

THE STATUS OF IMPERATIVES IN THEORIES OF GRAMMAR

by

SHI ZHANG

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A Dissertation Submitted to the Faculty of the

DEPARTMENT OF LINGUISTICS

In Partial Fulfillment of the Requirements  
For the Degree of

DOCTOR OF PHILOSOPHY

In the Graduate College

THE UNIVERSITY OF ARIZONA

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**Zhang, Shi, Ph.D.**

**The University of Arizona, 1990**

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the dissertation prepared by Shi Zhang  
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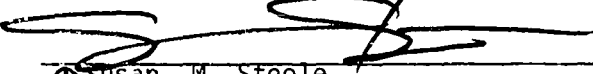
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SIGNED: 

**DEDICATION**

Dedicated to my beloved parents  
XIRU ZHANG and YUQING DOU  
and to my dear wife  
YING FANG  
for their love and support

## ACKNOWLEDGEMENT

I would like to take this opportunity to express my indebtedness to my committee members: Andy Barss, Terry Langendoen, Sue Steele, and especially Dick Oehrle -- my dissertation director. This is a committee that represents different areas of theoretical interests and expertise. It has given me a challenging experience not easily found in the field. My working with them has been not only interesting but also extremely rewarding. Their influence on me can be seen in this dissertation. I sincerely hope I have correctly followed their advice.

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### ABSTRACT

This dissertation examines imperative constructions within English and across languages.

Cross-linguistically, I define the strong imperative to be a unique sentential construction compatible with a direct command and not with an assertion. I show that strong imperatives are not universal: languages exist which can only be characterized as having weak imperatives -- sentential constructions ambiguous between assertions and direct commands. The strong imperative lacks both modal elements and elements indicating past tense, and uses formal strategies to mark itself as distinct from non-imperatives. Such formal strategies fall into three types: (i) imperative-marking elements, (ii) the manipulation of subject, and (iii) intonation. Languages use either one of the types or combinations of them to mark the strong imperative. Several implicational universals are drawn from the study, ranging over imperative types, combinations of formal strategies, imperative negatives and the types of subjects.

The dissertation proposes to treat the English imperatives as forming a clause type distinct from both tensed clauses and untensed clauses in terms of abstract properties and structures. Two analyses are given, one consistent with Government and Binding Theory (GB), and the other consistent with Extended Categorical Grammar (CG). In GB, imperatives are formally derivable from a single structure underlying both imperatives and non-imperatives only if adjustments to requirements by theta-theory, Case-theory and quantification-variable binding are provided. Negative imperatives are derived by construction-specific rules. In CG, imperatives are taken to be a basic sentence type parallel to declaratives, questions and various other sentence types which all have different clausal structures. The analysis uses lexical types, together with pragmatic issues like the distinction in force between requests and commands, to specify the particular syntactic properties associated with the imperative negatives don't and do not, do and please, accounting for their complex interactions with overt or null subjects.

The dissertation also examines the relation between imperatives and tenseless exclamatives -- Mad Magazine sentences (MMs). I conclude that MMs and imperatives are not an instance of one sentence type having two distinct pragmatic functions: imperatives have the clause structure of S (TP) and MMs are an instance of S' (CP) structure.

## CHAPTER 1

### IMPERATIVES AND RELATED THEORETICAL ISSUES

In this chapter, I first discuss the relationship between imperative constructions and sentences with imperative force, defining what is taken to be an imperative construction in this study. I characterize imperatives as a syntactic class compatible with direct commands and not with assertions. Parallel to sentential imperative constructions are non-sentential imperatives. I show that phrasal expressions can also be imperatives. The strong sentential imperative construction is not universal, since some languages simply do not have them. I type imperatives and the related constructions into sub-categories and discuss properties of each. I then concentrate on English imperatives and the theoretical issues that arise regarding their syntactic analysis under various proposals, especially under the Government and Binding theory. Finally I give an outline of other chapters in the thesis.

#### 1.1. The imperative sentence type

##### 1.1.1. The term imperative and English examples

The term imperative has been used in various different ways: it can mean a kind of mood of verb that is parallel to indicative and subjunctive moods; it can mean a syntactic class that is parallel to declarative and interrogative; and it can also mean the pragmatic notion of directive, including commanding, ordering, advising, requesting, suggesting, that is parallel to notions such as assertives, expressives and so on.<sup>1</sup> The first two uses of imperative are concerned with formal properties, either morphological or syntactic, that identify strings of words in a certain relationship forming a distinct class from other classes; the latter use is concerned with any strings of words that can be regarded as giving orders, advice, suggestions and so on whose syntactic or morphological status may (but not

---

<sup>1</sup> See Searle (1976) on the taxonomy of illocutionary acts.

necessarily) differ from each other. Semantically, the term imperative in any analysis (syntactic or pragmatic) refers to a class of sentences that are used not to assert, state or declare, or to ask questions, where things can be judged true or false, but to request a hearer to comply with the speaker's request; thus, imperatives are taken to be a different propositional type (Lewis 1972, Huntley 1984).<sup>2</sup>

Before going into any detailed discussion, I clarify the way in which the term imperative will be used in this study. I characterize imperatives as a syntactic class, non-consistent with assertions, which is compatible with a direct command. By imperatives in English, I mean the constructions without any verbal inflections for tense exemplified in (1).

- (1) a. (You) be quiet!
- b. Somebody answer the phone!
- c. Do be careful!
- d. Don't anybody put up his/their hand!
- e. Do not be careless with the glass!

That these examples constitute a syntactically coherent construction in English will become evident in the discussion below. Therefore, I exclude from the discussion other syntactic constructions which may also have directive meanings or force in a discourse, like those in (2).

- (2) a. I suggest that you (should) answer phone.
- b. Why don't you answer the phone now?
- c. You'd better answer the phone.
- d. Will you (please) answer the phone?
- e. I'd like it if you could (please) answer the phone.
- f. Answer the phone, will/can/could/ you?

It is necessary to distinguish sentences having directive force in (2) from sentences being characterized as the imperative construction in (1). The imperatives in (1) have syntactic and semantic properties that make them a coherent sentence type.

---

<sup>2</sup> See the characterization of the meaning of imperatives in Jespersen (1954), Curme (1931), Bolinger (1967), among others. See Austin (1962), Searle (1969, 1976), Katz (1977), Bach & Harnish (1979), among others, for pragmatic characterizations.

(i) They may have an optional subject, and the specified subjects are restricted to second person NP's and third person indefinite quantified NP's; first and other third person NP's are impossible (see Section 1.3).

- (3) a. {you/somebody/everybody} leave the room now.  
b. \*{I/he/we/they} please leave the room now.

(ii) The verb phrases are distinguished by the absence of tense inflection and modal auxiliaries.<sup>3</sup>

- (4) a. (You) be quiet!  
b. \* (You) are quiet!
- (5) a. Somebody answer the phone!  
b. \* Somebody answers the phone!
- (6) a. Listen to me!  
b. \* Must/Will listen to me!

(iii) They require the presence of do for negation preceding the subject; this do is also compatible with positive constructions and verbs like be/have.

- (7) a. Don't/do not listen to him!  
b. \*Not listen to him!  
c. Don't you/anybody listen to him!  
d. \*{you/everybody} don't listen to him!
- (8) a. Do answer the phone!  
b. Do be careful!  
c. \*He does not be careful.  
d. Don't/do not have eaten up everything before he shows up.  
e. \*Don't they have seen the movie?

(iv) Imperatives are intensional and used when the state, event or action in question is unrealized at the time of speech act.

Therefore, we can identify the imperative sentence type as a coherent class in English

---

<sup>3</sup> Akmajian, Steele and Wasow (1979), and Akmajian (1984) characterize imperatives as [-AUX], given their definition of AUX--a constituent which contains either tense or modality. See Chomsky (1957), Hale (1973), Akmajian, Steele & Wasow (1979) and Steele et al (1981) for definitions of Aux and its instantiations in universal grammar.



by reference to the above four major properties.

### 1.1.2. A general characterization of imperatives

It is a fact that every language has a syntactic form or forms dedicated to direct commands and orders, and to expressions having directive force. How do we characterize in general what counts as an imperative? Cross-linguistically, we provide the following two definitions as to what counts as an imperative.

- (9) a. In a given language, a sentence type is a strong imperative iff it is compatible with direct commands and inconsistent with assertions.
- b. In a given language, a sentence type is a weak imperative iff there is no strong imperative and the sentence type is consistent with direct commands.

The term sentence type is defined in (10a) and the term direct command is defined in (10b).

- (10) a. A sentence type is a string of analyzable expressions that together have the structure of a verbal category and a subject.
- b. A direct command is a verbal attempt by the speaker to get the hearer to do something.

The definitions in (9) immediately give rise to a question: are strong imperatives universal? I will show, in a short while, that there are languages which do not have strong imperatives. In (9a), I claim that there is an absolute correlation between certain syntactic structures and the directive meaning of commands expressed by these syntactic constructions in a given language, and that these constructions are strong imperatives. In (9b), I claim that, if there is no unique syntactic form compatible only with direct commands in a given language, there are constructions in these language that are ambiguous for commands and assertions. These ambiguous constructions which are compatible with direct commands are weak imperatives.

In regard to the above English examples, the sentences in (1) are strong imperatives, since they belong to a coherent syntactic class that only designates direct commands. Given that there is already a strong imperative construction in English, there does not exist the

issue of weak imperatives. The sentences given in (2) are simply other syntactic constructions having directive force -- they are not compatible with direct commands and are simply indirect commands expressing suggestion, request, advice and so on.

Let us now consider examples other than English to illustrate the above characterizations of imperatives in (9), especially (9b). (11) is a list of forty-six languages that I have included in a cross-linguistic investigation of imperative constructions (see details in Chapter 6).<sup>4</sup> The majority of the languages, except three, have strong imperatives -- non-assertive sentence types that are used only for commands.

- (11) -----
- a. Indo-European
    - Germanic: English, Dutch, German
    - Italic: Latin, Italian, Spanish
    - Balto-Slavic: Russian, Lithuanian,
    - Indo-Iranian: Hindi, Persian, Mundari, Romani
    - Celtic: Welsh
  - 
  - b. Uralic
    - Finnish
    - Hungarian
  - 
  - c. Sino-Tibetan
    - Chinese
    - Thai
  - 
  - d. Altaic
    - Japanese
    - Korean
  - 
  - e. Athapaskan
    - Navajo
  - 
  - f. Hokan
    - Faipai, Mojave, Yavapai
  - 
  - g. Uto-Aztecan
    - Southern Paiute
    - Tübatulabal

---

<sup>4</sup> The Indo-European languages are listed with internal structures simply because terms like Romance languages, Germanic languages, Slavic languages and so on are used in the discussion.

Hopi  
Yaqui  
Mayo  
Cora  
Nahuatl  
Serrano  
Cupeño  
Papago

---

h. Austronesian  
Indonesian  
Chamorro  
Hawaiian  
Kusaiean  
Fijian

---

i. Australian  
Warlpiri  
Yidin  
Dyirbal  
Tiwi

---

j. Indo-Pacific  
Amele

---

k. Nilo-Saharan  
Luo

---

l. Semitic  
Amharic  
Arabic  
Hebrew

---

Most of these forty six languages either use the bare verb stem form, or have special affixes for verb conjugation to signal the imperative construction; others use sentential particles to achieve the same purpose. English, as shown earlier, uses the bare verb stem (the affixless verbal base) together with the mentioned properties such as do to indicate the imperative construction. Using the bare verb stem form for imperatives is a very common property across languages, as has been noticed by Sadock & Zwicky (1985) in their investigation. On the other hand, verb conjugation or verb stem alternations are also commonly used for the imperative sentence, as in Latin, French, German, Dutch, Italian, Spanish, Arabic, Hindi, Mundari, Amharic, Japanese and so on (see Chapter 6).

For example, in Japanese, an Altaic language, the imperative formation requires a stem alternation, as in (12c) (Ishihara, p.c):

- (12)
- a. tegami-o            mimashita  
letter-OBJ        look.at.PAST  
'You looked at the letter'
  - b. tegami-o            mimashita        ka  
letter-OBJ        look.at.PAST    Quest.  
'Did you look at the letter?'
  - c. tegami-o            minasai!  
letter-OBJ        look.at.Imp.  
'Look at the letter!'

In Papago, a Uto-Aztecan language, the formation of an imperative construction adds -in to imperfective verbs or some perfective verbs (Zepeda 1984).

(13)

| imperfective       | imperative          |
|--------------------|---------------------|
| -----              | -----               |
| cipkan (working)   | cipkanin (work!)    |
| neok (talking.sg)  | neokin (talk!)      |
| neñok (talking.pl) | neñokin (talk!pl.)  |
| -----              | -----               |
| perfective         | imperative          |
| -----              | -----               |
| keickwa (kicked)   | keickwan (kick it!) |
| kekiwa (stood)     | kekiwan (stand up!) |

Some languages employ special subject pronouns attached to the verb to signal an imperative construction, as in Yokuts (Sadock & Zwicky 1985), Mojave (Munro 1976) and Yaqui (see Chapter 6).

Still other languages such as Thai and Chinese, two Sino-Tibetan languages, mark the imperative construction by using sentential particles. Neither of these two languages is inflectional. Thus, there is no operation on the verb forms to signal imperative construction. In Thai (Sookgasem, p.c), the imperative construction is characterized by a sentential particle si or hai which distinguishes imperatives (14a) and (15a,b) from regular declaratives (14b) and (15c) (tones are omitted in the transcription).

- (14) a. (thE) aan jotmaai si!  
 you.sg.plread letter Prt.  
 'Read the letters'
- b. thE aan jotmaai  
 you.sg.pl. read letter  
 'You read the letters'
- (15) a. sii nangsii hai John si!  
 buy book for John Prt.  
 'Buy a book for John!'
- b. hai thukkhon sii nagnsis hai John!  
 Prt. everyone buy book for John  
 'Everyone buy a book for John!'
- c. khaw sii nangsii hai John  
 she buy book for John  
 'She buys a book for John'

In Chinese, besides the constraint against using modals and 'tense-like' elements such as guo and le (indicating a past action), there are particles that may occur only in imperative constructions, as in (16).

- (16) a. (Ni) dakai chuanghu ba!  
 you.sg.pl. open window Prt.  
 'Open the window!'
- b. Qing (ni) zuoxia.  
 Prt. you.sg.pl. sit-down  
 'Sit down, please'
- c. (Ni) qing he cha  
 you.sg.pl. Prt. drink tea  
 'Drink some tea, please!'

All the examples above from various languages show that in each language there is a specific way of constructing a syntactic expression used only for direct commands. These constructions, according to (9a), count as strong imperatives, to which the term imperative refers in this study.

