of this in the sentence other than the precise identification of the intended agent and the specification of the desired action. Consequently, what to regard as fulfilment conditions must be contained in the sentence itself, no matter what happens with regard to the subsequent execution of the action. Thus, for example, the claim that nobody would utter a command which he or she knows cannot be complied with (see Searle, 1975, and Sadock, 1974) may be true in some contexts but false in others. As such ideas are not usually reflected in the imperative sentence itself, they constitute neither the "denotation" nor the "fulfilment" conditions of the construction. Therefore, my contention is that we should examine the sentence itself, its form and its context of use (which are discernible in it) in order to identify its strategies for conveying its meanings.

(2) SEMANTICO-PRAGMATIC RELATIONSHIP BETWEEN THE SUBJECT/VOCATIVE AND THE PREDICATE

Since these Models naturally vary from one instance to another, it is necessary to identify them as they are conveyed in each token of the construction. In this regard, it is necessary for us to determine how we can handle the two parts of the sentence in each case. The point to note is that whereas the referent of the subject NP must be unambiguously identified within the context of use, this is done without any regard to the predicate which may contain a specification of an action that may or may not be confined to the context, as the following examples show.

- (5.2.9)(a) The boy who has my briefcase please open it.
 (b) The boy in a blue jacket please ask your friend to call on him tomorrow.

(c) Drive the car to the next stop.

The briefcase mentioned in (5.2.9)(a) may be seen as an object in the context of use, but the friend of the addressee and the next stop mentioned in (5.2.9)(b) and (5.2.9)(c) respectively are certainly not in the contexts of use. (See Chapter Four, Section 3 above). It is therefore necessary to rely on the lexical contents of the sentence for guidance. In view of all this, we can say that the imperative raises one crucial issue, i.e., the nature of the semantico-pragmatic relationship between its subject and predicate. It would appear that this problem must be resolved before we can determine how to treat these two elements of the sentence in our model theoretic interpretations.

What is now clear is the fact that it is the speaker who, by using the imperative, identifies some individual(s) and then specifies some course of action. It would appear that the semantico-pragmatic feature of the sentence in question is the phenomenon by which the juxtaposition of these two elements (the identification of an individual and the specification of an action) informs such an individual that s(he) is being (or has been) introduced into a speech event as an agent to perform the action in question.¹² As I have pointed out in Section 5.1 above, there is nothing in the sentence to show that some agreement had been previously reached between the speaker and the addressee to the effect that the latter would play this role. The speaker must also be understood to intend the same message as the addressee has got. What conveys this message therefore may be the great care that goes into the identification of the referent of the subject NP and the clear-cut manner in which the action is specified just after it. This probably explains why anything which is not part, or a modifier, of the verb cannot occur between the subject NP and the main verb in the sentence as we saw in the previous chapter.¹³

Let's now examine some of the things that happen in the external world in these matters.

- (5.2.10)(a) Sam, have you seen her yet? [INTERROGATIVE]
- (b) Sam, why; I say why this mess?
- (c) Sam, you can't do this to me. [DECLARATIVE]
- (d) Sam, I have a story to tell you.
- (e) Sam, don't do this to me! [IMPERATIVE]
- (f) Sam, stop it!

We can pick out the similarities and the differences between the sentences in (5.2.10) with regard to the relationships between the vocative and the rest of the sentences. Although they do not fall into subject-predicate relationships, they can be used to illustrate the point at issue.¹⁴

- (a) In each of them, the attention of some individual, Sam, has been attracted by the speaker.
- (b) Also in each of them, some piece of information immediately follows the invocation of Sam.
- (c) Again in all of them, Sam is being incorporated into the rest of the sentences for one reason or the other. It is from here therefore that the differences begin to emerge.
- (d) In the examples in (5.2.10)(a) and (5.2.10)(b), all that is required is for the addressee to give a verbal answer in each case. (See Karttunen, 1977).
- (e) In those in (5.2.10)(c) and (5.2.10)(d), he is apparently being requested first and foremost to listen. Whatever action he might take later would be entirely his own choice. Indeed, he might simply instruct someone else (possibly using an imperative sentence) to act in (5.2.10)(c).
- (f) However, in the imperatives in (5.2.10)(e) and

(5.2.10)(f), Sam is being directly called upon to act. In the former, he is to refrain from doing something while in the latter, he is to halt what he has been doing or what has been happening.

As I have pointed out earlier, what this action should be is the choice of the speaker, not that of the addressee. It is for this reason therefore that the imperative construction must be characterized as a sentence type in which the speaker addresses or identifies an individual (or a group of individuals) and then specifies an action or a course of action with a view to making such an individual (or a group of individuals) understand that s(he) is (or they are) to perform the action in question. As I have already pointed out in Chapter Three and earlier in the present chapter, there is no guarantee whatsoever that such addressees are desirous, or capable, of performing such actions.¹⁵ (See Rescher, 1966).

The scope of the material to cover in the Model interpretation therefore may be restricted to the identification of the referent of the subject. This is so because as we have seen above, it is this entity that must be determined in relation to the context of use. The referent of the vocative is also similarly interpretable in relation to the context of use, as pointed out in Chapter Three. But since names and other forms of address are themselves unique designations, they do not have to be further identified in order to avoid any ambiguity as in the case of subject NP's.

(3) MODEL THEORETIC INTERPRETATIONS

The Model Theoretic interpretations I intend to propose here are special because they relate to the aspects that are crucial to the semantic organization of the imperative and also because they do not treat a set of intensions like those

for declaratives. This is in line with the ideas contained in Montague (1970c) referred to in Chapter Two, Section 2.4 above, and Montague (1974) mentioned above. They probably represent the type of interpretations that can be related to imperative sentences as they really are, in their surface forms, and they bring out aspects of "fulfilment conditions" raised by Montague (1974) with regard to the semantic nature of the constructions, which are not known to denote truth values. The interpretations of the imperative here relate to the states of affairs which are captured by the ways in which the subject NP's are used to identify their referents. I would like to represent the Models that explain them as functions from the Contexts of Use to a set of individuals, as stated in (5.2.11). The referring expressions (the subject NP's themselves) are represented as d, i.e., Speakers' Descriptions ¹⁶

(5.2.11) $\langle s, e \rangle$ ¹⁷ (See Chapter Three, Section 3.3)

It is in place here to explain the features of the Model with which the elements - s, d, and e - work.

TIME: With regard to time, it has been pointed out that the imperative relates to the present world; the subject and vocative NP's are set at the current state of affairs, and so none of these elements refers to intensional contexts or possible worlds.

PLACE: The role of place here has to do with the location in which both the speaker and the addressee are present. Such a place must of course be at the current index.

OBJECTS NAMED: These are objects which are named in any part of the sentence. They may be located anywhere as long as they form a part of the "mutual knowledge" between the speaker and the addressee. It must not be forgotten though that it is not always the case that the imperative must be complied with in the location in which it is used.

ADDRESSEE: This entity of the Model perhaps needs no expla-

nation. However; I would like to reiterate the point made in Chapter Three (Section 3) that in cases involving figures of speech in the imperative, the "addressee" could be anything that the speaker cares to place in the positions of subject and vocative NP's in the sentence. So, it is the positions which such NP's occupy that are significant here.

PROPERTY: This is a term used in MS. But with regard to the characteristics I want to refer to here, the term VIRTUE may be better. The point here is the fact that I have no intention to spell out, in the present study, whether or not these characteristics relate to the referents of subject NP's in the same way as properties relate to NP's in MS. Nevertheless, what PROPERTY or VIRTUE should refer to in the imperative is the individuating quality which the speaker uses to pick out the referent of the subject NP.¹⁸

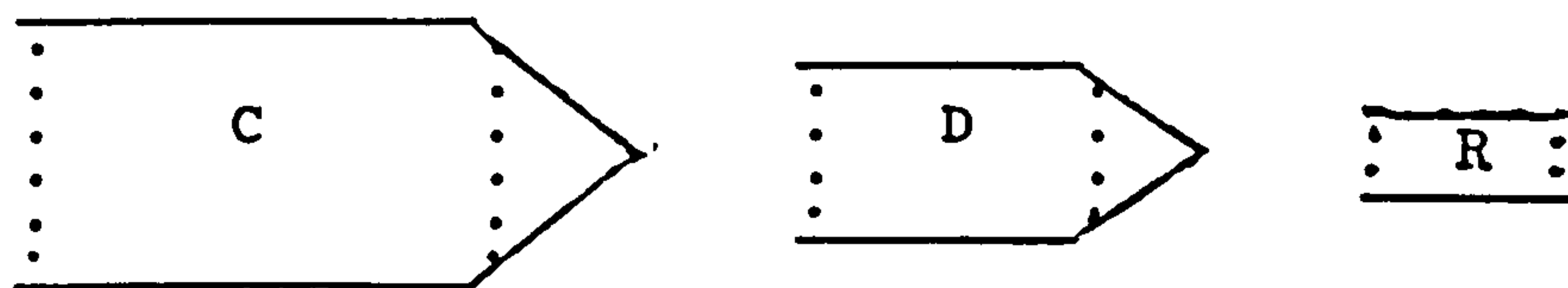
NAMES: Names here include other forms of address, all of which distinguish one person from another, particularly in the context of use.