However, there are also languages in which the form for commands are weak imperatives defined in (9b). I have found that three languages lack a strong imperative construction. That is, they lack a unique syntactic form dedicated to commands. They are Navajo, Paipai and Mayo. In these languages, constructions compatible with direct commands are also compatible with assertions.

According to Hagberg (1989), in Mayo, a Uto-Aztecan language, direct commands can be expressed in only two ways, both of which are ambiguous with respect to the declarative constructions. The first form is non-future (17a, 18a) and the second form is future (17b, 18b). The non-future form is considered polite and the future form with nake is considered impolite, if the sentence is understood to be one with directive force.

- (17) a. Bin-e' weeye.  
to here-2sgNOM move  
'Come here!/You are coming here'
- b. Bin-e' wee-nake.  
to here-2sgNOM move-FUT  
'Come here!/You will come here'
- (18) a. Ye'eye-'e  
dance-2sgNOM  
'Dance!/You(sg) are dancing'
- b. Ye'eye-'em  
dance-2plNOM  
'Dance!/You(pl) are dancing'

The imperative force is totally contingent on contextual information, such as previous statements. In (17) and (18), the second-person pronominals e/em, as a rule, cliticize to whatever element is in the sentence-initial position. Thus, they show up as attached to the adverb ka-tuatu'e'si (badly) in (19) and to the negative particle in (20).<sup>5</sup>

- (19) Ka-tuatu'si-e' ye'eye  
not-well-2sgNOM dance  
'Dance badly!/You(sg) are dancing badly'
- (20) a. Ka-t-e' ye'eye  
no?-2sg(NOM) dance  
'Don't dance!/You(sg) aren't dancing'
- b. Ka-t-em ye'eye  
no?-2pl(NOM) dance  
'Don't dance!/You(pl) aren't dancing'

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<sup>5</sup> t occurs whenever the negative ka is followed by an enclitic. Mayo has another negative particle, which has only the interjective use ε?.

With respect to the imperative, Mayo contrasts with the closely related language Yaqui, which is otherwise very similar.

A similar situation is reported in Paipai, a Yuman language of the Hokan family. Paipai has obligatory bound prefixes on the verb that mark subject and object persons. These bound elements appear in declarative and interrogative sentences as well as sentences for commands, without any variations for sentence types. In Paipai, speakers of older generations use the same verbal affix for (weak) imperatives and present/past declaratives, as given in table [a]; speakers of younger generations use the same verbal affix for (weak) imperatives and future declaratives, as given in table [b] (M.Lewis 1986).

(21)

a.

Old generations

| Sentence types              | Verb stem | Verb affix |
|-----------------------------|-----------|------------|
| declaratives: pres/past     | verb      | 0          |
| declarative: future         | verb      | -a         |
| imperative                  | verb      | 0          |
| interrogative:pres/past/fut | verb      | -'e        |

b.

Younger generations

| Sentence types              | Verb stem | Verb affix |
|-----------------------------|-----------|------------|
| declaratives: pres/past     | verb      | 0          |
| declarative: future         | verb      | -a         |
| imperative                  | verb      | 0/-a       |
| interrogative:pres/past/fut | verb      | -'e/-a     |

By formal properties alone, morphological, syntactic or intonational, there is no way to differentiate 'imperatives' from declaratives in the examples given in (22).

(22)

a.

m-ya:m

2-go

'You go; you went; Go!'

b.

m-nya:m

2-pl.go

'You all go; you all went; Y'all go!'

However, as reported in M. Lewis (1986), there is no ambiguity in discourse, because the 'imperative' occurs only in a highly marked context. The utterance of an 'imperative' needs

to be preceded by a series of WH questions to which the questioner does not wait for any response. The discourse pattern involving a series of WH questions is unusual, thus marking an imperative situation.

Navajo, an Athapaskan language, is of a similar nature in that there is no unique syntactic form that corresponds to an imperative construction. Any second person singular, plural or distributive plural form of the Imperfective Mode can be used as an immediate positive 'imperative', and so can any second person form of the future mode (Young & Morgan 1987, 204).

To summarize, despite the general belief that an imperative construction exists in all languages (see Sadock & Zwicky 1985), the directive force of commands, in some languages, is not determined by a distinct syntactic form but can only be determined by the context. These languages can only be said to possess weak imperatives, as characterized in (9b), sentence types compatible with both assertions and direct commands. Thus, strong imperatives are not universal.

### 1.1.3. Non-sentential imperatives

The present study focuses on the strong imperatives for the obvious reason that they exist as a syntactic class in a wide variety of languages, and there are formal properties that can be studied within and across languages (see Chapter 6).

The characterizations in (9) not only provide a general answer as to what an imperative is across languages, but also explicitly state that expressions as commands which count as strong imperatives must be a sentential type. The necessity of this requirement is simply that commands can be either sentential or non-sentential expressions; consequently, imperatives can be either sentential or non-sentential type of constructions. The English imperatives given earlier (and the imperatives from Japanese, Papago, Thai and Chinese) are sentential expressions. There are many non-sentential expressions compatible only with direct commands in English. Consider the basic lexical categories N, A, P, V, and Adv. Apart



from  $V^{\max}$ , the maximal projection of all these lexical categories can be direct commands in English, as shown in (23)-(26).<sup>6</sup>

- (23) NP's
  - a. Attention!
  - b. Silence!
  - c. More beer!
- (24) AP's
  - a. Careful (with the bottle)!
  - b. Quiet (in the ward)!
  - c. Easy (with the box)!
  - d. Quick!
- (25) PP's (as motion expressions)
  - a. To the mall with you! (You go to the mall!)
  - b. Under the table with you! (You go under the table!)
  - c. To the gallows with him! (You/someone take him to the gallows (idiomatic))
  - d. After me! (You follow me!)
- (26) AdvP's/Particle Phrases (as motion expressions)
  - a. Up with the flags!
  - b. Down with apartheid!
  - c. On with the show!
  - d. Out with you!
  - e. Off with his head!
  - f. Off with you!
  - g. Away with him (You take him out of my sight)
  - h. Away with you (You go away)
  - i. Away with the boxes (You take the boxes with you)

These non-sentential expressions cannot be assertions, questions or anything else but commands. Thus, they are non-sentential imperative constructions, having the following several interesting properties.

First, being non-sentential, there cannot be a NP subject,<sup>7</sup> although vocatives are

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<sup>6</sup> Thanks to Dick Oehrle and Terry Langendoen for bringing this point to my attention.

<sup>7</sup> As suggested by Andy Barss (p.c) the ban on the subject can be attributed to lack of Case assignable to the subject position (see Section 2). Assume that small clauses are non-sentential constructions, the fact that they allow overt subjects is because the verb assigns Case to the subject of the clause, as in We elected [him president], We

allowed.

- (27) a. \*You easy with the box!  
 b. \*You off with your shoes!  
 c. You. easy with the box!

Second, the choice of NP, AP, PP, Adv is subject to conventional and idiomatic uses.

It would be unacceptable to use the following NP's, AP's, or PP's.

- (28) a. \*Observation! (You observe the experiment!)  
 b. \*Books! (You buy/sell books!)  
 c. \*Silent! (You be silent!)  
 c. ?? Along with the president!  
 d. \*For the president!

The phrases in (25) and (26) have in common a directional meaning. Any non-directional categories are disallowed, as shown by (28c,d).

Third, the understood would-be agent of the action, or the theme of the event or state is the addressee. These expressions can be paraphrased by sentential imperative constructions with either the second person or indefinite third person as the addressee(s).

- (29) a. Off with his head! (You/somebody cut off his head)  
 b. Off with your head! (pragmatically abnormal)  
 c. Off with your shoes! (You take off your shoes)

Fourth, unlike imperatives, it is impossible to construct negative counterparts with not to these expressions. This non-negatable property is unique, since predicates (VP's, AP's, AdvP's) can be negated by not, and NP's by no nor not (Not everyone ate that fish). Neither not or don't is compatible with these non-sentential expressions except no (No more beans! No noise!).

- (30) a. \*Not attention!  
 b. \*Not to the mall with you!  
 c. \*Don't attention!  
 d. \*Don't to the mall with you!

Fifth, there is an asymmetry in the prepositional with arguments. If the prepositional argument is third person, it must be the internal argument with second person pronoun

made [her nervous] and I saw [him leave].

YOU as the understood agent (the semantic external argument); if the prepositional argument is second person, it has to be the semantic external argument and cannot be the internal argument.

- (31) a. Away with him! (You/somebody take him away!)  
b. Away with you! (You go away!)

Sixth, it is impossible to have reflexives in these expressions. The explanation for this seems to be that there is no structural subject to trigger reflexivization.<sup>8</sup>

- (32) a. \*Away with yourself!  
b. \*To the gallows with yourself!

As stated in (9), only sentential type expressions count as either strong or weak imperatives; these non-sentential constructions automatically fall outside the scope of strong imperatives. Although, the non-sentential imperatives will not be the focus of the present study, the above properties associated with them are certainly worth future research.

To sum up, the distinctions made between sentential and non-sentential imperatives yield two types of imperatives.

- (33) imperatives  
    <1> sentential imperatives  
    <2> non-sentential imperatives

Sentential imperatives can be further sub-divided into strong or weak imperatives, depending on whether a sentential imperative is compatible only with commands or with both commands and assertions. Thus, we have three types of imperatives and our study will be concerned with type <1a> imperatives in (34).

- (34) <1> sentential imperatives  
    <1a> strong imperatives (compatible only with commands)  
    <1b> weak imperatives (compatible with commands and assertions)  
    <2> non-sentential imperatives

#### 1.1.4. Addressee and persons

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<sup>8</sup> This would argue against the view that reflexives can have "semantic" antecedents.

As has been illustrated earlier in (1), English imperatives allow not only the second person pronoun but also a few third person indefinite NPs as their subjects. This phenomenon has not been found in the other languages investigated here and has particular characteristics regarding anaphoric binding, given in (35).

- (35) a. Somebody<sub>i</sub> put up your<sub>i</sub>/his<sub>i</sub>/their<sub>i</sub> hand  
 b. Everybody<sub>i</sub> tie your<sub>i</sub>/his<sub>i</sub>/their<sub>i</sub> shoes  
 c. Nobody<sub>i</sub> take off your<sub>i</sub>/his<sub>i</sub>/their<sub>i</sub> hat  
 d. Don't anyone<sub>i</sub> throw away your<sub>i</sub>/his<sub>i</sub>/their<sub>i</sub> wallet

In (35), the anaphoric pronoun can be either second or third person. Two questions arise with respect to (35). Why can the third person indefinite NP's be the subjects of imperatives? Why can they bind simultaneously anaphoric pronouns of either second or third person? To answer these questions, we need to first look at the issue of addressee and person.

In English imperatives, apart from the fact that the specified subjects can be the second person pronoun you and a few indefinite NPs of third person, the subjects can also be partitive NPs of you, definite NPs ((which can be paraphrased as partitive phrase of you) or Wh-word whoever).

- (36) a. One of you get the papers in my office!  
 b. The tallest of you sit at the back!  
 c. All new students sign up at the front door!  
 d. People interested in the project please come to see me afterwards!  
 e. The boy with the rubber gun get on the stage!  
 f. Whoever took the book please put it back on the shelf!  
 g. Whoever wants to leave leave right now!

In (36), the definite NPs and WH-word whoever are all restricted to the addressee(s), so are the indefinite NPs in (35). All these cases can then be generalized by the notion addressee: in each case, the referent of the specified subject is either the addressee or among the addressees. The indefinite NPs and WH-word are simply quantifiers over the set of addressees. The partitive NPs and definite NPs are also like quantifiers over a subset of the set of addressees. Let us use the term addressee-limited subjects to describe these

imperative constructions.

We now define the person designated by the referent of any NP according to the criteria in (37).

- (37) a. An NP is 1st person if its referent includes the speaker(s).  
 b. An NP is 2nd person if its referent excludes the speaker(s) and includes the addressee(s).  
 c. An NP is 3rd person if its referent excludes both the speaker(s) and the addressee(s).

All the subjects of the imperatives in (35) and (39) quantify over the set or a subset of the addressee(s), satisfying (37b). Thus, the subjects are second person and are compatible with direct commands; hence, quantifier-like definite NPs can be subjects in imperatives and bind second person anaphoric pronouns in (35).

However, to state that imperative subjects must be addressee-limited is definitely too strong. Under some circumstances, subject NPs do not have to be the addressee. As given in (38), the second NP of the conjoined subject is of third person, and the man or woman denoted by this NP may or may not be addressed to at the time of the speech.

- (38) a. You and Mark clean the table and I will do the dishes.  
 b. You and him/her/them make a deal! I am out of this.  
 c. You and someone clean the office downstairs! I will mop the floor.

The condition for this non-addressee-limited imperatives requires that the subject be a co-ordinate structure: the first conjunct must be you and the second conjunct is any third person NP, but not vice versa (speakers' judgements vary).

- (39) a.\*Mark and you VP  
 b.\*Somebody and you VP  
 c.\*Somebody and Mark VP

These non-addressee-limited subjects, however, are formally second person in nature, given the earlier definition of person in (37). According to (37b), imperatives with conjoined NPs as the subject -- the first conjunct as you and the second conjunct as an NP of third person -- contains an NP whose referent excludes the speaker and includes the addressee, i.e. you.

Therefore, being second person, the conjoined subject NP can bind second person plural anaphoric pronouns, as shown by the contrasts in (40).

- (40) a. You and Bill wash yourselves before dinner.  
 c.\*You and Bill wash yourself before dinner.  
 d.\*You and Bill wash himself before dinner.  
 d.\*You and Bill wash yourself and himself before dinner.

The ill-formed sentences show that the conjoined subject can bind only second person plural anaphors. We conclude that all subjects in English imperatives are second person in nature, even the quantifier-like NPs and conjoined NPs. But why do the quantifier-like NP subjects in (35) also bind third person pronouns? We may formally explain this by assuming that the subject quantifiers in imperatives are unspecified for numbers and must range over second persons, ie. assigned values of both second person and third person, given in (41). As a result of the assumption, the paradigm in (35) follow.

- (41) [Someone{2nd,3rd} [...your<2nd>/his<3rd>/their<3rd>...]]  
 [Everyone{2nd,3rd} [...your<2nd>/his<3rd>/their<3rd>...]]  
 [Anybody{2nd,3rd} [...your<2nd>/his<3rd>/their<3rd>...]]

As a matter of fact, all the sentences involving partitive phrases, definite NPs and the Wh-word allow either second or third person anaphoric pronouns, as in (42), supporting the explanation that quantifier-like imperative subjects have values for either second or third person.

- (42)  
 a. Whoever knows the answer please put up your/his/their hand.  
 b. People interested in the project write down your/their names.  
 c. The tallest boy among you buy yourself/himself a bicycle.

The distinctions we have made between addressee-limited and non-addressee-limited NP subjects, which are all formally second person, contrast with speaker-included constructions. This is the let's construction that includes both the speaker and the addressee.