SPEAKER: The speaker is the central figure in the Model from whose position other elements are mainly decided. Apart from being the speaker of the sentence, s(he) must have some knowledge which s(he) shares with his or her addressee. It is such knowledge that s(he) uses to identify the addressee in the context of use of the sentence. (See McCawley, 1970).

The roles that all the above elements play in the Models are quite variable. Therefore, the precise nature of the Models themselves and the particular elements which are relevant in each sentence depend on the sentence concerned. What is certainly common to all of them however is the relationship between the main segments of each Model which is represented in the function in (5.2.11) above.

Let's first of all try to represent this function by a simplified diagram as follows:

(5.2.12)



Box C stands for the situation that obtains in the Context of Use. Here, the regular entities are the speaker and the audience. But the situation is such that the speaker must, as pointed out above, have knowledge of some virtue or quality to distinguish any member of the audience. This is usually selected from the immediate context (e.g., the clothes that the addressee is wearing, the position s(he) is occupying in the audience) to any action that the person in question or any person that can be linked with him or her may have performed anywhere. Since the speaker is the repository of all such pieces of information, we can see how the union formed by him or her and the audience provides an appropriate context for the creation of the next major segment, Box D.

This second segment is thus the Speaker's Description of the potential agent of the action to be spelled out soon afterwards. The description used by the speaker is thus taken from the pool of knowledge about the audience which s(he) possesses.¹⁹ It is this Description therefore that leads to Box R which stands for the Referent. Whenever this identification fails, i.e., when it cannot pinpoint a particular person or group of persons in the audience as the case may be, it is usually the case that the speaker either improves on the description or switches to another one which may now pick out the person originally intended or a new person altogether.

It is thus being contended that the composition of, and the relationships between, C, D and R are parts of the semantico-pragmatic conditions for the production of the imperative

construction in English and other natural languages. These factors also demonstrate that there is no justification in relating the imperative to infinitival clauses (see Culicover, 1976 and Huntley, 1984). They may be set out in detail as follows:

- (1) an imperative must have the Referent of the subject NP unambiguously specified. This lack of ambiguity must be obvious to at least the speaker and the addressee, whether or not it is verbally conveyed.
 - (2) The Speaker's Description of the Referent must be such that at least one member of the audience would be able to relate to it. Those who cannot relate to it would thus regard the sentence as not applying to them.
 - (3) The Speaker's Description must be as simple and short as necessary. The piling up of Virtues will thus progressively diminish the degree of acceptability of the sentence.²⁰
 - (4) The need for the unique identification of the Referent cannot be replaced by the use of vocatives for they are only optional additions to almost all varieties of imperatives. These are particularly the cases in which you- and zero-subjects are present. It would appear that they cannot occur in structures with full Speaker's Descriptions, except, of course, you.
- (5.2.13)(a) *Kate, the lady who spoke a short while ago,
tell us what you hope to do, please.
- (b) *Samson, the man in the car, stop it!
- (c) You, the boy looking at me, come here!

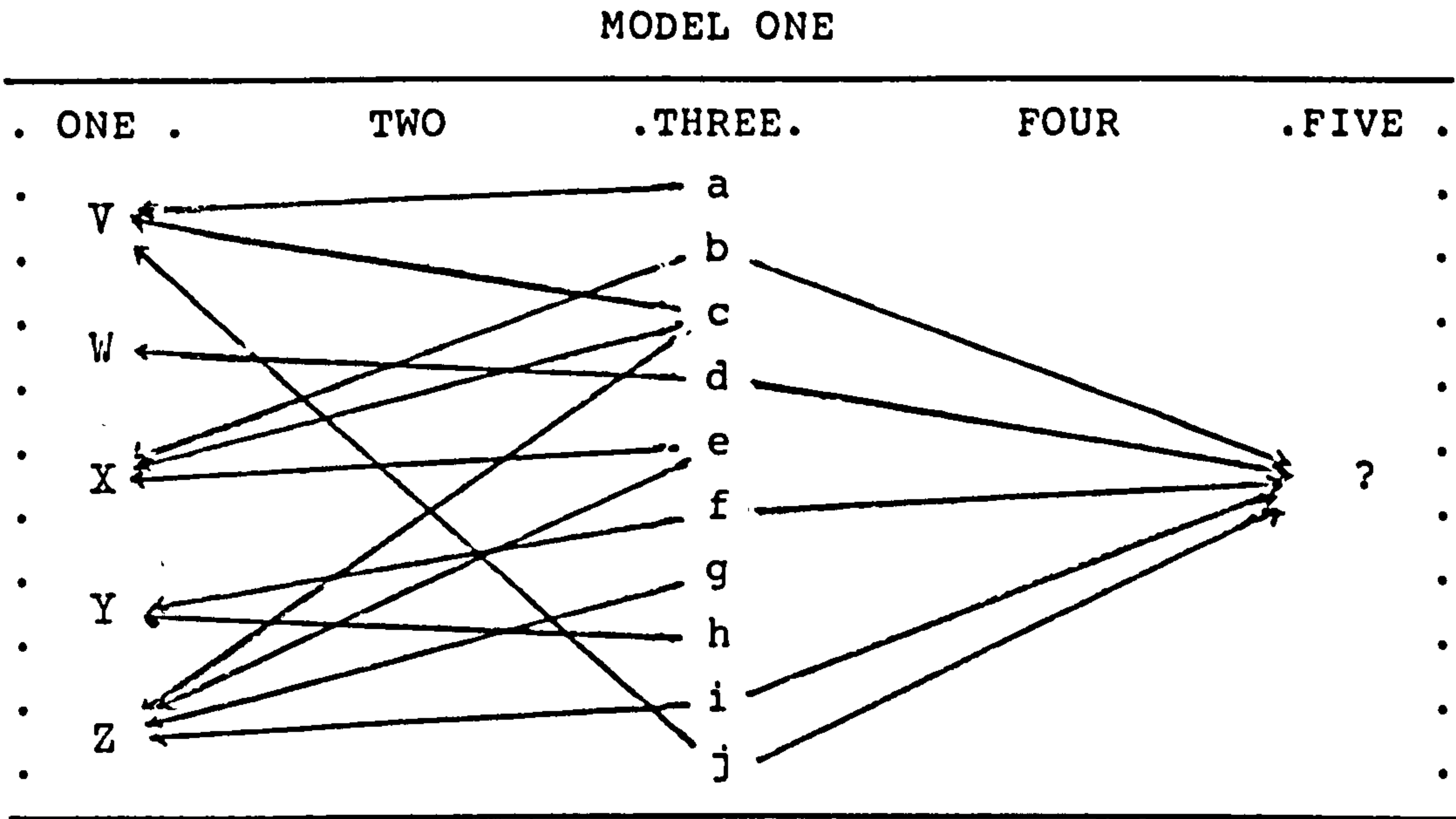
- (5) Finally, in addition to observing any or all of the

above conditions, the action to be performed by the Referent must be indicated. As we saw in the previous chapter, the verb must be in the base form since the syntactic mood category of the sentence already makes it clear that the performance of the action is a subsequent thing. Thus, as we have observed in the previous chapter, the essence of the "predicate" of the sentence is the "pronouncement" of the action to be performed, not any link that the action may have with the subject.²¹ In semantic terms therefore, the imperative may be seen as a "Referent + Action" sort of creation, where the action is cast in the base-form of the verb (with the complements, where appropriate, occurring in their usual positions after the verb).

We can see these conditions at work in the demonstration of the operations of the Models that will now follow.

- MODEL ONE: (1) Members of the Audience: V, W, X, Y and Z.
 (2) "Virtues" (in the knowledge of the speaker):
 (a) the boy who came yesterday
 (b) the boy who is wearing a red shirt
 (c) the boy in the corner.
 (d) the girl to tell a story
 (e) the boy sitting down
 (f) the girl who arrived early
 (g) the boy to clean the windows
 (h) the girl leading the team today
 (i) the boy looking at the ceiling
 (j) the boy who found the purse
 (3) Location: A room
 (4) The distribution of the Virtues

among the members of the audience and
the rest of MODEL ONE:



In a sense, we may say that columns ONE and TWO of the above Model, in relation to the location in question, represent the Context of Use in this case. It is in place here to make some comparison between this Model and the ones that are used for declaratives in MS. Thus, unlike such model theoretic interpretations, there are no variables and so no functions for the assignment of values to them. (See Montague, 1973; Halvorsen and Ladusaw, 1979, and Dowty et al, 1981). Again, unlike Hausser (1981), I am not making distinctions like "a speaker-context", "a hearer-context" (p.198), since there is only one context in which each and every one of the members of the audience already shares some knowledge with the speaker. There is no question then of the speaker trying to bring the addressee into his or her context as such, in the sense that Webber (1979) has used these terms; what we have here is a case of the speaker trying to link the addressee with a token of the imperative as I have explained above.

The arrows in column TWO show a possible distribution of the virtues among the members of the audience in column ONE. As in real life, it is not the case that some of these virtues are not shared by some members of the audience. Column THREE then represents the inventory of the **Virtues** which constitutes the pool of knowledge that the speaker holds about the audience at the time of speaking.²² Column FOUR contains the selection that the speakers makes from the inventory and it is this that thus identifies the Referent in column FIVE.

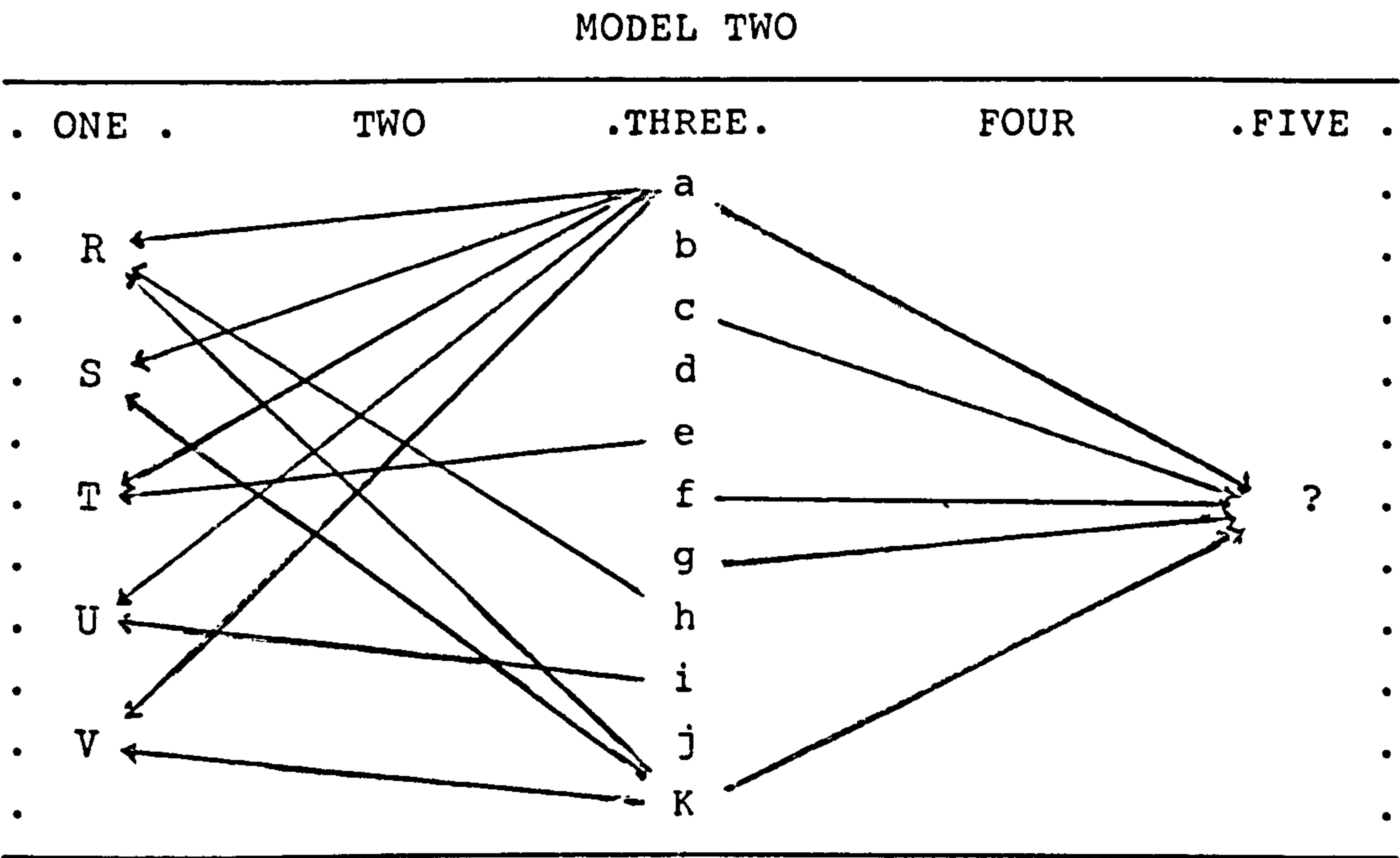
We can see clearly that MODEL ONE fully justifies the conditions that are set out above. For example, we can see why the stacking of virtues is rather odd. What the speaker does is to examine his or her inventory in order to pick out a single virtue that **UNIQUELY** identifies the Referent. For example, b is a unique identification and so it is this virtue that the speaker would choose as a possible subject NP of an imperative. Secondly, where the speaker wants to make a subset of the audience the Referents, he or she would choose the virtue that uniquely identifies such a subset, e.g., c. S(he) will only have to pluralize the first noun of the expression. The above Model covers Group One NP's.

Let's now consider those in Groups Two and Three. The Virtues in this case are as follows:

- (a) Somebody among you
- (b) Nobody among you
- (c) Two of you
- (d) All of you
- (e) The tallest of you
- (f) Division Five
- (g) Everybody
- (h) *My son
- (i) *Kate

- (j) *Your daughter
- (k) Member of Division Five

An audience is still involved and, in this case, it is made up of the following members: R, S, T, U and V. Other features are the same as above. The Model is follows:



The strongest justification for this interpretation must be its ability to resolve the identification of all classes of referents through the use of Speaker's Descriptions. For example, Virtue e presupposes that one person is the tallest in the audience and so it is possessed by only one of the members.

(5.2.14) The tallest of you come here.

On the contrary, b, d and g , for example, are shared by every member since they do not identify any particular person. But there is an interesting side to b and g. We can see that whereas only one member is eventually identified by e, all the members of the audience are identified by h and g

Furthermore, there is one difference between g and b. It is the fact that whereas the Referents of g are required to perform the action in question, those of b are told NOT to perform the action in question. This thus independently supports our claim above that in imperatives, negation relates only to the action (i.e., the verb and its complements) specified in the predicate. Thus, where the same Referents and action are involved, it will all come down to whether or not they are to perform it.²³ So, it is either that everybody (as a unity as it were) performs the action as demanded by (5.2.15)(a) or does not do so, as demanded by (5.2.15)(b). It is so because no single individual, in an audience, is identified as "everybody" or as "nobody", and yet, no individual is exempt from orders like those in (5.2.15) in such an audience. Thus, MODEL FOUR applies to (5.2.15).

(5.2.15)(a) Everybody go out!

(b) Nobody go out!

With regard to Virtues c and f, the situation is not so straightforward. There is no single individual who could be identified with any of them: Two of you and Division Five. However, we can also see that these descriptions are based on certain relationships between the members of the audience. Therefore, in the first example, if the Referents are not also pointed to by the speaker, any two members will fit the description. We may well attribute this phenomenon to the mutual knowledge (or some background knowledge) that every person there possesses. This sort of knowledge is however different from the type ordinarily needed for the identification of the referents because it does not relate to any person as a Virtue. This is however unlike the second example where certain members can directly identify with the description "Division Five" as individuals. In such a context, therefore, it is only after the description has been identified with individually by those concerned as k that they can come together to form the unit that is Division Five.

(5.2.16)(a) .Two of you leave there at once.

(b) Division Five stand over there!