According to (37a), the subject is first person.

- (43) a. Let's go to the party at Bill's house.  
 b. Let's read this paper together.  
 c. Let's wash ourselves/\*yourselves/\*themselves.

Since it is not common for one to command oneself to do something, these constructions do not have the illocutionary force of command or order. They are simply suggestions. Our earlier characterization of imperatives as compatible with direct commands automatically separates let's constructions from the imperatives.

To summarize, we have concluded that all imperatives in English can be formally treated as having second person subject: the third person indefinite and definite NP's, and the partitive phrases are quantifiers over the set of addressees that are second person in nature. As a result, the first person let's constructions are excluded in the imperative paradigm. Thus, we have first person let's constructions as a parallel to second person imperatives that have been sub-divided in earlier discussion, as shown below.

(44) A. Imperatives (commands, formally 2nd person)

Sentential imperatives  
                   strong imperatives  
                   weak imperatives  
 Non-sentential imperatives

B. Let's constructions (suggestions, formally 1st person)

## 1.2. Issues surrounding imperative constructions

In the next two sections (Sections 2 & 3), I discuss the major issues surrounding the English imperative construction as defined in Section 1. Some of these theoretical issues grew out of the transformational studies of English syntax from the 1960s to the late 1970s. Crucially, I single out the unsolved questions and relate them to current grammatical theories. I concentrate on the fact that a re-examination of the imperative problems under the Government and Binding theory, outlined in Chomsky (1981, 1982) and developed in Chomsky (1986), among others, would seem to require assumptions conflicting with existing theoretical constructs. Thus I show that, despite much progress made in the last decade, imperative constructions still remain a challenge.

### 1.2.1. A historical review

#### 1.2.1.1. Underlying subjects

Imperatives require a second person subject. This fact seems to be agreed upon by many people -- so many before the generative era that it is hard to give a list. Familiar generative grammarians include Chomsky (1955), Klima (1964), Kiparsky (1963), Katz & Postal (1964), Lees (1964), who all agree that imperatives have you as the underlying subject that undergoes a deletion operation in Wash yourself!. It was not until Thorne (1966), Bolinger (1967) and later Downing (1969) that attention was paid to subjects which are third person. Schachter (1972) discussed the relationship between the subjects, you and the indefinite NP's, and the pronominal/anaphoric references these subjects admit. He took (45) as special imperative cases and noted that if a third person NP occurs in an imperative subject position it may select either second or third person anaphora, as in (45) and (46).

- (45) a. Somebody take off your coat!  
       b. Somebody<sub>i</sub> take off his<sub>i</sub> coat!
- (46) a. Everyone of you pick up his/?your towel!  
       b. Everyone pick up his/?your towel!  
       c. Every one pick up his/?your towel!  
       (Schachter 1972)

In last section, I discussed similar or more complicated examples and concluded that third person indefinite NPs are not special but simply quantifiers over the set of addressees that are of second person.

#### 1.2.1.2. Underlying modal elements

Not only are there arguments for underlying subjects but there are also arguments for underlying modal and auxiliary elements. Since the English imperative "lacks the auxiliary accompaniments and also is permitted to lack a subject, this boils down to discovering a plausible source that contains these elements, which are then deleted by rule" (Bolinger 1967).

##### 1.2.1.2.1



Katz & Postal (1964) and Klima (1964) propose an underlying phrase marker containing will to account for cases like (47).<sup>9</sup>

- (47) a. Close the window!  
 b. (You will) close the window, won't you?  
 c. Do help me, won't you?

Lees (1964) proposes an affix-like zero morpheme, which he terms IMP, to be the initial underlying modal element in imperatives. As a result, there is no need for an ad hoc rule deleting a postulated auxiliary in his system, since the auxiliary is a phonologically unrealized morpheme in imperatives. This IMP applies to its adjacent V and turns it into tenseless V.<sup>10</sup> An imperative may assume the form (48a) but not (48b) because IMP attaches to the verb stem in (48a) and (48b) does not have IMP. If Emphatic or Negative has prevented IMP from moving onto the verb, DO-support must apply, thus explaining (49).

- (48) a. Be there by five! [IMP<-tns>+V...] -> [V +IMP<-tns>]  
 b. \*Are there by five! [ V ...] -> [V ...]
- (49) a. Do come to my house! [IMP+EMP+V] -> [Do+IMP+EMP+V]  
 b. Don't come to my house! [IMP+NEG+V] -> [Do+IMP+NEG+V]

However, as pointed out by Schachter (1972), exactly the same IMP attachment would be prevented by a subject you in (50a). Thus DO-support must apply, yielding ill-formed (50b).

- (50) a. You close the door! [IMP+YOU+V] -> [Do+IMP+YOU+V]  
 b. \*Do you close the door!

All this, in fact, is a sort of re-formulation, in a transformational approach, of the

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<sup>9</sup> See Lees (1964) on the conjunction-reduction proposal for deriving tagged imperatives and Kiparsky (1963) for drawing attention to tags that do not involve will. Criticisms can also be found in Bolinger (1967), and Culicover (1971) for the will analysis.

<sup>10</sup> The deletion of a postulated auxiliary encounters other problems such as deletion under identity and change of meaning. First, there is no preceding modal to delete under identity with. Second, there is a change of meaning with a modal appearing in the imperative.

observation made by Jespersen (1949, V, 24.1; IV 15.7), who emphasized the futurity of imperatives and the tagged modal element will in imperatives. But the theoretical conception of underlying structures and their appropriate derivations to surface forms via rules has provoked research and disagreements on how imperatives and their properties can be best represented, underlyingly and on the surface.

### 1.2.1.2.2

One of these studies led Schmerling (1975, 1977) to propose that there is no AUX phrase marker for some imperatives but there is one for others. She adopted Akmajian & Wasow's (1975) arguments for BE-shift, which claims that VP deletion and VP fronting are allowed if BE, generated within VP, moves into Aux. Therefore, we get the well-formed (51b) and (52b)

- (51) a. You should be examined by a doctor, and you should be  
examined by a doctor, too.
- b. You should be examined by a doctor, and you should be,  
too.
- (52) a. They said to be examined by a doctor, so you should be  
examined by a doctor!
- b. They said to be examined by a doctor, so examined by a  
doctor you should be!

Schmerling (1977)

According to her, if imperatives do not contain AUX, BE-shift will be inapplicable. Thus, VP fronting and VP deletion should be impossible. Indeed it does seem to be true, as in (53b) and (54b).<sup>11</sup>

- (53) a. They said to be examined by a doctor, so (you) be  
examined by a doctor!
- b. \* They said to be examined by a doctor, so examined by  
a doctor (you) be!
- (54) a. You be examined by a doctor, and you be examined by a  
doctor, too.

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<sup>11</sup> To some speakers, (54b) is grammatical. To others it is marginal but definitely better than (i), which suggests that there is no verb movement in imperatives (see Chapter 3).

(i) \*You get examined by a doctor, and you get, too!

- b. \* You be examined by a doctor, and you be, too.  
Schmerling (1977)

Based on the above test, she claims that imperative negative don't is then in AUX, since VP deletion is permitted.

- (55) a. Don't you be examined by a doctor, and don't you be  
examined by a doctor, either!  
b. Don't you be examined by a doctor, and don't you be,  
either!

Schmerling (1977)

Inevitably, as one can see clearly from the above, the issue of imperatives is tied with the analysis of the auxiliary elements do and don't in English (see details in Chapter 3). These auxiliary elements, in turn, interact with the overt subject, as illustrated in the next section.

#### 1.2.1.3. Constraints on imperative subjects

There are notorious asymmetries in imperatives, first discussed by Cohen (1975) and Schmerling (1975, 1977). Subject NPs appear in the post-auxiliary position only in negative imperatives containing don't, as in (56), not in positive imperative sentences, as in (13a), or negative imperative containing do not, as in (57b).

- (56) a. Don't (you) move another step forward!  
b. Don't (anyone) taste my cake!
- (57) a. \*Do you eat that cake!  
b. \*Do not you move another step forward!

Subject NPs are never compatible with do, as shown by additional examples in (58), where NPs are preceding do. As a contrast, Subject NPs freely occur in positive imperatives without do, as shown in (59).

- (58) a. \*You do try and taste my cake!  
b. \*You do not taste my cake!
- (59) a. (You) taste my cake!  
b. Somebody help me with the car!

It is not clear whether or how these asymmetries are syntactically constrained. No successful

account was ever offered in the previous studies. Thus, they remain unsolved in current theoretical frameworks (Chapters 3 & 4 are devoted to discussions of these asymmetries in English. Syntactic accounts are offered along the line of Government and Binding Theory, and both syntactic and pragmatic accounts are proposed in terms of Categorical Grammar).

### 1.2.2. Theoretical issues

The unusual interaction between overt subjects, AUX and the syntactic position of the subjects, presented in Section 2.1, give rise to questions that are of theoretical interest. These include: (i) are imperative constructions derivable from general rules that are already assumed in the grammar? (ii) if they are, how? if not, do imperatives form a special utterance type? (iii) do imperatives have any role in a syntactic theory?

#### 1.2.2.1. Derivability and arbitrariness

It is quite usual to associate imperatives with infinitives, such as in Jespersen (1949, IV, 7.4; V, 24.1); E.Kruisinga (1931 A handbook of present-day English), G.O.Curme (1931, Syntax), and Bolinger (1967). The obvious reason for the association is that the verb forms in infinitives and imperatives lack inflections. Schachter (1972) even proposes that subjunctive clauses should be treated as embedded imperatives for the same reason. One central methodology of generative grammar is to associate constructions with each other through abstract formulation of rules. As a result, the issue for generative grammar is whether rules can be formulated on a principled basis, to derive imperatives from non-imperatives. This line of research treats imperatives as having a similar underlying structure for other constructions, and believes that imperatives are not a type unto themselves.

#### 1.2.2.2. Special utterance type

Schmerling (1975, 1977), however, presents arguments for not deriving imperatives from a unified underlying structure with non-imperatives. Both the Performative Hypothesis (Sadock 1974) and rules in Standard Theory have been argued to be insufficient to deal with English imperatives (see Schmerling 1975, 1977). Based on (51), (52) and (55), and (56)-

(59), she treats be and do in imperatives as different from the regular be and do in non-imperatives, ending up with a special PS rule  $IMP \rightarrow NP (Aux) VP$  to generate imperatives, labeling them as "special utterance type" and "a third distinct clause type" from tensed and untensed clauses (Schmerling 1982) (see discussions in Chapters 2, 3, 4 & 5).

### 1.2.2.3. Non-syntactic

On the other hand, Akmajian (1984) proposes that on syntactic grounds English imperatives are equivalent to a class of exclamative constructions. Hence, he argues that imperatives should not play a role in syntax (see Chapter 5).

## 1.3. A re-examination of imperatives in GB and its implications

Although every innovative grammar must deal and has dealt to varying degrees with the complicated issue of the English auxiliary system, imperatives are usually skipped over. The imperative constructions are not mentioned or systematically discussed in many current grammatical theories, for instance GPSG, HPSG, LFG. Brief discussions made in the 1980's can be found in Steele et al (1981), Schmerling (1982), Huntley (1982, 1984), Gazdar, Pullum & Sag (1982), along the line of nontransformational approaches, and recently in Pollock (1989) along the line of Government and Binding theory.<sup>12</sup> I turn now to the widely adopted Government and Binding theory, the precursors of which depended on imperatives to motivate the famous rule of Reflexivization and the idea of Rule-ordering. I demonstrate how a re-examination of some aspects of the imperatives discussed in Section 2 create obvious contradictions within the framework; thus, posing interesting questions.

### 1.3.1. The theory of Case and phonetically realized NP

Case theory, one of the modules of the GB framework (Chomsky 1981, 1982), requires

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<sup>12</sup> Lasnik (1982) discussed some of the problems using an extended pre-GB model. Davies (1986) discussed imperatives at length from both a syntactic and a semantic point of view, with a non-generative emphasis. The concerns in this thesis are different from those of Davies (1986).

every lexically headed NP to receive Case from a case-assigner. Case-assignment requires that the Case-assigner govern the NP to which it assigns Case.<sup>13</sup> To illustrate, subject NP is assigned nominative Case by INFL in a tensed clause, object NP is assigned accusative Case by the verb, and an NP following a preposition is assigned Case by the preposition. This accounts for the obligatory NP-Movement in passive and raising constructions, given the assumption that passive participles, raising verbs and the infinitive marker to are not Case-assigners.<sup>14</sup>

- (60) a. \*        was seen Bill  
       b. \*        seems Bill to be nice  
       c. \*        was believed Bill to be nice

In addition, Case theory captures a generalization about infinitive constructions across languages: infinitives do not have overt subjects (excluding Exceptional Case Marking (ECM) constructions in English), explaining the obligatory presence of PRO in a number of constructions:

- (61) a. \*[Mark to leave] was expected.  
       b. [For Mark to leave] was expected.  
       c. [PRO to leave] was not an appropriate thing to do.
- (62) a. \*I tried [Mark to go]  
       b. I tried [PRO to go]
- (63) a. \*The professor [Mark to talk to] is next door.  
       b. The professor [for Mark to talk to] is next door.  
       c. The professor [PRO to talk to] is next door.

PRO can occur in an infinitive clause, namely clauses that can be characterized as [-finite]

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<sup>13</sup> Readers are referred to Chomsky (1981, 1982, 1986) for discussions of Case theory. Detailed definitions of government with respect to c-command, and the condition for an NP that is in theta-position to receive Case from theta-role assigner V, and assumptions of Case assignment by INFL[+tense], P and N (for genitive phrases) or by inheritance are provided in the works cited above.

<sup>14</sup> These examples implicitly rest on such assumptions as passives take the same argument structure as actives.

or [-tense], but cannot appear in a tensed clause which is characterized as [+finite], since it is assumed that (i) the functional category INFL[+finite], i.e. INFL[+AGR], is a governor of the subject position whereas INFL [-finite], i.e. [-AGR], is not a governor of that position, and (ii) PRO cannot be governed, a 'theorem' derived from Binding Principles.<sup>15</sup> If there is no governor, then there is no case-assigner. Hence, there is no lexical NP in the subject position of an infinitive clause.

As a consequence, it can be assumed that the presence of Case is associated with a subject argument being phonetically realized and the absence of Case with a subject argument being phonetically unrealized. This is a crucial assumption that is held throughout this study.

### 1.3.2. INFL and null subject in imperatives

Turning to imperative constructions, one needs to characterize the presence and absence of a lexical NP in the subject position. Imperatives seem to belong to the [-finite] category, given their similarities to infinitive verbs. On these grounds, one may account for subjectless imperatives by assuming that imperatives contain the functional category INFL[-finite]. INFL[-finite] is assumed not to be a governor of the subject position; thus, there is no Case to be assigned to the subject position at S-Structure. If there is no Case associated with the position, there is no overt NP. As a result, the sentences in (64) are properly derived.