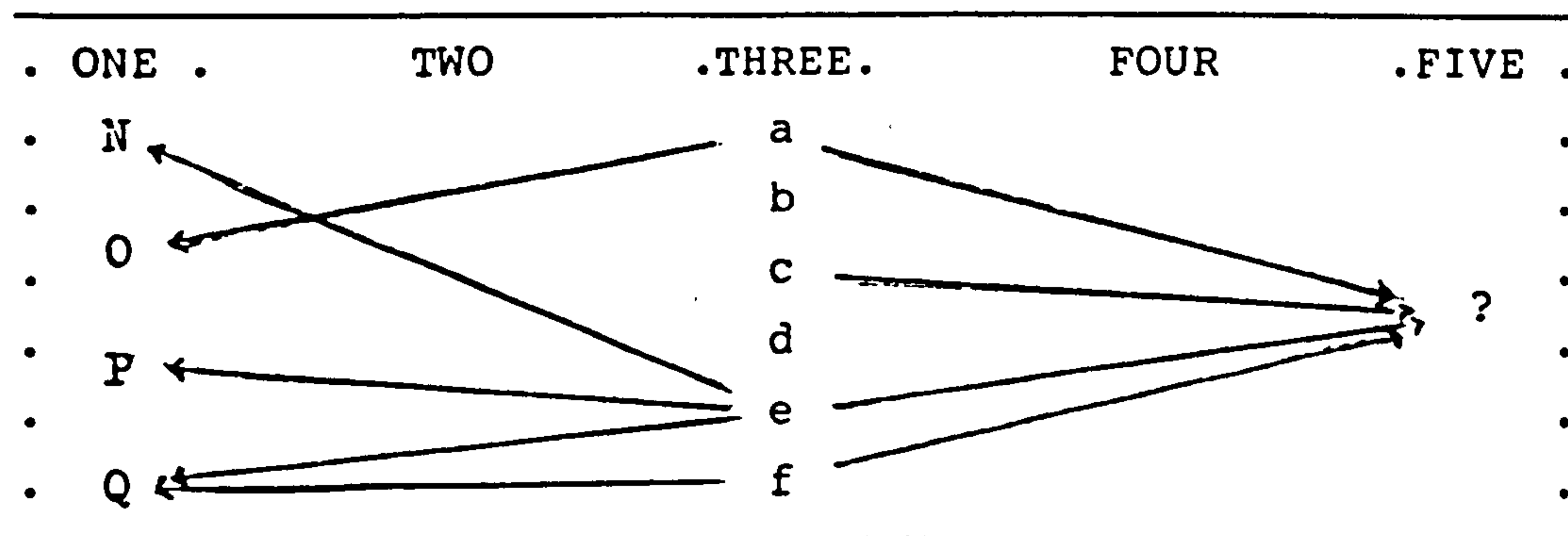
As for i, j and h, we have different situations. i, as a "rigid" designation, directly identifies the Referent, i.e., the bearer of the name. j proves that you cannot address the imperative to a person other than the Addressee or, indeed, the Hearer, which again supports the claim that s(he) must be present in the Context of Use. Thus, the Referent is not linked with the inventory of Virtues because s(he) is not in the Context of Use. h is starred because of its connection with the speaker. It would thus appear that the speaker must be completely detached from the subject NP's that s(he) creates, probably because of the need to hold the connection between the speaker and the inventory of Virtues which s(he) possesses as a feature of the speech event, the imperative. in all cases. This does not appear to extend to the vocative in the example, probably because a name can identify the speaker's daughter without giving it away that she is his or her daughter.

For the interpretation of you boy and you, the Group Four subject NP's, I shall use the next Model. However, the fact is that expressions like You boy and you present a rather complex situation. In the first place, they may be used in a context where there is an audience of more than one person. Secondly, they may occur in a context where the audience is just one person. Let's now look at the Model for the first case. The members of the audience are represented by N, O, P and Q. The Virtues, including one name, are as follows:

- (a) The boy who bought a pen.
- (b) Some of you
- (c) You boy
- (d) You
- (e) One of the boys standing
- (f) *Alfred

Other features remain the same as before.

MODEL THREE(A)



In this case, there are two approaches: the speaker may use either Virtue a or any one of c and d, reinforced by pointing to the person in question. If the former option is adopted, the speaker cannot again use any Virtue with a form like that of a thereafter to refer to the same individual without some oddity, especially if the second imperative sentence follows immediately on the first one.

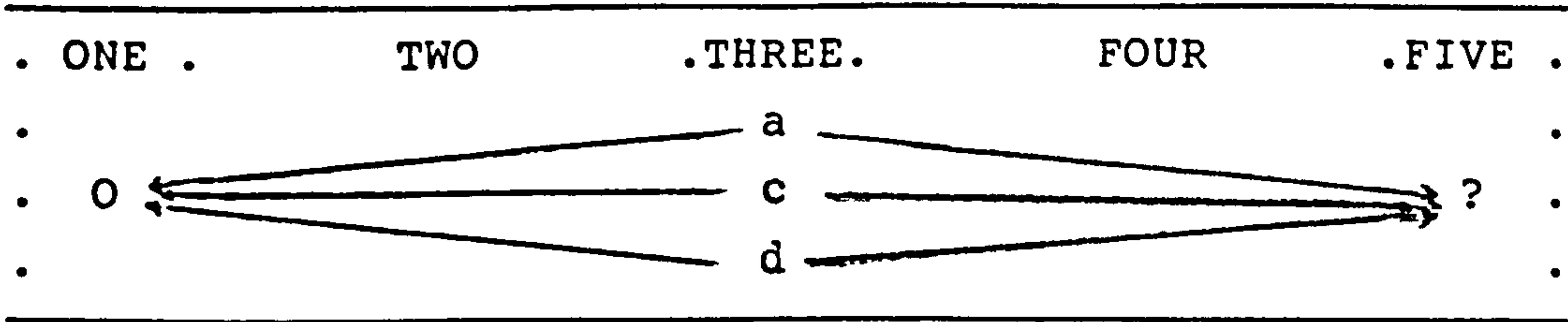
(5.2.17)(a) The boy who bought it keep it for the time being.

(b) The boy who bought it sit down please.

There is no question of repeating the NP for the sake of emphasis or for the purpose of enabling the addressee to hear it clearly, in which case such a repetition could have been justified. What happens now that the Referent has been identified by the first approach is the automatic creation of a sub-context in which s(he) would be referred to by the speaker or any person in the Context of Use in one of two ways: (i) by the use of you, and (ii), by the use of the zero-subject. In this case, the other members of the audience cannot relate the imperative sentence to themselves at all even though you and the zero-subject could be given a plural interpretation.

If the second approach, the use of c or d is adopted, we would then have a situation in which there are only two people in the Context of Use, namely, the speaker and the addressee, where either you or the zero-subject must be used, as MODEL THREE(B) shows.

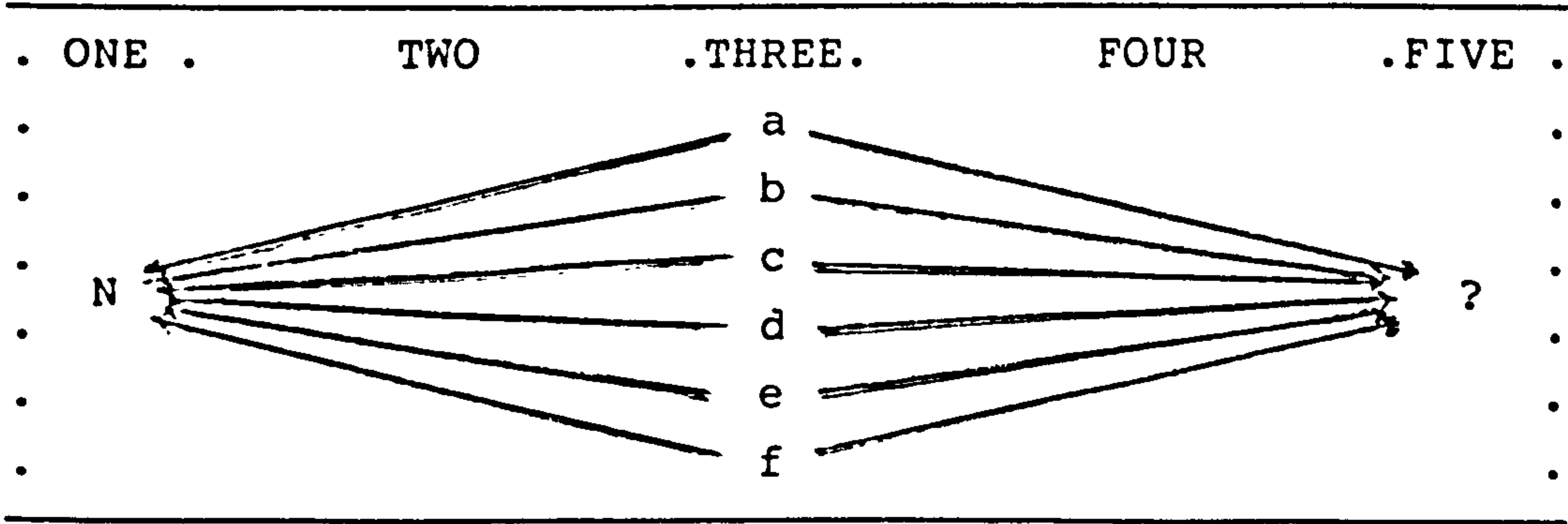
MODEL THREE(B)



Finally, we would like to examine the case of the zero-subject more closely. As we have already observed, it always involves a Context or a Sub-context with only two people: the speaker and the addressee. Let's represent this addressee with N. The Virtues are as follows:

- (a) The boy who can play the piano
- (b) The boy to fly the kite
- (c) The boy writing on a blue paper
- (d) The boy sitting in front of me
- (e) The boy with a bow tie

MODEL FOUR



As we can see in MODEL FOUR, the situation presented by

the zero-subject is such that every Virtue in the inventory of the speaker (for the purpose of identifying the Referent of the subject NP) relates only to this single individual. Therefore, whichever of them is used will inevitably identify him or her. Since s(he) is the only addressee, each of these Virtues is thus a unique identification, and all of them thus provide a unique identification for him or her. Similarly, not using any of them also provides him or her a unique identification. It is the choice of this last option that thus creates the so-called zero-subject. This is also true where there are several persons who, as a single group, thus have the same reference capability as in the case of one person.

The point to note now is that what follows the identification of the Referent of the subject NP is the specification of the action to be carried out. As explained in the previous chapter, the verb-object relationship is unchanged and the performance of the action may not be restricted to the context of use. But the entire predicate is related to the context of use in the sense that it is in such a context that the action is first mentioned in connection with the person(s) to carry it out. As I have endeavoured to explain above, in this construction, the juxtaposition, in semantic terms, of a Referent and an intended Action, executed in the appropriate intonation pattern, conveys the message that such a Referent is expected to perform the Action in question. This is the essence of the imperative construction. Whether or not the Action is carried out is an aspect of life which the imperative itself does not, and cannot, take care of since that eventuality post-dates it.

This interpretation has certain consequences which I will now comment upon.

- (a) It makes the point that if necessary, the speaker can always identify the referent of the zero-subject.
- (b) It explains the general notion that this subject is contextually determined. It is simply not the case that the context makes clear who the addressee is; it is just that it is redundant to use any descriptive or identifying options since none of them makes any contrast between the Referent and somebody else.
- (c) It further explains the claim in Chapter Three that the subject NP does not need to be you for zero-subject to occur eventually. The fact is that in a context in which there are only the speaker and the addressee, you or the the full descriptive NP may be used, as MODELS THREE and FOUR show. We have already seen that the use of you is quite complex, since the pronoun can occur as a subject NP in the context of a large audience just as much as it may also occur in this case of a one-member audience.
- (d) It makes the point that there can be no imperative without a Referent, the intended agent of the action stated in the predicate of the sentence. The corollary of this is that the vocative NP, wherever it occurs in the imperative, only duplicates the identification of the Referent, and so it is not a substitute for subject NP as a way of referring to the agent-of-action.

C) Fulfilment Conditions and Propositions

(1) FULFILMENT CONDITIONS

It is in place here to discuss the aspects of fulfilment conditions and propositions. I shall start with fulfilment conditions. After that, I shall examine the other aspect: the issue of the propositional content of the imperative. But first, I comment on the question that is immediately raised: what is the difference between them? A full answer to this question, I would say, is beyond the scope of the

present study because it raises the philosophical issue of what should be regarded as "meaning", or "sense" in a sentence. (See Chapter One, Section 1.6). So, what I intend to discuss here is my representation of the "fulfilment conditions" of the imperative in the present study as well as the motivation behind the notion of the propositional content of the imperative. I shall also identify some of the limitations that exist in attempts to describe it. I should also say that if propositions relate to truth values, and imperatives do not raise the question of truth but have certain fulfilment conditions, it can be reasonably concluded that "propositions" are not the same as "fulfilment conditions". The two notions must also be distinguished from "felicity conditions" -- the conditions for the proper USE of sentences.

The present approach provides an interpretation of the entire imperative sentence in stages, on the basis of the claim that the meaning of a sentence is the sum total of the meanings of its parts. The significant aspect of the denotations of the parts of the imperative consists not in the denotations of its individual lexical items but in the denotations of its subject and predicate elements (see Chapters Three and Four). It is these elements that distinguish it semantically from all other sentences. It is they that give the imperative sentence the following logical TYPES.

- (5.2.18)(a) $\langle s, e \rangle$ $[T^{im}]$ (subject NP's)
 (b) $\langle s \langle e, t \rangle \rangle$ $[IV^{im}]$ (VP'S)

These logical TYPES do not constitute a unit which is susceptible to the rule of functional application, as (5.2.19)(a) shows, unlike those of the declarative, as in (5.2.19)(b),

- (5.2.19)(a) $*IV^{im}/T^{im} . T^{im} \neq t$
 (b) $IV/T . T = t$

which is in line with the general belief that imperatives do not denote truth values (see Dowty's Subject-Predicate Rules

in (3.1.5)(a)). This semantic organization of the imperative thus represents aspects of its "fulfilment conditions". These conditions may be set out, informally, as follows:

- (a) the referent of the subject NP of the imperative must be identified in relation to the context of use (as in (5.2.18)(a);
- (b) the action indicated in the the verb phrase must be specified in the same context. (see (5.2.18)(b));
- (c) The link between the subject and the predicate must be such as identifies the former as the intended agent of the latter.
- (d) the action must take place only after the token of the sentence has been used.

Conditions (a) and (b) have been discussed in Chapters Three and Four respectively. All have also been discussed in different subsections in the present chapter. I must add here that with regard to (a) and (b), the realization of concord (see Section 5.1 above) is not illogical if the speaker is certain about whether or not the agent is a single person, where the subject NP is not you. After all, number concord is known to have been used in imperatives in Middle English--for example, "bringaþ" for singular "bring".

Finally, the aspect of "compliance" at a subsequent time (Condition (d) above), upon which the issue of proposition is based, is conveyed not by the parts that make up the sentence, but by the limitations imposed on human psychology and actions by the incidence of TIME and SPACE. The identified agent can only perform an action specified in the predicate of the imperative only after the sentence is uttered, not before, as pointed out above. The action can naturally take place either in the context of use, or outside it, and the imperative has both options. Therefore, the above analysis, which captures the fundamental semantic organization of the

sentence type, thus identifies aspects of its fulfilment conditions. "Fulfilment" in this sense refers to the semantic organization of syntactic categories in a way that makes the situation described above possible. Sentential structures that conform to these conditions, as reflected in the semantic TYPES in (5.2.19)(a), must thus be regarded as imperatives.

(2) THE PROPOSITIONAL CONTENT OF THE IMPERATIVE

As for proposition, it may be said that what obtains BEFORE the action is performed represents a state of affairs which I may here refer to as (i), for the sake of convenience, and what obtains AFTER it is performed represents another state of affairs which I may also refer to as (ii). What makes the issue of propositions controversial, it appears, consists in the fact that only a declarative sentence can be used to describe the states of affairs (i) and (ii). We can see this in the following case. For the state of affairs (i), we take the following description:

(5.2.20) The carpet is dirty. [DECLARATIVE]

and for the state of affairs (ii), we may have the following description:

(5.2.21) The carpet is clean.