- (64) a. Eat an apple everyday!  
       b. Go to the beach and enjoy yourself!  
       c. Be quiet!

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<sup>15</sup> PRO has the features [+anaphoric, +pronominal]. The principles of the Binding Theory state that a [+anaphoric] NP must be bound in its governing category, a [+pronominal] NP must be free in its governing category, and that a [-anaphoric, -pronominal] NP must be free. As a result, a [+anaphoric, +pronominal] element satisfies the first two principles only if it has no governing category. Thus PRO cannot be governed.

The analysis of a lexical subject being contingent on properties of the functional category INFL and the assumption that INFL in (subjectless) imperative is INFL[-finite] give rise to problems in explaining imperatives with overt subjects.

- (65) a. You wait for me here!  
       b. You be quiet!  
       c. Somebody open the door!

First of all, the lexical NPs in the initial position are not vocatives, which are phonologically characterized by a pause following the NP. Second, the verb form is tenseless. These two indisputable facts create a "paradoxical" situation: the lexical NP must receive Case from INFL but the INFL[-finite] is unable to assign Case to the subject position.

To accommodate (65), one seems to need an assumption that INFL in (65) is able to assign Case. Brute force methods such as letting INFL be [+finite] in (65) will not do. Not only does this have the result of making conflicting assumptions of INFL for (64) and (65), but it also assimilates imperatives to tensed clauses, which is implausible for obvious reasons. To simultaneously explain (64) and (65), the only option is to assume that INFL in imperatives is neither [+finite] nor [-finite]. What does this mean in terms of the theoretical consequences? It means the structure of imperatives has a feature in INFL that allows the INFL to assign Case optionally to the subject position; thus, allowing an overt NP as well as its null counterpart:

- (66) The subject position is governed and receives Case from  
       the INFL.

Presuming (66), the next question to ask is: what is this null element in terms of empty categories? It is apparent that this null element falls outside of the array of empty categories made available by the theory. It is definitely not a wh-trace nor an NP trace. It cannot be PRO, since PRO cannot be governed. It does not seem to be the pro defined as [+pronominal, -anaphoric], because pro is not typical in English or in untensed clauses: pro



is typical only in tensed clauses in Romance languages.<sup>16</sup>

When facing a dilemma like this, the constructive option is to make some further necessary and reasonable assumptions, the validity of which can hopefully be tested. I would like to suggest that a pro-type of analysis seems more appropriate to both English and cross-linguistic data, as the following reasons show.

(a) The interpretation of the null subject has a determinant range restricted to second person. The quantified NPs that are allowed to be subjects quantify over the set of addressees.<sup>17</sup>

- (67) a. \*pro<sub>i</sub> Hand in his<sub>i</sub> homework!  
b. pro<sub>i</sub> Hand in his<sub>j</sub> homework!

In this sense, the null subject in imperative is as determinant as the null subject that undergoes 'pro-drop' in Italian and Spanish due to the rich verbal morphology. Imperative INFL is [+AGR].

(b) English imperative verbs do not show inflections for person, number or gender. Other languages do show these agreement suffixes on verbs in imperatives. Overt subjects and the agreement affixes on the imperative verb may appear simultaneously such as in Russian and Lithuanian (Timberlake 1974).

(c) Another reason for the null subject to be pro but not PRO (besides PRO cannot be governed by the governing category INFL [+AGR]) is that PRO may allow an arbitrary interpretation and trigger arbitrary third person reflexive oneself/ves, which is banned in

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<sup>16</sup> See Chomsky (1982), Rizzi (1982), Taraldsen (1978), Huang (1984), Rizzi (1986), and references cited there as to why English does not have pro.

<sup>17</sup> (23a) cannot be an imperative but is OK as answer to an echo question.

imperatives.<sup>18</sup>

### 1.3.3. Particular grammar and theoretical construct

If the above suggestions are reasonable, namely, that the functional category INFL in imperative constructions has some content that enables it to license both overt and null subjects in English and that the null subject is a pro-like empty category, we then need to ask why this is the case at all in the grammar.

UG depicts pro as a necessary syntactic entity, given the binary features [+/- pronominal] and [+/- anaphora]. Typologically, it is claimed that Romance languages have it (synchronic evidence from Italian and Spanish, diachronic evidence from Old French), English Child Language has it (Hyme 1988), Chinese and other languages have it. However, pro does not exist in the grammar of (adult) English, due to the non-lexical nature of INFL and its impoverished agreement morphology.<sup>19</sup>

Suppose imperatives are analyzed to allow pro in English. This conclusion is more interesting to the theory than the theory describing them as unique, since the theory is opposed to construction-specific rules, conditions or stipulations. This calls for an examination of imperative constructions in a larger context -- to look at the issue of the structure of imperatives in other languages. Just within English, as discussed in the previous pages, the imperative issue suggests that the traditional idea of equating imperatives with infinitives should be reconsidered. Content of INFL in imperatives, at least, seems to have some effect

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<sup>18</sup> One option to take is to assume INFL has the same properties in imperatives as in infinitives, and that the subject in an imperative is a PRO, only with second person interpretation.

<sup>19</sup> Languages like Chinese, where there is no trace of overt agreement, have been argued to have a lexical INFL, which governs the subject position and allows the properly governed element to drop (Huang 1984). See Zhang (1988) for disagreement and the analysis of proposing V as governor of the subject in certain constructions.

that places imperatives in between tensed clauses and untensed clauses.

To sum up this section, we have come up with the approximation that INFL for imperatives governs the subject position and allows a pro-type null subject. This null subject is licensed by the more determinant AGR, i.e. second person singular or plural, similar to 'pro-drop' in tensed clauses noticed in some non-English languages. As a result, three types of INFLs are distinguished: one for tensed clauses, one for untensed clauses and the other for imperatives.

#### **1.4. Summary**

In Section 1, I have defined the imperative constructions in terms of compatibility between sentence types and commands, and discussed various imperatives and related constructions (strong vs. weak, sentential vs. non-sentential). I have shown the non-existence of strong imperatives in some languages and provided an analysis of the quantified NP subjects in English.

Together in Section 2 and 3, I have sorted out two major theoretical issues that need to be addressed: (i) are imperatives derivable from a uniform underlying structure for both imperatives and non-imperatives, or are they an independent sentence type? (ii) do imperatives with their noticed interactions with auxiliary elements, subject NPs, and their affinities to infinitives (or even exclamatives; see Chapter 5) play a role in the syntactic theory? In particular, I have argued for the necessity of an explanation for imperatives in the current GB theory, and for a study of imperative constructions in a cross-linguistic setting. Specifically, we need to find out the distributions of subject arguments and the conditions for their null, optional, or obligatory occurrence in English and other languages.

#### **1.5. Other chapters**

In Chapter 2, I examine Pollock's proposal regarding imperative and tensed clauses. I present criticism and extend the analysis along the line of a transformational approach.

Most crucially, I discuss the theoretical consequences of such an extended analysis in terms of construction-specific rules vs. general principles, pointing out the unavoidable result of invoking special assumptions for the imperative construction.

In Chapter 3, based on the criticism made in Chapter 2, I offer an account of positive imperatives with overt, or null, subjects, and propose a structural representation of don't negative imperatives. I motivate a non-verbal, construction specific, analysis of don't, proposing that don't is a base-generated sentence-initial Imp Negative Phrase. I show that the hypothesis of sentence-initial negative phrase for imperatives can be instantiated in a positive way to negative imperative constructions in English and other languages. This chapter shows that negative interrogatives like Won't you eat that cake? and negative imperatives Don't you eat that cake! have different syntactic structures, the interrogatives as an instance of S'(CP) structure and the imperatives as an instance of S (TP); hence, negative imperatives are not inverted constructions. The study also suggests that imperatives are formally derivable from move-alpha but only with certain additional assumptions. The additional assumptions and construction-specific rules show that correlating every construction by a uniform underlying structure has its limit.

In Chapter 4, I relate the observations, results and proposals made in the last two chapters to lexical approaches to imperative constructions. I present an analysis along the line of extended Categorical Grammars (CG), showing that the lexical approach captures the particular syntactic properties associated with don't, do not and no that interact with the subject (overt or null), and that imperatives should be treated as an independent clause type. I evaluate the two different approaches, GB and CG, and point out that in GB the underivability of English imperatives from a uniform D-structure is only implicitly recognized but imperatives are formally represented as derivable for methodological reasons. Afterwards, I discuss other alternative proposals for ruling out the co-occurrence of overt subjects and do. I suggest that pragmatic issues such as the distinction in force between requests and

commands affect the interactions between overt subjects and do.

In Chapter 5, I argue that there are non-neglectable formal properties associated with imperatives in English which are distinct from a class of exclamatives (Mad Magazine sentences (MMs)), and that there is no structural equation between these two constructions. I present arguments to show that MMs are constructions of S' (CP) structure while imperatives are an instance of S (TP). The conclusions are (i) MMs and imperatives are two distinct sentence types and cannot be regarded as an instance of one sentence type having two distinct pragmatic functions, and (ii) the properties associated with imperatives are important to syntactic investigations.

In Chapter 6, I present a cross-linguistic perspective on the properties of imperatives. The examination shows that the imperatives in the languages surveyed have three properties in common: (i) they lack modal elements; (ii) they lack elements indicating past tense; and (iii) they use formal strategies to mark the construction as distinct from non-imperatives. Although considerable diversity exists in the way imperatives are manifested, the ways can be generalized into three types of formal strategies for indicating imperatives: imperative-marking elements, the manipulation of subject and intonation. Five implicational universals can be drawn from this cross-linguistic examination, ranging over imperative types, formal strategies, negatives, and subjects.

## CHAPTER 2

### A GB REPRESENTATION AND ITS THEORETICAL CONSEQUENCES

#### 2.0. Introduction.

The neglect of imperative constructions in current generative grammars is obvious. One recent exception, based on the theory of GB (Chomsky 1986a,b, 1989), is Pollock (1989) which outlines an approach to some imperative constructions.<sup>1</sup> One major issue brought to the forefront in Chapter 1 is whether imperatives and non-imperatives are derivable from a common underlying structure. It was suggested that three types of INFLs need to be recognized, including one for the imperative. The first part of this chapter is the presentation of how and why imperative constructions become an unavoidable issue for Pollock's theory of Verb Movement, and of the proposal made to cope with some of the imperatives. The second part is an evaluation of the proposal, its theoretical consequences and some incorrect predictions regarding the whole range of imperative constructions. Specifically, it is argued that (i) the derivation of imperatives regarding Verb Movement of be/have separates imperatives from tensed clauses and from infinitives; (ii) imperatives in English pattern with tensed clauses regarding 'quantificational binding' but pattern with infinitive clauses regarding the T(ense) feature [-finite], which argues for a special INFL for the imperative in the current transformational grammar; (iii) the negative complex don't cannot be analyzed as a main verb and Pollock's proposal for imperatives is untenable.

#### 2.1. Verb Movement and imperatives

##### 2.1.1. The obligatory movement of have and be in non-imperatives

###### 2.1.1.1. English

It has been argued that English has a rule of Verb Raising to Aux, i.e. INFL in the current GB theory, restricted to certain lexical elements such as be/have (Jackendoff 1972,

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<sup>1</sup> Other recent linguistic comments on imperatives include Zwicky (1988), Zhang (1988), and Zwicky (1987), which reviews Davies (1986).

Emonds 1976, 1978, Lasnik 1981). Consider (1) and (2).

- (1) a. Bill is not happy.  
b. \*Bill does not be happy.
- (2) a. Bill has not finished the homework.  
b. \*Bill does not have finished the homework.

Given the assumption that the negative particle is outside the VP, we have the following D-structure form for the above constructions.

- (3) [IPNP I ([Neg not]) [VP (ADV V...)]

Assuming (3), and also assuming that be/have are generated in VP and on INFL, the paradigm in (1) and (2) requires be/have to move out of the VP to the I(NFL) position, and indicates that the failure of such a movement yields ungrammatical strings where the auxiliary/substitute verb do, generated beyond VP, moves into INFL (1b) and (2b).

However, V to INFL raising is restricted in modern English. In (4), a verb such as like or finish must stay inside the VP, and the substitute verb do moves into INFL.

- (4) a. \*Bill likes not Mary.  
b. Bill does not like Mary.  
c. \*Bill finished not the homework.  
d. Bill did not finish the homework.

The fact that the Verb Movement rule is restricted to be/have in English can be supported by comparison with French, as argued by Pollock (1989) shown below.

#### 2.1.1.2. English versus French

Compare French and English regarding the data in (5)-(7) below, provided the D-structure (3) where ADV is an optional adverbial position that can be occupied by VP adverbs like often/souvent and seldom/rarement.

- (5) a. \*John likes not Mary.  
b. Jean (n') aime pas Marie.
- (6) a. \*Likes he Mary?  
b. Aime-t-il Marie?
- (7) a. \*John kisses often Mary.  
b. Jean embrasse souvent Marie.

c. John often kisses Mary.  
 d. \*Jean souvent embrasse Marie.  
 (Pollock 1989, 367)

(5a) is excluded since English Verb Movement is restricted to be/have. (5b) is well-formed since all verbs undergo Verb Movement in French. (6a) is excluded because the derivation of it presupposes Verb Movement of like to INFL if we analyze the Subject-Aux Inversion as movement from INFL to Comp. (6b) is fine for the same reasons as (5b). Presuming that neither English nor French allows for ADV movement to the right, the ill-formedness of (7a) must involve Verb Movement to INFL whereas the grammaticality of (7b) is straightforward since the verb embrasser is allowed to move. Therefore, the only acceptable English sentence is (7c).

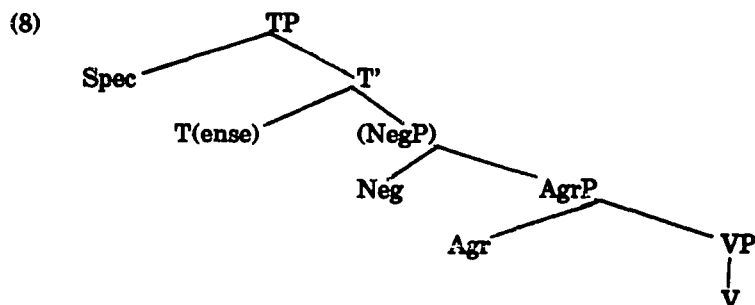
To sum up, if we allow the grammar to specify that English has a limited version of the Verb Movement rule and that French has an obligatory Verb Movement rule, we can account for the minimal pairs in (5)-(7) as the surface reflex of the abstract syntactic differences in Verb Movement in English and French (see Pollock 1989).