On the assumption that we are talking about the same carpet, and that (ii) is brought about by someone who is given the order:

(5.2.22) (The boy in the corner) clean the carpet

we can see that the function of the imperative in [5.2.22] is to change the state of affairs described by (5.2.20) into the one described by (5.2.21). This is as a result of the action of the addressee or of the referent of the subject NP, and hence s(he) or they must be characterized semantically as agent(s), as I have done above.²⁴

The issue of truth and falsehood arises not in relation to the imperative in (5.2.22) because it does not make any assertion about a state of affairs but in relation to the declaratives in (5.2.20) and (5.2.21). The more relevant declarative here is of course the one in (5.2.21). The issue therefore is whether they represent WHAT THE ADDRESSEE UNDERSTANDS when s(he) hears the imperative sentence in (5.2.22) or not. Let's illustrate this with an example. If one tells a boy,

(5.2.23) Kick the ball over there

it does appear that one ENVISAGES a state of affairs that will follow the action of kicking the ball, and the boy too knows not only the act of kicking the ball but also the result of performing the act. It is for this reason that both the speaker and the boy concerned may be "surprised" if, for example, the result of the boy trying to "hit" (or actually "hitting") the ball with his foot is one in which it simply "evaporates", as it were, rather than one in which it rolls on the ground or passes through the air, which represents accurately what is "understood" when the order in (2.2.23) is given. Similarly, in the case of the carpet, it may be said that an idea similar to what is stated in the declarative in (5.2.21) must be in the mind of the speaker and also must be understood by the addressee when the imperative in (5.2.22) is spoken. This phenomenon has been identified in a variety of ways (see Ransom 1977; Hausser, 1979; and Huntley, 1982 and 1984). While Ransom speaks of modality in sentences as an aspect of their meaning, Hausser attempts to capture the new state of affairs through a formula (see Chapter One, Section 1.6 above) and Huntley (very much like Schmerling, 1982, as we have seen Chapter Three above) discusses the propositional content of the imperative broadly in terms of the new state of affairs that is brought about when compliance is achieved.

The general feeling is that the new state of affairs (like the one in (5.2.21) that is attributed to the imperative presents a set of intensions which can be characterized propositionally as true or false. (See Chapter Two, Section 2.4). Thus, at the state of affairs (i), as represented, for example, by the Context of Use ONE above, x (representing the boy in the corner) is not in the set of individuals denoted by a function in which y (representing clean the table) is a predicate. The individual represented by x may however be said to become a member of the set after he cleans the carpet i.e., in the state of affairs (ii), certainly at a time later than that at which the order is given, and possibly in the same Context of Use. If this is the case, the "new" state of affairs which follows the performance of the action can be captured by a formula, y(x), the intension of which is a function from a set of indices (represented here by the state of affairs (ii)) to truth values. This kind of intension is thus the proposition which the imperative is believed to have. For Model Interpretations of such intensions, see Dowty et al (1981: Chapter Six, and Dowty (1982a).

(2) LIMITATIONS

The identification of imperatives with propositions as stated above is however not without certain limitations. The main one is the failure to relate the surface form of the imperative to the set of intensions which is associated with the sentence. The intensions involved can only be based on declaratives as the example in (5.2.21) shows. It is probably for this reason then that the rigour and discipline of a surface compositional analysis is not strictly adhered to with regard to the representation of the so-called propositional content of the imperative. It is probably for this reason too that most analysts either avoid the surface form of the imperative when they discuss its semantic inter-

pretation (see Huntley, 1980 and 1984, and Schmerling, 1982) or resort to analysing declarative-like structures which are derived or paraphrased from imperatives (see Section 1.5 above).

Another problem is its inability to distinguish clearly between what Dowty (1977: 67) calls "tenseless future" like

(5.2.24)(a) The men depart tomorrow.

(b) The plane arrives at 8 p.m. tonight.

and imperatives with regard to the method of providing their semantic representations. Since the sentences in (5.2.24) have to do with future events or actions, their intensions will be characterized propositionally as true or false at the state of affairs envisaged. As we have seen above, imperatives also have the similar semantic representations, and so the propositional analysis of the imperative has another limitation in that it fails to separate its semantic interpretation of the sentence from that of the "tenseless future".

There is also the problem which relates to the treatment of subject NP's in sentences like those in (5.2.25). The semantic representation of the sentence in (5.2.25)(a) must include a semantic interpretation of the subject NP as it is specified but that of the imperative in (5.2.25)(b) cannot do the same for the subject NP in the sentence since its referent will not still be "in the corner" at the state of affairs (or set of indices) that is relevant for the denotation of truth values, as we saw above. So, the analysis neither accounts for the fact that the property that an entity has in the context of use of the imperative may not persist up to the point that compliance is achieved, nor does it consider the problem of identification, with regard to the intended agent, that may thus be raised.

(5.2.25)(a) The boy in the corner travels by plane

every week. [DECLARATIVE]

(b) The boy in the corner travel by train tomorrow please. [IMPERATIVE]

Yet another drawback in the above account has to do with what really happens when the action mentioned in the imperative is not performed. As pointed out above, the imperative never takes for granted the idea that compliance will be forthcoming. Consequently, when there is no compliance, no new state of affairs is thus created, and so we are left only with the imperative sentence itself which is uttered and which, as pointed out above, does not "describe" any state of affairs. If this "situation" was "described", one might say any of these:

(5.2.26)(a) It is not the case that the boy in the corner cleaned the carpet.

(b) The boy in the corner refused to clean the carpet.

(c) The boy in the corner has not cleaned the carpet as ordered.

It is very doubtful whether all such descriptions can be said to apply to a single state of affairs, in which the action in question is not performed, for the purpose of identifying the propositional content of the imperative in question. This thus raises the question as to whether or not compliance and non-compliance with an order (i.e., the imperative) can reasonably be said to bring about opposite states of affairs.²⁵

Similarly, after the action in question has been carried out, it is also possible to describe the new state of affairs in more ways than are stated in (5.2.21) above. Any of the following sentences might also be used to describe it.

- (5.2.27)(a). The boy (in the corner) has cleaned the carper
 (b) The carpet is now shining because the boy (in the corner) has cleaned it.
 (c) The boy (in the corner) did exactly as he was ordered -- he cleaned the carpet.

This thus raises the question of whether or not the determination of the propositional content of the imperative as described above is not too narrow in scope to capture the aspects of the situation that become relevant after the performance of the action mentioned in the imperative. If the idea of performance is simply something that is "understood" at the time the imperative is uttered, and so does not relate to the actual time it takes place later, the conclusion that will thus be drawn is that imperatives involve only propositions that are true, and this is counter-intuitive. The reason is that it may turn out that the action specified is not performed after all (or cannot be performed at all, as we have seen in Chapter Three, Section 3.3 above). This issue thus reflects the fact the intensions that are associated with the imperative are not linked with any clear-cut sentence as in the case of the declarative in (5.2.25)(a), although there is no doubt about the idea in question. As we saw above, not all aspects of the relevant imperative sentence itself are taken into account when the matter of truth values is considered. So, it is not clear how many of all the aspects that have to do with the imperative are called for in their propositional analysis. In particular, it is not clear whether or not aspects like the following,

- (i) how the action is performed;
- (ii) the "current relevance" of the action that is performed, as can be indicated through the use of present perfective aspect as in (5.2.27)(a), and,
- (iii) the person who prompted the performance of the

action as well as the doer of the action, which normally form parts of the situation that exists after an action is performed, should be accommodated in one way or another in the semantic interpretations of "the state of affairs" that obtains after an imperative sentence is complied with.

What remains to be said here on this topic is that while it is true that when one uses or hears an imperative one conceives of a definite meaning, that meaning can only be referred to in terms of a sentence structure which has a translation into intensional logic which reflects that of the declarative sentence. It is also true that the imperative raises many more questions than can be resolved by the characterization of their propositional content as functions from indices to truth values; or as functions which characterize a set of possible worlds, including the actual world (see Huntley, 1982). As I pointed out in subsection 5.2.A above, the situation that we have is one in which an approach that rigorously applies the principles of surface compositional analysis, where the meaning of an expression is believed to be a function of the meanings of its components and the syntactic rules that relate them together, must be distinguished from an analysis of the imperative which traces it up to the point where the question of whether or not the action specified in it is carried out is raised. The reason for this is that at this point, either a new sentence type becomes the focus of attention or there is no identifiable sentence structure to be represented by a set of rules; and none of these prospects satisfies the principle of surface compositional analysis. For another approach to some of the problems that relate to semantic interpretations of expressions, see Barwise and Perry (1981) and for criticisms of it, see Fodor (1985) and Partee (1985).

To summarize, I would say what we have seen about propositions in connection with imperatives has to do with the description of the state of affairs that is created following the execution of the action specified in the imperative. This may be described by declarative sentences which may be predicated as true or false. Nevertheless, it creates a host of problems most of which stem from the fact that the set of intensions that is associated with the new state of affairs is not clearly demarcated as it would have been if there were a definite declarative sentence which describes the new state of affairs.