## **2.1.2. Pollock's proposal for clause structure and Verb Movement**

### **2.1.2.1. Tense and Agreement Phrases**

Pollock (1989) proposed an analysis for why Verb Movement to INFL in English is lexically restricted, using the ECP, especially the Head Movement Constraint which requires movement to be local and the trace of the moved head to be properly governed, theta-theory and quantification theory developed in the current GB literature. Essential to his analysis is the development of a clause structure with the INFL category dissected into two functional categories: Tense and Agreement, each with its own maximal projection TP (i.e. S) and AgrP. Negation, headed by not, also projects its own  $X^{\max}$ .

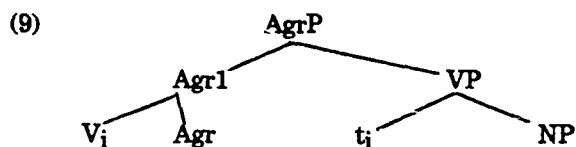




Every  $X^{\max}$  is assumed to be an inherent barrier for movement except AgrP which is defective in English and can only be a barrier by inheritance.<sup>2</sup> In the above configuration, V movement obeys the strict locality condition, moving from V to Agr to T. The head Neg is assumed not to count as a potential intervening head governor for the Minimality Principle of Chomsky (1986a) which states that the closest  $X^0$  element to a trace  $t$  of  $Y^0$  blocks the government of  $t$  by the moved  $Y^0$ .<sup>3</sup>

#### 2.1.2.2. Theta-roles and the 'opacity' of Agr

But why is Verb Movement from V to Agr to T in English restricted to be/have? The property these two verbs have in common is that they do not assign any theta-role to the constituents they subcategorize for, whereas all other verbs do. Pollock then assumes that Agr in English, unlike Agr in French, is opaque to theta-role assignment. As a result, Agr1 in the structure (9) blocks the theta-grid of V from percolating to AgrP after V adjoins to Agr, forming the amalgamated  $[[V] \text{ Agr}]$ .



<sup>2</sup> See Chomsky (1986a) for relevant assumptions and definitions of barriers for movement.

<sup>3</sup> See Chomsky (1986a) on the Minimality Principle and Rizzi (forthcoming) on the relativized minimality condition.

This blocking causes the trace *t* to have no theta-role to assign, violating the theta-criterion which requires that the terminal D-structure of the verbal chain retain the capacity to theta-mark. Therefore, Verb Movement of theta-assigning verbs in English are not allowed. On the other hand, the non-theta-assigning verbs be/have can move. The unrestricted Verb Movement in French simply follows from the assumption that Agr is not opaque to theta-role assignment.

### 2.1.2.3. Operator and variable binding

Furthermore, Pollock takes Tense to have [+/-finite] dimensions, [+finite] being either [+past] or [-past]. He proposes that [+finite] T is an operator which must bind an event variable denoted by VP, and that [-finite] Tense is not an operator (see later discussion on T in imperatives), as defined as follows.<sup>4</sup>

- a. Alpha is a variable for [+/-past] iff Alpha is bound by [+/-past]
- b. Alpha is bound by Beta iff Alpha is c-commanded by Beta and coindexed with it.

That is, [+/-past] T must be-coindexed with a variable in its c-command domain, binding the variable and making movement obligatory. The coindexing between the T operator and the variable is achieved by index percolation through movement: the event variable, construed as a syntactic entity and notated by "e<sub>i</sub>", is assumed to be the verb trace in the VP which is anaphoric to the head that has moved into T. In other words, the operator status of T requires "some" Verb Movement (see examples below).

### 2.1.2.4. Some illustrations

In a representation like (8), Agr is opaque to theta-role assignment and dominates the auxiliary/substitute verb do or its null counterpart 0. V dominates non-theta assigning verbs have/be and theta-assigning verbs. Let us consider the sentences in (10) and see how Verb

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<sup>4</sup> Pollock assumes the semantic analysis of the event variable in Higginbotham (1985).

Movement to Agr to T is obligatory for have/be but not for other verbs, and how variable binding is satisfied.

- (10) a. John is not happy.  
       b. John has left.  
       c. \*John does (not) be happy  
       d. \*John does (not) have gone.  
       e. John does not like apples.  
       f. \*John likes not apples.  
       g. John ran.

For sentences such as (10a,b), the derivations involve movement of be and have to Agr and to T, as shown below.

- (11) [TP John [T<sub>i</sub> [AGR<sub>i</sub> [V<sub>i</sub> be/have] Agr] T] [NEGP not [AGRP t'<sub>i</sub> [VP t/e<sub>i</sub> ...]]]]

Be/have, being non-theta assigning verbs, can move to Agr, and from there to T. Thus, theta-theory is satisfied. VP being an inherent barrier, V moves to Agr, forming the amalgamated V+Agr that L(exical)-marks VP, voiding barrierhood. V+Agr then goes to T, forming [T<sub>i</sub> [V+Agr]+T]. If the sentence is negative, T<sub>i</sub> L-marks NegP, voiding barrierhood; if the sentence is affirmative, AgrP causes no harm since it is defective and does not count as a blocking category. Therefore, the derivation satisfies the ECP. As to the requirement of the quantification binding theory outlined above, the [-past] T operator binds a variable, the trace of V, notated as t/e<sub>i</sub> in (11) for the syntactic counterpart of trace and semantic counterpart of the event.

Consider the structure of the ill-formed (10c,d), where be/have do not move to T.

- (12) [TP John [T<sub>i</sub> [AGR<sub>i</sub> [do] Agr] T] [NEGP not [AGRP t'<sub>i</sub> [VP be/have...]]]]

The structure in (12) is very similar to (1). Since the operator status of T requires some movement, do moves instead of be and have. The derivation satisfies the ECP, since T<sub>i</sub> containing the lexical do L-marks NegP, voiding barrierhood. It satisfies theta-theory, since the substitute verb always lacks a theta-role and moves to T. What then rules out the structure? It is the quantification theory of event variable binding that rules out (12). There is no trace in VP that would syntactically denote a variable for the tense operator. Since

be/have lack a theta-grid, do, as a substitute verb, has nothing to copy from VP. Thus, do remains semantically empty. Even if do leaves a trace that is coindexed with its head in T, it cannot be interpreted as an event variable bound by the tense operator.

For the opposite reason, (10e) is well-formed. Like is a verb with a theta-grid. As a result, do under Agr is assumed to copy the role and moves to T, leaving a trace in AgrP with semantic interpretation as an event variable denoted by VP and bound by T, as shown below.

- (13) [TP John [Ti [AGRi [do] Agr] T] [NEGP not [AGRP t/ei [VP like...]]]]

The ill-formed (10f) is ruled out by theta-theory. Agr is opaque to theta-role assigning verbs. Consequently, like cannot move to Agr and then to T.

The well-formed (10g) depends on the postulation that Agr may also dominate the null counterpart 0 of do. 0 copies the theta-grid of the V and moves to T, satisfying theta-theory and operator-variable binding. It also satisfies the ECP, since AgrP is not a barrier and 0 in T properly governs its trace in AgrP.

To sum up, the conditions set up for the above derivations in the Pollock's system boil down to (14).

- (14) Non-theta assigning verbs be and have must move to T by the requirement of quantificational binding; the presence of the auxiliary/substitute verb do with theta-assigning verbs is a result of the ECP, quantification binding and theta-theory.

Given the above characterization of be and have and the auxiliary/substitute verb do, an obvious question is how to analyze imperative sentences.

### 2.1.3. No have/be movement in imperatives

Imperative sentences allow have/be, as shown below.

- (15) a. Be careful!  
b. Be singing a song when your mother comes home.  
c. Have finished your homework by the time your mother comes back.

There are, however, two striking properties associated with the imperative constructions. The

first departure from the behavior of non-imperatives is that do is always compatible with be/have.

- (16) a. Don't/do not be careless.  
 b. Don't/do not be playing with that piano when Mark comes back.  
 c. Don't/ do not have finished your homework when your father comes back.

The second departure from the behavior of non-imperatives is that Verb Raising is never possible with imperatives, as shown below.

- (17) a. \*Be not careless.  
 b. Don't/Do not be careless.  
 c. \*Have not finished your homework by five o'clock.  
 d. Don't/Do not have finished your homework by five o'clock.

The sentences are ill-formed when have/be precedes [[NegP] VP] but are well-formed when have/be stays in the VP. Therefore, two immediate questions arise: (A) why do is acceptable in imperatives and (B) why the obligatory movement of be/have to T does not apply in imperatives.

#### 2.1.4. Pollock's proposal for imperatives

##### 2.1.4.1. Neg as an intervening governor in imperatives

Pollock (1989) proposed an analysis of imperatives to address the above questions. He discussed three imperative constructions: negative imperative constructions with don't, as in (18), positive imperatives with do, as in (19), and the most simple positive form, as in (20).

- (18) a. Don't (you) have finished your work when I come back!  
 b. Don't (you) be singing when I come back!  
 c. Don't be careless!
- (19) a. Do be a good student!  
 b. Do sing a song!
- (20) a. Be careful!  
 b. Sing a song!

Apparently, the contrast in (17) can be attributed to the illicit Verb Movement of be/have. Thus, it is assumed that English imperatives contain an element blocking Verb

Movement, either an abstract special IMP tense morpheme or an empty auxiliary (Lasnik 1981, Roberts 1985). But facts from French indicate that the impossibility of having have/be movement to T in English imperatives is not an accident. French negative infinitive constructions are often used as imperatives, as illustrated in (21).

- (21) a. Attention! Ne pas toucher!  
           beware particle not touch  
           'Beware! Don't touch!  
       b. Voyons, s'il vous plaît, ne pas être idiot!  
           come on please particle not be silly  
           'Come on, please, don't be silly!  
       c. Allons, ne pas avoir peur, s'il vous plaît!  
           come on particle not have fear, please  
           'Come on, don't be scared, please!'

(21a) contains the verb toucher (to touch) and (21b,c) contain the French be/have -- être/avoir. In these infinitival imperatives, the negative particle pas must precede the verb.

- (22) ...[ne [T -finite] [NEGppas [AGR [vp toucher/avoir/être]]]

As shown in (23), Verb Movement of avoir/être to T yield ungrammatical sentences.

- (23) a. \*Voyons, s'il vous plaît, n'être pas idiot!  
       b. \*Allons, n'avoir pas peur, s'il vous plaît!

However, in other infinitives like (24) and (25), avoir/être of (24a) and (25a), can normally undergo Verb Movement, as illustrated in (24b) and (25b).

- (24) a. Ne pas être heureux est une condition pour écrire des romans  
           ne to not be happy is a prerequisite for writing novels  
       b. N'être pas heureux est une condition pour écrire des romans  
           ne to be not happy is a prerequisite for writing novels

- (25) a. Ne pas avoir de voiture en banlieue rend la vie difficile  
           ne to not have a car in the suburbs makes life difficult  
       b. N'avoir pas de voiture en banlieue rend la vie difficile  
           ne to have not a car in the suburbs makes life difficult

(26a) is the structure of (24a) and (25a). (26b) is the structure of (24b) and (25b) where Verb Movement to T has taken place.

- (26)

- a.[ne [T-finite] [NEGPPas [ [AGR] [VP [v avoir/être]...]]]  
 b.[ne [T avoir/être] [NEGP pas [ [AGR t'] [VP [v t]...]]]

It is then implausible to assume a special Tense element that blocks Verb Movement in these otherwise perfectly ordinary infinitives like (24) and (25).

What the English data in (17) and the French infinitival imperatives in (23) have in common is that the non-theta assigning verbs have moved, crossing the NegP. Thus, Pollock proposes the descriptive generalization (26) to capture the fact that Verb Movement is not allowed in French infinitival imperatives and English imperatives.

- (26) Neg (Negative element) counts as head for verb movement in  
 [-finite] sentences with imperative force

(26) states that Neg is a potential intervening governor for the minimality principle and blocks movement from V (to Agr) to T in imperative constructions. As a result, the ill-formedness of (17) and (23) can be accounted for by the ECP: not, being an intervening governor, is the closest governor to the trace of V in [AGRP t']; thus, not blocks the proper antecedent government of t' by its head V in T.

- (27)  
 [ne [T [AGR<sub>i</sub> [V<sub>i</sub> avoir/être] [NEGPPas [[AGR t'] ] [VP [v t<sub>i</sub> ]]]]

  
 blocks antecedent government

#### 2.1.4.2. Do as a verb in don't imperatives

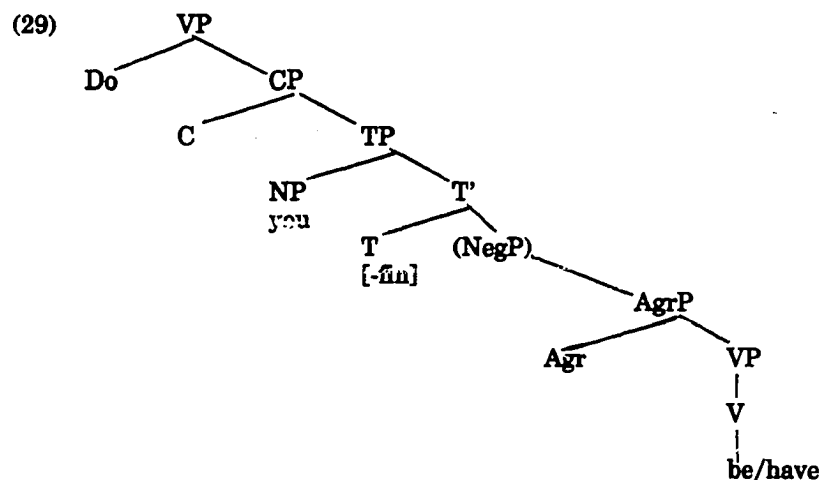
In the earlier analysis of non-imperatives in (10) of Section 1.2.4., do is base generated in AgrP and cannot be present if non-theta verbs be/have are in the VP. If VP is headed by theta-assigning verbs, do must move to T. It is demonstrated in the previous section that do is compatible with verbs be/have, as in the negative imperatives in (18), repeated in (28).

- (28) a. Don't (you) be careless.  
 b. Don't (you) have finished the homework when your mother comes back.

Why does there exist such a contrast between imperatives and non-imperatives?

Presuming the analysis (of do) of (10) and the principle stated in (26), do in (28) cannot be analyzed as an auxiliary/substitute verb under Agr, as argued by Pollock. If it is an auxiliary/substitute verb, all other things being equal, neither of the sentences in (28) should be grammatical because Neg will block movement. Furthermore, Pollock argues that, under the auxiliary/substitute analysis of do, one could not explain how subject you is licensed unless further Verb Movement to Comp is assumed, i.e. the traditional rule Subject-Aux-Inversion (SAI) (see Chapter 3 for the impossible SAI or movement to Comp in imperatives).

What is do in (28) if it is not an auxiliary/substitute verb? Pollock suggests that it is a main verb, drawing on evidence from Middle English. He proposes that do in don't imperatives, like the French verbs laisser or faire, is a causative verb which can optionally Case-mark and govern the subject of its infinitival complement, as shown in (29).<sup>5</sup>



In (29), do is the verb of the matrix clause that takes a [-finite] complement clause. The subject you in the Spec of TP is properly governed by do, which assigns Case. Hence, the

<sup>5</sup> Note that there is even evidence from Pollock's system that the null subject is *pro* but not *PRO*, if do in don't is assumed to be a main verb. In order to assign Case, do must govern the null subject. *PRO* cannot be governed; hence, it must be *pro*.



you is licensed. Exactly how not merges with the main verb do is not discussed by Pollock.<sup>6</sup>

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<sup>6</sup> However, nothing is mentioned by Pollock about how the negative complex don't is formed. Is not a part of the embedded infinitive or a part of the higher clause? For the present purpose, let us assume that Neg is generated in the higher clause simply because double negative imperatives are acceptable.

(i) Don't you not come to my party this Friday!

If Neg appears in the lower clause, it must join do in the higher clause. I can conjecture two ways. By Head Movement Constraint, not must move to Tense, to Comp, and then join do. NegP is a maximal projection and is assumed to be an inherent barrier for movement; therefore, it has to be L-marked by not after not gets to Tense. TP is a blocking category but not a barrier, and neither is CP, since CP is a complement of higher V. As a result, the trace of Neg is properly governed, satisfying the ECP. One aspect that seems odd is the step to Tense: it is Neg instead of V that moves (to Agr) to Tense.

The other way is simply to let not directly move to Comp, assuming the functional head T not to count as an intervening head for Neg Movement in the spirit of Rizzi's relativized minimality principle (Rizzi 1990). From C, not moves to the matrix V; thus, the trace of Neg is properly governed. Also see Baker & Hale (1990) for the functional and lexical split in notion of head.

As shown in (ii), at D-structure (iia), do is in VP. At S-structure (iib), do has moved out of VP and, through Agr, landed in Tense of the higher clause. Since it has been assumed that Neg counts as a head for Verb Movement in [-finite] clause with imperative force, is the Neg in the higher clause blocking the movement of V to T? Notice that everything said so far with respect to Principle (26) applies to the [-finite] clause. The higher clause is not [-finite]; hence, Verb Movement is not blocked if do is assumed to lack a theta-grid (see later discussion of the consequence of assuming do to not assign theta-role).

(ii)

a. [TP[ T [NEGP not [AGRP [VP do [CP[TP you [vp be/have...]]].

b. [TP[T<sub>i</sub>[AGRP<sub>i</sub> do]]] [AGRP<sub>i</sub> T<sub>i</sub> [NEGP not [VP t<sub>i</sub> [CP[TP you [vp be/have...]]]]]

There are two questions that remain regarding the structures in (ii). First, when the subject of the embedded infinitival complement is absent, is it a PRO or pro? It cannot be PRO since it is a governed position, then it must be pro. The standard pro has pronominal interpretations, but, in this case, it is limited only to second person and quantified third person NPs understood as addressees. Second, does the matrix clause have a subject position, i.e. Spec of TP? It has to be null. If so, Why TP?

### 2.1.4.3. Do as an auxiliary/substitute verb in positive imperatives

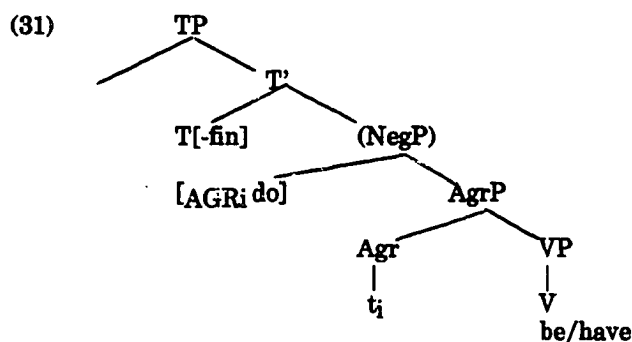
The next natural question regards the status of do in (19).

- (19) a. Do be a good student!  
 b. Do be careful!  
 c. Be careful!

If do in (19) is taken to be a main verb, the analysis just sketched above predicts (30) to be fine.

- (30) a. \*Do you be a good student!  
 b. \*Do you be quiet!

Clearly, it is implausible to analyze do in (19) as a main verb. This suggests that do cannot license a subject in positive imperatives, contrary to the do in don't imperatives in (18). The suggestion made by Pollock is to treat do in positive imperatives like those in (19) as the auxiliary/substitute verb generated under the head Agr in AgrP, similar to the D-structure proposed for non-imperatives in Section 1.1.<sup>7</sup> Thus, do must move to T. By movement, do goes to T, forming [<sub>T</sub>AGR do+Agr] T ].




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<sup>7</sup> Pollock (1989, 403) is very vague on this point and does not provide any detailed derivational structures to represent what he means. I conjecture that do must raise to T, even if T in imperatives contains a special tense ingredient Imp that provides the event variable to be necessarily bound by the operator [-finite]. See my interpretation of Pollock's idea below.

However, there is no mention of how to rule out (30) in Pollock (1989).<sup>6</sup>

#### 2.1.4.3.1. Another interpretation

The following interpretation rules out (30) and is consistent with all the previous analyses, i.e. Verb Movement, operator-variable binding, theta-grid copying and principle (26). The newly created category is  $[T [[AGR_i do]]]$ , crucially [-finite], which is unable to license any overt subject in Spec of TP, let alone an overt subject following T. The latter impossibility is not because there is no available structural position for a subject (for instance Spec of AgrP) but because  $[T [[AGR_i do]]]$  is not a verb and it cannot theta mark or case-mark an NP that follows it. The ungrammaticality of an overt subject in (30) results.

#### 2.1.4.4. Imp as a special feature

But the analysis of do in (19) and (30) as an auxiliary/substitute verb automatically carries over to (10c,d). Note that the sentences in (19) are not much different from the ill-formed (10c,d). How could one reconcile this dilemma? Recall (10c,d) are ruled out by 'quantification theory', since the variable they contain fails to denote an event that is required to be bound by the operator [-finite]. The failure to denote an event is due to the analysis that do in AgrP has no theta-grid to copy from non-theta assigning verbs be/have. However, the imperatives in (19) and (30) have exactly the same structure as that for (10c,d). This forces Pollock to assume that imperative sentences contain a special Imp in T.

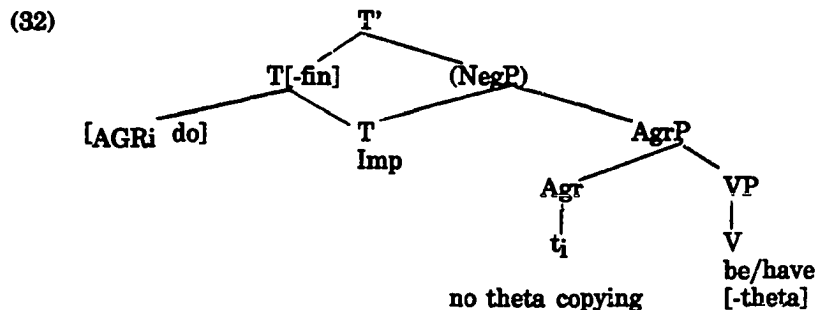
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<sup>6</sup> I interpret this (i.e. no precise analysis of the ill-formedness of (30)) as Pollock not intending to get into the issue regarding overt subjects in imperatives. For example, the following contrasts would inevitably involve complicated discussion of vocatives and subjects.

- (i) You, do be a good boy!  
       \*You do be a good boy!  
       \*Do you be a good boy!  
       Somebody do help me!  
       Somebody, do help me!

See later sections on these problems.

The Imp provides the variable bound by [+/-finite] operator:



As a result of allowing imperatives to have this variation, do, as an auxiliary/substitute verb under Agr in the positive imperatives, does not have to copy any theta-grid from V in VP. Do moves to Tense, leaving a trace  $t_i$  in AgrP, just as the do in non-imperative constructions He did (not)leave. The crucial difference is that do in non-imperatives copies the theta-grid from the V in VP and the trace of do serves as an event variable bound by Tense operator, as in (33).

(33) [TPHe [T<sub>i</sub>[AGR<sub>i</sub> [do] Agr]T] [AGRPe<sub>i</sub> [VPleave]]]

However, in (32), after do moves to T, its trace  $t_i$  in AgrP has no event to denote because no theta-role can be copied. Imp in T then provides the variable  $e_i$  to  $t_i$  which is bound by the tense operator, see (34). Thus, quantificational binding is satisfied.

(34) [TP[T<sub>i</sub>[AGR<sub>i</sub> 0] T,Imp] [ACRP  $t/e_i$  [VP be careful]]]

#### 2.1.4.5. Summary, null do and no verb movement

Thus far, we have shown how imperatives become an unavoidable issue in the discussion of Verb Movement in Pollock's theory. We have reviewed Pollock's proposal, and ended up distinguishing two do's (a verb do dominated by higher V and an substitute do dominated by Agr) in imperatives and assuming that the functional category T contains Imp which provides a range of variation.

This analysis, as a consequence, forces one to postulate a null lexical counterpart 0

of do for imperatives like Be careful, the structure of which is given in (35).

- (35) a.[TP[T, Imp] [AGRP[AGR 0] [VP be careful]]]  
 b.[TP[Ti[AGRi 0] T, Imp] [AGRP e<sub>i</sub> [t<sub>i</sub>] [VP be careful]]]

The null lexical counterpart of Q shares with do all its defining properties except its lexical character. It moves to Tense, leaving a trace in AgrP t<sub>i</sub> to which the Imp provides the appropriate event variable e<sub>i</sub>, which is to be bound by Tense operator [-finite].

As a result, we reach the conclusion that be/have in imperatives must not move to T, although they must do so in non-imperative sentences where the trace of VP is bound by Tense operator. Such a difference exists, because Imp in Tense can "inherently restrict the range of variation of the variable bound by the Tense operator" (Pollock 1989, 407), providing the event variable onto the trace of do/Q left in AgrP (left by do/Q).

The exact same analysis carries over to simple imperative constructions like (20), although I omit the derivations here.

## 2.2. Consequences and incorrect predictions

In this section, I first discuss the implicit consequences of Pollock's analysis of imperatives. I then point out the problems in analyzing don't as a main verb and in extending the analysis to other imperative constructions.

### 2.2.1. Some consequences

Given the above proposal of imperatives, two consequences follow. First, regarding Verb Movement of be/have, the derivation of imperatives separates imperatives from tensed clauses and from infinitives. Second, imperatives pattern with tensed clauses regarding quantificational binding but pattern with infinitive clauses regarding the T(ense) feature [-finite].

#### 2.2.1.1. Imp

Let us comment on the assumption that the Tense operator in imperatives contains

a special Imp feature, and that Imp provides the variable to be bound by the Tense operator.

According to Pollock's theory of quantificational binding, the Tense operator in imperatives obligatorily requires some kind of movement. Since it is argued that Verb Movement of be/have must be suppressed in imperatives, the movement of do/0 is always necessary. The following chart compares imperatives with non-imperatives regarding Verb Movement of be/have and theta-assigning verbs, and the movement of do/0, i.e. the traditional generalized do support.

(36)

|                 | Verb Movement  |             | theta-copying   |
|-----------------|----------------|-------------|-----------------|
|                 | <u>be/have</u> | other verbs | <u>do/0</u>     |
| Non-imperatives | yes            | no          | yes(copying)    |
| imperatives     | no             | no          | yes(no copying) |

In non-imperative constructions, be/have must move, and the absence of be/have requires the presence of do/0 in the D-structure. In the imperative constructions, be/have cannot move, and the absence or presence of be/have always requires do/0. The co-representation of do/0 and non-theta assigning be/have at D-structure results in no event variable after do/0 moves to T at S-structure. Therefore, the assumption that Imp provides the event variable is invoked and that do does not copy theta role is stipulated.

This assumption creates a situation in which imperatives ARE treated exceptionally. Although the outcome of the assumption is to account for well-formed imperatives under the theory of quantificational binding, it actually amounts to putting a tag on the constructions saying the following two points in (37):

(37)

- (i) we need an assumption that Tense in imperatives contains what is missing in the regular [+finite] Tense operator -- the abstract Imp that provides the event variable.

(ii) we need to further assume, as a consequence of (i), that (imperative) do and its null counterpart 0 do not copy the theta-grid of the theta assigning verb in VP.

The assumption (ii) yields the result that be/have do not need to move out of VP. If this does not amount to saying that we have imperative be/have, it at least indicates that imperative constructions are a domain "opaque" to quantification theory and theta-role copying.<sup>9</sup>

### 2.2.1.2. Verb Movement, Tense and Operator: a classification of clauses

Regarding Verb Movement, the [+/-finite] dimensions and the operator status of the Tense category, imperatives are implicitly treated as clauses distinguished from tensed and infinitive clauses.

In Pollock's theory, Verb Movement of be/have (to Agr) to Tense is obligatory in English tensed clauses, as shown earlier in Section 1, but optional in infinitive clauses, as shown below.

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<sup>9</sup> Consider the sentences in (i) below.

- (i) a. Do not sing that song!  
b. \*Do not you sing that song!

Sentences in (i) contrast with those in (18) in that the negative complex is do not instead of don't. Do not does not allow any overt subject, as in (ib), although (ia, b) are negative constructions.

The analysis of (18) in Section 1 claims that do in don't imperatives must be a verb. The do in (i), however, cannot be. Rather it must be analyzed parallel to positive constructions like (19), since (19) and (i) have similar distributions with respect to disallowing overt subject.

- (ii) a.\*Do you sing that song!  
b.\*Do not you sing that song!

Therefore, to account for (i) requires generating do as an auxiliary/substitute verb under Agr rather than as a verb in the matrix clause. Notice that the contrast between (ia) and (ib) cannot be attributed to a violation of the Case adjacency condition between do and you in (ib), which is seemingly plausible; otherwise, the ill-formed sentences in (ii) remain unexplained. If (ib) violated Case adjacency, then (iia) would be well-formed. So, deriving (ia) must then involve movement of [AGR] do to Tense.

- (38) a. Not to be happy is a prerequisite for writing novels.  
 b.?To be not happy is a prerequisite for writing novels.  
 c. Not to have had a happy childhood is prerequisite for writing novels.  
 d.?To have not had a happy childhood is a prerequisite for writing novels.  
 e. Not to be arrested under such circumstances is a miracle.  
 f.?To be not arrested under such circumstances is a miracle.  
 (Pollock 1989, 376)

Pollock also presents data showing that être and avoir in French also obligatorily move in tensed clauses but only optionally in infinitives, as given earlier in (5) and (6) in Section 1. He attributes this comparative difference between tensed and infinitive clauses in English and French to the [+/-finite] dimension assumed for the functional category T. Thus, in his analysis, [+finite] T is an operator that triggers obligatory Verb Movement, whereas [-finite] T is not an operator and does not require Verb Movement (Pollock 1989, 392).<sup>10</sup> Comparing the tensed clauses, infinitives and imperatives regarding the distribution of be/have, we end up with three results. Since be/have cannot move out of the VP in imperatives, we have a third situation where there is no Verb Movement. The chart below presents differences drawn among these constructions with respect to Verb Movement.

| (39)              | Verb Movement |
|-------------------|---------------|
| [+finite] clauses | obligatory    |
| [-finite] clauses | possible      |
| [Imp] clauses     | impossible    |

The chart indicates that imperatives and [+finite] clauses are opposed to each other with [-finite] clauses falling in between in the sense that Verb Movement in infinitives can be yes or no.