5.3 Conclusion

In this concluding chapter, many aspects of the entire imperative construction, as it psychologically constitutes a single unit, are examined. This thus complements the aspects discussed in the previous chapters. With regard to syntax, it is claimed that the notion of subject-predicate structure in the imperative in English is a psychological one because the factors that warrant this structure in the sentences of English are completely absent in the construction. These include number concord, tense, modality and aspect. What creates the notion therefore is the fact that the so-called subject NP always occurs before the verb phrase, the predicate. It is also found that this phenomenon has an enormous implication for the semantics of the sentence where we have seen that the identification of the referent of the subject NP is carried out independently of the specification of the action s(he) is intended to perform later.

Also, the syntax of certain elements that have to do with the entire sentence is discussed. Sentence adverbs, in this regard, are found to occupy sentence-initial positions only, contrary to what they do in other sentence types. The

behaviour of the other adverbs is somehow regular, except for the negative preverbs. It is contended that their inability to occur even in preverbal positions in imperatives is due to the absence of the usual grammatical links between the subject and predicate elements in the sentences. It is pointed out that with an emphasis on the specification of the action to be performed rather than on the relationship between such an action and the intended doer of it, there is no room, in the imperative, for any of these adverbs, which basically require such links to enable them to occur in other sentences.

Appropriate Model theoretic interpretations are then proposed for the imperative sentence. They resolve a number of problems with regard to the determination of the type of semantical object which the sentence is. It is discovered that it should not be linked with the characterization of, for example, the agent of the action as a variable for which a value assignment function has to find external entities in some possible worlds. What underlies the uniqueness of the construction in this regard, as pointed out above, is the complexity in the identification of the referent of the subject NP and the specification of the action that immediately follows it. These involve semantic as well as pragmatic factors, as reflected in the function (see (5.2.11) above) that summarizes the conditions that govern the semantic organization of the sentence.

It is thus demonstrated that for a surface compositional approach, an imperative involves a function from the Context of Use to a set of individuals. This thus identifies the Referent who becomes the Agent of the Action mentioned subsequently. This then establishes the Referent as the ONLY Agent of the Action that must be mentioned immediately after the process of identifying him or her. Therefore, the manner in which this relationship between the Referent and the Action is organized is unique to the imperative construction.

Finally, with regard to the interpretation of the entire imperative, two aspects are treated. The first establishes a set of "fulfilment conditions". It is claimed that if a syntactic structure is organized in accordance with the conditions, it must be an imperative, and so it can only be complied with at a subsequent time.

The second aspect examines its semantic function which involves its propositional content. The motive for the identification of it is explained and the manner of doing so is illustrated. It is however noted that the whole question of propositions in relation to the imperative, as it is treated in truth-conditional semantics, is controversial because it does not directly involve the surface form of the imperative sentence, as a surface, compositional approach to the construction requires. It characterizes, propositionally, a set of intensions which themselves may be identified, verbally, by the use of declarative sentences only. The real nature of such intensions is therefore not very clear; for example, in one sense, since it has to do with a state of affairs created after a sentence has been uttered, it resembles future sentences but in another, where the subject noun phrase is specified in relation to the context of use of the imperative sentence itself, it cannot capture such a "property" (or "virtue") of the agent-of-action if the context of use is different from the one in which the action is performed. There is also the problem of how to characterize the situation that obtains when, for example, the action in question is not carried out, or if it is, how it should be reported. Nevertheless, since the imperative conveys a meaning when it is used, a truth-conditional semantics will have to identify a set of conditions which it can regard attributively as true, when the action is performed, or false, when it is not.

Footnotes to Chapter Five

1. The imperative, it was noted in the previous chapter, does not allow the extraction of any element from its VP.
2. I have already, in Chapter Three (Section 1), excluded the notion of Topic-Comment as a description that could possibly apply to the imperative construction.
3. Perhaps the only problem now, which will not be investigated in the present approach, is how to capture the notion by a set of rules.
4. This aspect of sentential adverbs in imperatives is quite significant. There is no doubt about the grammaticality of the sentences in (5.1.8). They can still occur as full sentences even if they were uttered during conversations. The consequence of this is that they independently confirm the existence of the addressees in the contexts of use, since such conversations, wherever they occur, would be between the speaker and the addressee in each case. Indeed, in real life situations, imperatives do frequently occur in the middle of conversations as independent sentences as well as in structures like the following:
 - (1) If you are in doubt, leave it.
5. In declaratives, for example, where such a division does not exist, sentence adverbs can occur in both sentence-initial and final positions as well as in medial positions.
 - (1) Certainly, he will be here.
 - (2) He will, certainly, be here.
 - (3) He will be here, certainly.
6. Of course, the comma is regularly used to mark off the sentential adverb from the rest of its sentence. This is not

usually done in the case of non-sentential adverbs.

7. For the description of the forms in (5.2.3)(c) and (5.2.3)(d) as referring to the future, see Palmer (1965).

8. For a survey of yet earlier proposals, see Chapter One (Sections 4 and 5).

9. The fact that the subject NP cannot be an argument to the predicate without implying the existence of a truth value which the construction does not have demonstrates clearly that the sentence presents a unique semantic case. At the same time, the fact that each of the two segments can be given a compositional analysis, as has been done in Chapters Three and Four above, indicates that there is a break only in the grammatical relationships between the subject and the predicate elements of the sentence.

10. The conception of the imperative as as a grammatical mood category (see Chapter Two, Section 4) must thus include the fact that the subject-predicate relation in the sentence is different from those of other sentences. It is one which does not form a grammatically unified whole as does, for example, the declarative.

11. It must however be recognized that the fact that their relationship has been characterized as psychological in nature clearly means that their descriptions as "subject" and "predicate" have no fundamental validity; they are the product of custom and appearance as we have explained above. Consequently, they cannot be used as such in a Montague-style analysis where the syntactic features of a sentence have relevance for its semantic description.

12. The elements in question here are the subject and the

predicate of the imperative. Their referents might well be plural in number.

13. It is quite interesting that in ordinary speech situations, not more than one person can utter an imperative sentence. It is thus the case that in the most unlikely but not impossible event of two or more persons uttering the same imperative sentence simultaneously, each of such sentences has its own individuality with regard to form and intonation features. What may be quite identical is the illocutionary force that is being conveyed.

14. The choice of a vocative in each of the examples in (5.2.10) is deliberate. It enables me to give the same non-intensional interpretations to all the sentences, despite the categorial differences between them.

15. The usual argument in this regard is based on the Gricean Principle - "Be relevant". As I have argued above, this argument itself does not claim that any use of a sentence in violation of this principle is unacceptable. To impose such a condition would amount to putting a limitation on extensions of uses which natural languages are open to. Thus, to call on the clouds not to drop as rain would be an example. At any rate, if the notion of relevance is indispensable in the uses we make of sentences, it is not impossible to find some for imperatives where the subjects or vocatives are inanimate objects: the uttering of the sentences has some psychological or emotional satisfaction for the speaker. Therefore, it is not the carrying out of the action only that can make the sentences "relevant"; it all depends on what the motivation of the speaker is. What is certain in all this is the form of the sentence used in such cases.

16. One of these terms needs some explanation. "Speaker's

Description" refers to subject NP's in the imperative. It is a convenient term which captures the fact that the speaker is obliged to come up with that form of NP that can uniquely identify its referent in the Context of Use. In one case though this Description is suppressed. This is the case of the so-called zero-subject. Our interpretation must show why this sort of thing can take place.

17. This formulaton must be distinguished from the type that is used for declaratives. Thus, it is neither a syntactic category nor a logical TYPE. It is a representation of the basis upon which the "fulfilment conditions" for the sentence can be determined, bearing in mind of course that whatever comes out from it is expected (in the nature of the construction) to carry out the action specified in the predicate.

18. As a matter of fact, the discussions in Chapter Three (Sections 3.2 and 3.3) explain how the NP's are organized.

19. Although I have stated above that the speaker always shares this knowledge with the members of the audience as it is appropriate to each one of them, it is not impossible for this not to happen in some cases. Thus, a speaker may try to identify someone with a characteristic which s(he) may think that the addressee is aware of. It might well be the case that the addressee is not aware of it. Where the characteristic is taken from the immediate context, other members of the audience might come to the aid of the addressee by drawing his attention to the characteristic in question.

20. Distinctiveness may be achieved in the description of the Referent not only by the whole phrase but also by any of its contents. In English, it is usually enough to achieve a

contrast between these identifying descriptions just with one word. For example, the boy in the corner vs. the boy beside the corner.