However, an examination of the operator status in each of these clauses indicates that imperatives and [+finite] clauses are tied together. Recall that the generalization stated in

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<sup>10</sup> Also see Pollock (1989,392) for Negation blocking Affix movement only in tensed clauses in English.



(8) regards imperatives as [-finite] sentences. Consequently, T in imperative should not be an operator. However, it is assumed by Pollock that T in imperatives contains Imp, and that this [T [Imp]] is [-past] which must bind a variable (Pollock 1989, 403). The importance of assuming T in imperatives to be an operator having to bind a variable is to rule out ill-formed sentences like those in (40).

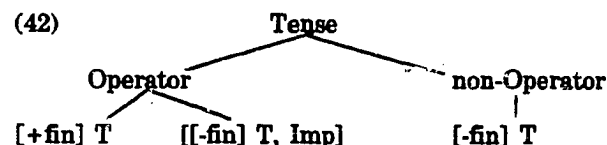
- (40) a. \*Not eat that cake!  
b. \*Not be careless!

(40) can be explained in terms of quantification theory in conjunction with principle (26). Consider their D-structure, in which the Tense operator contains Imp.

- (41) [TPNP [T T-finite, Imp] [NEGPnot[AGRP 0 [VP eat/be...]]]

As usual, the Tense operator is a quantifier having to bind a variable. The event variable provided by Imp needs to be passed onto a trace in AgrP, i.e. the trace of null do in this case. However, the 0<sub>i</sub> after moving to T, cannot properly govern its trace due to the ECP (see (27)). Thus, no trace can be created to be the carrier of the variable provided by Imp. As a result of the failure of satisfying variable binding, (41) cannot have a well-formed S-structure representation associated with it.<sup>11</sup>

The operator status of T in imperatives distinguishes imperatives from [-finite] infinitives, as the diagram (42) indicates:

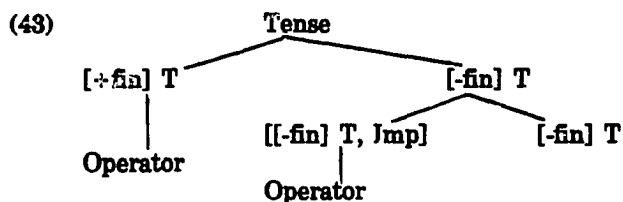


On the other hand, the priority of [+/-finite] would group the constructions differently,

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<sup>11</sup> Affix movement, i.e. T lowering (to Agr) to V, would also create an invalid structure, since the trace of Agr, the potential variable carrier, is not in the c-command domain of the operator [-finite], the head of Agr being not in T but in V.

although covering the same ground.



(39), (40) and (41) simply suggest that imperatives cannot be conflated with either of the tensed or untensed clauses.<sup>12</sup>

### 2.2.2. Incorrect predictions

I now turn to the incorrect predictions made by the proposal of treating don't as a causative verb in the matrix clause. I then point out that amendments to these problems require departures from Pollock's proposal.

#### 2.2.2.1. Subjects of the embedded infinitival complement

The main verb analysis of don't overgenerates, allowing forms other than you to occur. Given that don't is taken to be the matrix V and that it licenses an optional subject in the embedded infinitival complement, it should, like any other verbs that take infinitive complements, license (properly govern and Case-mark) a lexical subject irrespective of person and form. For example, it should allow NPs as in (44a,b) and NPs in the accusative proforms as in (44c,d).<sup>13</sup>

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<sup>12</sup> It will be argued in later chapters that the result that Imp has to be distinguished from [-finite] clauses is correct.

<sup>13</sup> If the NPs are conjoined phrases, pronoun in the accusative case is allowed, as in (i). However, this could be due to the effect of conjunction, as discussed by Klima (1964) on colloquial variation and conjoined phrases.

(i) Don't you and him/\*he fight again!

You and her/\*she compromise!

Speakers vary in the judgement of (i) if yourself is understood as an emphatic expression or a semantic referential pronoun with a pause in front of it. The emphatic explanation can be supported by the fact that

- (44) a.\*Don't Kim touch that computer!  
 b.\*Don't Mark and Paul form a study group!  
 c.\*Don't him go to the party!  
 d.\*Don't her eat my cake!

However, the sentences in (44) are ungrammatical. The permitted subject NP is restricted only to second person you (or NPs that are second person in nature as addressees).<sup>14</sup>

#### 2.2.2.2. VP adverbs and the non-verbal status of don't

Another problem for analyzing don't as a matrix causative verb has to do with the distribution of VP adverbs. One of the common properties of adverbs is that they may immediately precede or follow VP but not come in between the constituents within VP. For example, as in (45)-(47), the adverbs often, completely, seldom occur immediately preceding the verb.

- (45) a. He often rides his bicycle.  
 b.\*He rides often his bicycle.
- (46) a. He completely forgot my name.  
 b.\*He forgot completely my name
- (47) a. Bill seldom arrives on time for his appointments  
 b.\*Bill arrives seldom on time for his appointments

---

the position for the reflexive form is not fixed (ii).

- (i) Don't # yourself# go to the party! Go to the party with someone else!
- (ii) Don't (you) go to the party yourself!

<sup>14</sup> Pollock (1989) notes that Kayne has claimed that a nominative proform in the subject position improves the acceptability, as in (i).

- (i) a.?? Don't he go to the party!  
 b.?? Don't she eat my cake!

These examples are subject to strong dialectal differences, and the majority of native speakers I have consulted find them totally impossible.

If Kayne's examples are taken seriously by Pollock, they actually serve as evidence against his treating don't-constructions as having the structure [V [NP [INFINITIVE VP]]. Regular infinitival complements obligatorily require the subject to bear accusative case.

- (ii) Mark wants Jan/her to go to the party.  
 Paul believes Jan/him to be a good student.

If don't is the matrix verb subcategorizing for an infinitival complement, one would expect the matrix predicate to be modified by adverbs. However, as shown in (48)-(50), don't simply cannot be preceded by VP adverbs. Rather the adverbs must occur preceding the embedded predicate.

- (48) a. \*Often don't ride your bicycle on busy streets  
b. Don't often ride your bicycle on busy streets.
- (49) a. \*Completely don't forget your thesis!  
b. Don't completely forget your thesis!
- (50) a. \*Seldom don't arrive on time for his appointments.  
b. Don't seldom arrive on time for his appointments.

Instead, don't behaves like an auxiliary modal element with respect to the placement of VP adverbs. Consider the distributional pattern between modal/auxiliary elements and adverbs in (51)-(53).

- (51) a. \*John completely will lose his mind.  
b. John will completely lose his mind.
- (52) a. ??/\*John often should read newspapers.  
b. John should often read newspapers.
- (53) a. ??/\*He often didn't go to the library when he was a student.  
b. ?He didn't often go to the library when he was a student.

Adverbs, such as completely, as a rule, cannot precede the auxiliary modal but must appear in between the modal and the tenseless VP constituent. The paradigm in (51)-(53) patterns like that in (48)-(50), suggesting that don't behaves rather like auxiliary modal elements and cannot be treated as part of the matrix VP.

If don't is an auxiliary modal element, our analysis would require a movement from T' to C, assuming modal verbs are generated under T and the substitute verb moves to T from Agr. Notice that a T to C analysis would claim that negative imperatives involve a more general rule, traditionally known as Subject-Aux-Inversion, as shown below.

- (54) a.  $[CP[C', C^0 [TP \text{ you } [T' [T_i \text{ don't}] [\text{not } [[AGRP t_i [vp ]]]]]]]$   
b.  $[CP[C' [[C_i [T_i \text{ don't}]] C^0] [TP \text{ you } [T' t_i' [AGRP t_i [VP]]]]]$

That is, do in the negative don't originates in AgrP and moves through T (picking up not) to C. Therefore, the negative don't lands in the pre-IP Comp position. As has been studied by (Lasnik & Saito 1990), topicalization is an adjunction of XP to IP. The structure of an imperative in (54b) would predict that a topicalized element should be able to land in the post-Comp and pre-IP position. This prediction, however, is incorrect.

- (55) a. \*Don't that computer (you) use while I am gone.  
b. That computer don't (you) use while I am gone.

What is possible, as in (55b), is that the topicalized element may precede the negative don't, which suggests that don't is not in Comp. Therefore don't cannot be treated as an auxiliary modal (see detailed arguments in Chapter 3).

#### 2.2.2.3. Overt subjects in non-negative imperatives

A central assumption of Pollock's analysis is the Case filter, requiring that optional overt subjects be properly licensed if and only if they receive Case from a Case assigner, i.e. a verb, that governs the subject. Thus, the sentences in (56) are straightforwardly accounted for with do in (56b) being treated as a substitute verb. Being a substitute verb, do lands in T of a [-finite] clause. [[do]T], being [-finite] only permits PRO.

- (56) a. Don't you sing that song!  
b. \*You do sing that song!

Recall that, because of the postulation of the null counterpart of do, constructions in (57) all fall under a parallel derivation.

- (57) a. Do sing that song!  
b. Ø Sing that song!  
c. Do be careful!  
d. Ø Be careful!

As a consequence, the analysis predicts that it is impossible for overt subjects to occur on the basis of the positive evidence from (56b), and rules out grammatical constructions such

as those in (58).<sup>15</sup>

- (58) a. (You) be quiet!  
       b. (You) sing that song!  
       b. Somebody open the window!  
       c. Nobody move!

### 2.2.3. Summary

To summarize the second part of this chapter, I have argued that Pollock's proposal has consequences which make implicit the special treatment of imperatives. His analysis relies on the postulation of an Imp feature, because of which Verb Movement is suppressed and quantifier-variable binding is satisfied. I have also argued that imperatives, tensed clauses and infinitives are actually distinguished as a result of the independent motivation for the operator status of T, and [+/-finite] or Imp features in T. This is exactly what I have pointed out in Chapter 1, which argues for a special INFL for the imperative in the current transformational grammar. I have also argued that Pollock's analysis of do in don't imperatives as a matrix verb is untenable, and that positive imperatives with overt subjects simply cannot be derived in his system.

Therefore, I conclude this chapter with the postulation of Imp in T. I accept the treatment of do in positive imperatives as an auxiliary/substitute verb, but reject the main verb analysis of don't. I need to propose an account that gives a unified analysis of don't imperatives and positive imperatives with null and overt subjects.

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<sup>15</sup> Pollock made it clear that his analysis is only intended to cover certain imperative constructions. But his analysis of the simple form Sing that song! does not seem to me to extend to any of these positive imperatives with overt subjects.

### CHAPTER 3

#### CONSTRUCTION-SPECIFIC RULES AND A SYNTAX OF NEGATIVE IMPERATIVES

##### 3.0. Introduction

In this chapter, based on the criticism made in the last chapter, I offer an account of positive imperatives, both with overt subjects and with null subjects, and propose a structural representation of don't negative imperatives. Specifically, I take the null subject in imperatives to be a pronominal which is recoverable as an NP (of second person or quantified NPs), as suggested in Chapter 1. Both overt and null subjects are taken to be licensed by the functional category T containing Imp. I motivate a non-verbal, construction specific, analysis of don't, proposing that don't is a base-generated sentence initial Imp Negative Phrase. I show that the hypothesis of sentence initial negative phrase for imperatives can be extended in a positive way to negative imperative constructions in English and other languages.

The study shows that negative interrogatives like Won't you eat that cake? and negative imperatives Don't you eat that cake! have different syntactic structures, the interrogatives as an instance of S'(CP) structure involving T to C movement and the imperatives as an instance of S (TP) without such a movement; hence, negative imperatives are not inverted constructions. The study also suggests that imperatives are formally derivable from move-alpha but only with certain additional assumptions. The additional assumptions and construction-specific rules invoked show that correlating imperatives and non-imperatives by a uniform underlying structure has its limit.

##### 3.1. The licensing of null and overt subjects

Let us first concentrate on the problem facing the GB analysis discussed in Section 2.3 of Chapter 2. Consider the paradigm of positive imperatives in (1), where do is assumed

to be base-generated under Agr, as shown in (1').

- (1) a. Go away  
b. You go away  
c. Do go away  
d. \*You do go away  
e. \*Do you go away

(1') [TP You/pro T [NegP [AgrP [Agr do] [VP go away]]]

What seems to go wrong in (1) is the co-occurrence of the overt subject you and the auxiliary/substitute verb do. I have already given an account of the ill-formed (1e), attributing it to the violation of Case theory (see Section 1.3.3.1 of Chapter 2). What is to be explained is (1d).

Logically, it is equally possible to attribute the ill-formedness of (1d) to either the intrusion of you or the intrusion of the substitute verb do. Since an imperative can have a second person subject (overt or null), there is no reason then to formally attribute the cause of the incompatibility to the subject you. Let us suppose then that it is the intrusion of do in between the subject and AgrP that causes you to be unable to show up, given the grammatical sentences (1a,b,c). Specifically, I assume that do, after moving into T from Agr, is the offending element to overt imperative subjects, as schematized in (1'').

offending element

(1'') [TP You/pro [T [Agr do<sub>i</sub>] ] [NegP [AgrP t<sub>i</sub> [VP go away]]]

How is this idea to be formally represented and the result to be achieved? To do this, I start with the following assumptions for the grammar of English and their relevant definitions.

Assumption <1a,b> are common in the literature (see Chomsky 1986a, among others).

Assumptions:

<1a> a phonetically realized lexical subject is properly licensed iff an abstract Case is assigned to the structural position where it is to occur (see Section 2 of Chapter 1);

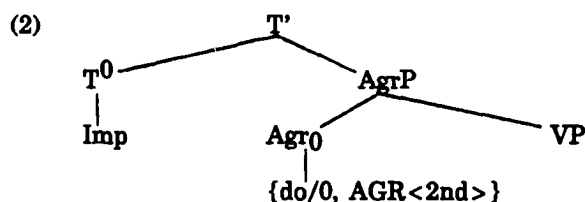
<1b> the capability of assigning a Case to the subject position by T can be met by "strong" Spec-Head agreement ("strong" is added by the author and defined below).