21. As I have pointed out in Section 5.1 above, no such links exist. So, the emphasis in the predicate of the sentence is simply to "name" the action to be performed, as it were. This probably explains why all varieties of the imperative have their verbs in the base-form, as claimed in Chapter Four.

22. I would like to stress that this pool of knowledge is by no means static. What may be said for certain is that it would be up-to-date at the time the sentence is used, and could still improve soon after that.

23. The current proposal is thus able to capture the plurality that we find in the semantic interpretations of everybody and nobody.

24. If it is held that the referent of the subject NP is not always the agent of the action specified in the sentence, it will be difficult to explain what brings about the state of affairs (ii), when it is deemed to exist. (See Chapter Two, Section 2.2 above).

25. If compliance with an order is believed to create a new state of affairs, non-compliance with it may be said to leave the existing state of affairs unchanged. If this is to be characterized propositionally, it will have to be related to a sentence like the one in (5.2.20), which owes nothing to the imperative construction at all since it has to do with what has been obtaining well before the imperative sentence could have been uttered.

Conclusion

In this part of the present study, I intend to look back at it in order to assess its contribution to the subject and identify some of the problems that remain. I shall first of all discuss the thesis as a unit before I go on to assess the main aspects that it contains.

This study is an in-depth analysis of the syntax and semantics of the imperative sentence in English within the framework of generative grammar. It uses two linguistic models (i.e. Generalized Phrase Structure Grammar and Montague Semantics) in a manner that is unique in itself, and so achieves a level of co-operation between grammatical models that is often wished for (see Aissen, 1985), but rarely found in modern linguistic analyses. The present study is the first to use these two models, as far as I know, in the study of the imperative in English in this way.

This theoretical base of the thesis thus places it in a position to tackle one of the most recalcitrant problems in sentence analysis, the imperative. I have thus resolved a major problem in the study of this sentence type, i.e., the use of grammatical models which are rich enough to be sensitive to the particular phenomena that the imperative presents. I have provided a detailed literature review which puts this problem in perspective as well as shows an alternative way that can be used to resolve a number of other problems. Prominent among the approaches in the current literature is the use of TG to account for all sentence types on the basis that they all derive from common declarative-like structures but vary in surface forms as a result of the operations of transformations.

The survey of the current approaches to the imperative

reveals that (a), some studies claim that the construction is peculiar because it does not conform to general grammatical rules, and (b), some take the opposite position and say that the sentence has many features in common with other sentence types, and (c), others take the middle line, partly agreeing, and partly disagreeing, with the two views above. There is nothing unusual in this state of affairs, except that none of these approaches tries to identify the construction fully as it really is, rather than examine it to the extent that it measures up to the declarative and declarative-like constructions. To pursue this last line of approach, one needs to use a very rich theoretical framework, and this is what I have done in the present study. I now take up specific aspects that are treated in the thesis, beginning with syntax.

What was urgently needed for the syntax of the imperative, within the general generative approach, was a set of rules that could predict the various shapes in which the imperative appears in English. None, set out in clearly defined grammatical framework, existed before, so, using the general principles of Generalized Phrase Structure Grammar, I have provided such rules in Chapter Four. As indicated above, the rules relate to the structures as they really are, in their surface forms, rather than as they conform to, or depart from, the rules that predict declarative sentences.

These rules are preceded by an analysis of possible imperative subject NP's. They give useful insights into the syntactic organization of the NP's. It is discovered that where such NP's are fully specified, they have definite structures, which include the possession of post-modifiers, if they are not pronouns. This explains (in line with the semantic interpretations of the NP's) why not all NP's in English can function as subjects in the imperative. It also

explains why current notions on the Relation of Subject fail to predict the case of the imperative subject NP's, as Chapter Three of the thesis shows. So, what is remarkable in the imperative subject NP's is the fact that they constitute a small subset of NP's, on the basis of their syntactic (as well as semantic) features. Although different structures occur in possible imperative subject NP's as modifiers of the Head N's, the above analysis shows that their presence in the constructions is significant enough to be given serious attention, especially in view of the fact that it is the imperative alone that picks almost all its subjects from a small subset of NP's. The account provided here also shows that the controversy about the syntactic nature of NP's can be reduced considerably if the analyses of such a topic are related to specific sentence types, as has been done here in the case of the imperative.

The analysis of the VP's resolves a number of problems that relate to the structures. It identifies the nature of the imperative VP itself, and it is found that it constitutes a unique syntactic category. This is borne out not only by the manner in which it deploys elements like negation, do and be, but also by its relationships with the subject NP of the construction. It has thus been demonstrated that to try to account for do, be and not outside the unique syntactic structures in which they occur is grossly inadequate. So, not only does the problem of do insertion or of ensuring that it is placed in front of be not arise in this approach, but the syntactic roles of the verbs are also reflected by the PS rules for the surface forms and sub-components of the imperative. To take another example, from the examination of the syntactic organization of the imperative VP, it is found that the imperative is TENSE-NEUTRAL, not tenseless as it is generally assumed.

Apart from the provision of rules mentioned above, I have also examined other aspects of the imperative S-structure. I

have identified the nature of the subject-predicate relationship as psychological, in view of the absence of elements like modality and aspect in the construction. This is an aspect that has been ignored in current generative accounts, in spite of the fact that it sheds light on many aspects of the construction. For example, it is observed that sentence adverbs generally tend to occur in sentence-initial positions in the imperative as a reflection of the unique nature of this relationship. The base-form of the verbs that occur in the imperative and the inability of the so-called negative preverbs to occur in it are also attributable to it.

The aspect of the semantics of the imperative supports the syntactic one, a feature of the study that is made possible by the theoretical base that it has. This aspect is a surface compositional analysis of the imperative, and it has been highly desirable, for a long time now, to provide it (see McCawley, 1981, as well as Chapters One and Two above) for the purpose of the semantic interpretation of the imperative. My achievements in this regard consist in the fact that by the extension of the rigorous principles of Montague Semantics, I have been able to identify the type of semantical entities that components of the imperative are. For example, I have identified the imperative subject NP as a function from the context of use to a set of individuals, and the VP as an entity that has to do with the context of use in the sense that it captures the fact that a clearly identifiable piece of action is specified in the context of use, no matter where the execution of it is to be located. Another example is that I have revealed the semantico-pragmatic nature of the imperative S-structure itself by showing how it relates to the context of use. I have also proposed that the identification of the referent of the vocative or subject NP, followed by the specification of an action, creates between the referent and the action a link which may not have

existed before and the link is that the individual is to become the agent of the action in question.

Within the above general framework, I have identified the essence of the semantic organization of the imperative as the precise identification of the intended agent-of-action and of the intended action itself. The present analysis thus resolves the problem of the interpretation of subject NP's which is so central to the semantic organization of the imperative that an account which approaches it as a syntactic mood category, as the present one does, must treat it. I have therefore modified the conventional MODEL-THEORETIC INTERPRETATION and so make it one which involves (within the conventions of Montague, 1970c) the Context of Use of the imperative, in which a great deal of effort goes into picking out the referent of the the subject NP.

By showing that possible imperative subject NP's and predicate phrases constitute unique semantic TYPES which do not enter into functional relationship with each other, I have been able to capture the fact that the imperative, as an S-category, does not denote truth values, unlike the declarative. With regard to the interpretation of the entire imperative sentence therefore, I have, on the basis of my semantic analysis of its major components, identified certain of its "fulfilment conditions" (see Chapter Five, Section 5.2 C above). One of these conditions relates to the ability of the sentence to convey the sense that compliance is a subsequent matter, through its relation with the external world. This is the aspect that gives rise to the propositional analysis of the sentence, and so the fulfilment conditions of the imperative encompass more grounds than the aspect of its propositional content.

I have also examined this aspect and noted the problems

that it raises. Among these are the problem of the reference of the subject NP, in view of the fact that the context of use of the sentence is at times different from the context in which it is complied with, and the problem of how this can be reflected in a state of affairs in which the referent of the subject NP may be said to acquire the property that the predicate of the sentence denotes.

I would like to end this conclusion here by adding that a number of problems are still not fully resolved. In syntax, it is still necessary to account for the features of do in the sentence. The real nature of tags in imperatives needs to be probed more deeply in order to identify the properties of these elements more clearly. As for the semantics of the sentences, it still remains to give more substance to the propositional analysis of the sentences than is at present available in the literature. These problems are now easier to tackle in view of insights which the present approach gives into the nature of the sentence type.

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