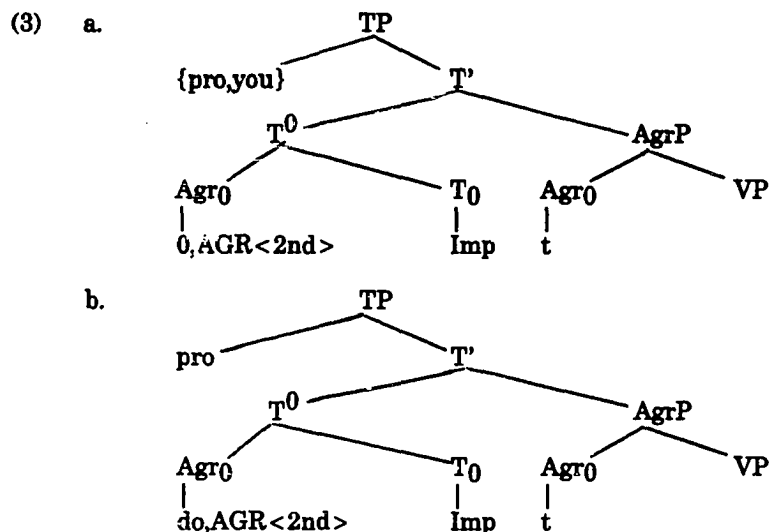
**Definitions:**

Spec-Head agreement is strong iff no non-agreement element is in the Head, otherwise the agreement is weak; the null subject *pro* can be properly licensed by the governing head *T* containing *Imp*, and is identified by the agreement feature *AGR*<2nd> associated with *T*.

(2) represents the D-structure of the imperative construction. Tense contains *Imp*, as is motivated in Chapter 2. *Agr* contains a set of two elements {*do*/*0*, *AGR*<2nd>}: one is the substitute verb *do* and its null counterpart *0*, the other is the second person agreement affix *AGR*<2nd>, which is abstract in English. *AGR* in imperatives differs from standard *AGR* in the respect that the former is obligatorily restricted to second person (or third person only for the few quantified NPs).



Head movement of *Agr* to *T*, as required by quantifier-variable binding, yields two results, given in (3a) and (3b) respectively.



In (3a), *AGR*<2nd> is the agreement element in the head *T*, *0* being non-lexical. Thus, *T*

and Spec of TP are subject to strong Spec-Head agreement. The strong Spec-Head agreement assigns nominative Case to the subject via Assumption 1, resulting in the appearance of overt subject like you. When the subject is *pro*, AGR<2nd> is capable of identifying the *pro*, which is independently licensed by Imp via Definitions given earlier.<sup>1</sup>

On the contrary, in (3b), Agr to T movement results in the presence of the lexical substitute verb do together with AGR<2nd>. Being a non-agreement (i.e. no AGR) element, do in T disqualifies T to be in the strong Spec-Head agreement relation with the subject position as defined in Definitions. Thus, the weak Spec-Head agreement is insufficient to assign a nominative Case to the subject position.<sup>2</sup> Therefore, a phonetically realized overt subject you is never able to appear, as in (1d). Since Spec-Head agreement is assumed to be independent of the licensing and identification of *pro* (see Definitions), *pro* is allowed in (1c). The necessity of positing the null subject in (1c) is the empirical fact that structural anaphoric binding, control and raising are familiar properties of the imperatives without overt you.

- (4) a. Do look at yourself in the mirror!  
b. Do try to be more patient with yourself.

The above analysis automatically applies to negative imperatives with the negative do not, since Neg does not count as head for movement of auxiliary/substitute (see Section 1.4.1 of Chapter 2). It also rules out \*Not go away by the ECP, since [T[AGR 0 AGR<2nd>] Imp] in (5), being non-lexical, cannot L-mark NegP. Consequently, the trace *t<sub>i</sub>* is not properly

<sup>1</sup> Compare with Rizzi (1986) who suggests that *pro* is licensed by a Case assigning head in Italian for non-imperative constructions.

<sup>2</sup> The blocking effect by the presence of do seems contingent on types of clauses determined by the content of Tense. In a non-imperative construction, i.e. T[-Imp], do is compatible with the occurrence of subjects, as in (i)

- (i) a. We do love Chinese food.  
b. He did (not) finish the homework.  
c. She does (not) play pingpong.

governed.

- (5) [...[T<sub>i</sub>[Agr 0 AGR<2nd] Imp] [NegP not [AgrP t<sub>i</sub> VP...

Next I account for negative imperatives with don't.

### 3.2. A syntax of negative imperatives

Towards the end of Chapter 2, I presented two arguments against treating don't as a matrix causative verb. I also pointed out briefly that it is implausible to treat don't as an auxiliary/substitute verb that undergoes Subject-Aux-Inversion (SAI) through move-alpha. In this section, I present detailed arguments showing that the imperative don't, in the strict transformational approach, cannot be analyzed as an auxiliary complex parallel to won't, can't and other similar entities:

- (6) \*[CP[C don't] [TP you [VP eat that cake]]]

Rather, I argue that it is an unanalyzable unit base-generated as a negative phrase adjoined to TP (S), given in (7). As a consequence, imperatives are an instance of TP (S) structure rather than an instance of CP (S') structure.

- (7) [TP [NegP don't] [TP you [VP eat that cake]]]

#### 3.2.1. No Subject-Aux-Inversion (T to C movement)

##### 3.2.1.1. Negative imperative and negative interrogative

The central issue of the negative imperative constructions in (8) is that don't and do not have different distributions.

- (8) a. Don't you leave!  
b. \*Do not you leave!

It seems that not only do they constitute an interesting contrast but also they appear to be partly independent of imperativity. Compare (8) and (9). What is going on seems to have to

do with a general property of "not-contraction" and with elements other than do -- elements that are traditionally termed auxiliaries, as in (9).<sup>3</sup>

- (9) a. Won't you have some cake?  
 b. Can't you be here on time?  
 c. Aren't you tired?  
 d. \*Will not you have some cake?  
 e. \*Can not you be here on time?  
 f. \*Are not you tired?

On the surface, the systematic contrast seems to involve negative auxiliaries moving into the pre-subject  $C^0$  position. The grammatical examples (7a-c) have been traditionally treated as involving SAI -- an  $I^0$  to  $C^0$  movement, or  $T^0$  to  $C^0$  movement in the present discussion:

- (10) [CP [C' [C won't/can't...] [TP you [T' [T t] [VP ]]]]]

If imperatives in (8) are to be analyzed as having a similar structure to that of sentences in (9), then the imperatives must involve SAI (T to C movement). Therefore, one must determine whether the assumption that SAI has applied to negative imperatives of (6) is empirically supported. If not, the above similarity is merely superficial; hence, the don't imperatives are not an inverted construction. Then (8) and (9) have different structures: (7) has the structure in (10) but (8) does not. I have three arguments to show that (6) does not have the structure in (10).<sup>4</sup>

### 3.2.1.2. Evidence from topicalization

Lasnik and Saito (forthcoming, following Baltin 1982) argue that topicalization is best

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<sup>3</sup> Chomsky (1955) suggests that imperatives, like questions, requests and wishes, undergo SAI (also see Kiparsky 1963). Schacter (1972) provides semantic arguments and older style transformational arguments against any link between them.

<sup>4</sup> There are distinct formal properties, ie. intonation contours, associated with the don't imperatives and negative - interrogatives. See Akmajian (1984) for proposing intonation as a formal property in sentence types. See Chapter 6 regarding other languages.

analyzed as an adjunction to TP rather than movement into either Spec of CP or Comp. As shown below, topicalized sentences can be embedded within sentences containing an overt complementizer that.

- (11) a.I think that you should read this book.  
 b.I think [that [this book [you should read t ]]].  
 c.\*I think [[this book] [that [you should read t ]]]  
 d.I don't think that you should read this book.  
 e.I don't think [that [this book [you should read t ]]].  
 f.\*I don't think [this book [that [you should read it]]]

The well-formed (11b,e) and ill-formed (11c,f) indicate that topicalized XP cannot precede the complementizer that. One possible structure to capture this fact is to adjoin the topicalized XP to TP by movement:

- (12) [CP C [TP XP<sub>i</sub> [TP NP ...t<sub>i</sub> ]]]

Let us consider the don't imperatives. Presuming that (13) has the structure of (10), where don't has moved to Comp from T, topicalization of the direct object in (13) will create a structure in which the object occurs following don't in Comp but precedes the overt or null subject, as illustrated in (14).

- (13) Don't (you) open that present until next week!  
 (14) a.\*Don't [TP that present] [TP pro open until next week]]!  
 b.\*Don't [TP that present] [TP you open until next week]]!

However, the results are ungrammatical. What is grammatical, if we continue to assume that (13) has the structure of (10), is the sentence having the structure of (15) in which the preposed XP lands in the pre-Comp position, i.e. Spec of CP, as shown in (16).

- (15) [CP XP<sub>i</sub>, [C' [C don't] [TP Subj [VP t<sub>i</sub> ]]]  
 (16) a.That present, don't open until next week!  
 b.That present, don't you open until next week!

The above result that topicalization in imperatives is a movement to the Spec of CP contradicts Lasnik & Saito's conclusion that topicalization is an adjunction to TP. This suggests that what we take to be an instance of SAI in negative imperatives, based on the observation of the possible similarity between (8) and (9), may not be a real inversion construction at all which places don't in Comp, if we take Lasnik and Saito's conclusion to

be correct. Thus, negative imperatives (8) and (13) do not have the structure in (8), particularly don't can not be in Comp.

If negative imperatives are not an inverted construction while negative interrogatives are, then as a prediction of their structural differences we expect to find no application of topicalization to the interrogatives. This prediction is borne out. As shown below, movement of an XP to the sentential position yields ill-formed constructions.

- (17) a. \*That classic novel, can't you read by next week?  
 b. \*That classic novel, won't you read for your class?  
 c. \*/?That type of person, aren't you tired of?

(17a-c) become grammatical only if a resumptive pronoun shows up within VP.

- (13) a. That classic novel, can't you read it by next week?  
 b. That classic novel, won't you read it for your class?  
 c. That type of person, aren't you tired of him?

The contrast between (16) and (17) is quite clear, the former as a topicalization by movement with the initial XP within TP, the latter as a left-dislocation construction with the initial XP base-generated outside TP as adjunction to CP (see Chapter 5 on left-dislocation). This then indicates that don't in imperatives is within TP, given in (19); hence, there is no T to C movement.

- (19) [TP XP<sub>i</sub> , [don't] [TP Subj [VP t<sub>i</sub> ]]]

### 3.2.1.3. Phonological evidence

There is phonological evidence indicating a structural difference between (8) and (9). Normally, contraction is allowed between two phonologically compatible elements under strict adjacency, especially when no structurally empty element is represented between these elements. Note that /t/ and you can be contracted as cha in negative interrogatives such as don't you, can't you, won't you, aren't you but contraction sounds odd in negative

imperatives, as shown by the contrast in (20).<sup>5</sup>

- (20) a. Dontcha wanna go now?  
       b. Cantcha help me?  
       c. Wontcha come to the party?  
       d. \*/?Dontcha hit me!  
           (Akmajian 1984, p16)

I have assumed, in line with the traditional analysis, that negative interrogatives are an inverted construction -- the T to C movement places the negative auxiliary complex adjacent to the subject you (see (10)); hence, contraction is allowed. The unacceptability of (17d) indicates that there could be a structural difference between the sentences in (17). Since I have just argued that negative imperatives do not involve T to C movement, it suggests that don't is not an element in C that is in a adjacent relation to the subject in the Spec of TP. The contraction phenomenon here provides an additional argument for our conclusion that there is no T to C movement.

#### 3.2.1.4. Evidence from pronoun case marking

So far, we have argued that negative imperatives are not SAI constructions in terms of syntactic operations and abstract configurations. Obvious supportive evidence also exists from the case-marking properties on the pronouns following don't.

- (21) a. Don't you and the boy standing by the door fight again!  
       b. Don't you and Bill fight again!  
       c. Don't you and him/them/her fight again!  
       d. \*Don't you and he/they/she fight again!

In (21), NPs can be conjoined after the negative, the first of which must be the second person pronoun. The second NP can be of another person, but it must be with accusative case if a pronoun. If negative imperatives are simply inverted constructions, one would not expect such a bizarre requirement of accusative case marking on an ordinary subject. As a

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<sup>5</sup> Dick Oehrle (p.c) suggests a prosodic explanation that the contrast in (20) is due to the role played by stress. (20d) is ill-formed because the pronoun YOU cannot be a stressless subject of an imperative. See Chapter 4.

contrast, negative interrogative constructions seem to be compatible with either nominative or accusative case marking on the conjoined pronouns.

- (22) a. Won't you and he come to my party?  
 b. Won't you and him come to my party?  
 c. Can't you and she compromise?  
 d. Can't you and her compromise?

In conclusion, don't imperatives are not an inverted construction. If so, the question arises why one instance of Aux+n't (can't, won't and so on) behaves differently from the other instance Aux+n't (don't <imp>). Therefore, one must discover whether don't in (8) is synchronically a result of contraction, as the other combination of auxiliaries and negative won't, can't and aren't are. I conclude that it is not, as argued in next section.

### 3.2.2. Don't as an unanalyzable unit in imperatives

Logically the conclusion that negative imperatives do not involve T to C movement opens up the issue regarding the status of don't and the structural position it occupies.

#### 3.2.2.1. An analysis of contraction

Assuming that modals are base generated under T (Chomsky 1986a, Pollock 1989), the D-structure of a negative interrogative looks like (23).

- (23) [CPC [TP NP [[T will/can..] [NegP not [ VP ]]]]]

Consider the contrasts among the following sentences in (24).

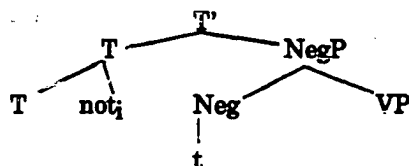
- (24) a. Won't you eat that cake?  
 b. \*Will not you eat that cake?  
 c. Will you not eat that cake?  
 d. You will not eat that cake  
 e. You won't eat that cake  
 f. \*Will youn't eat that cake

The generalization following from (24) is that not is fronted with the modal if and only if it contracts. I assume that such a contraction has both syntactic and phonological aspects to it (Lasnik 1981, 165): the syntactic aspect makes not a syntactic dependent of the modal and the phonology reduces the vowel of the dependent. I take the syntactic aspect to be an



instance of head-movement of Neg to T, given in (25a). A rule like (25b) then yields the contracted form at PF.

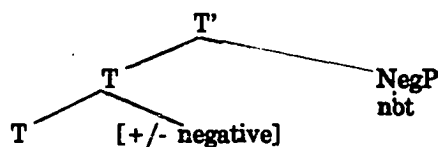
(25)a. right-adjoin Neg to T (optional)



b. ...[T' [T modal [ not]]... -> [t' [modal+n't]] (obligatory)

Since the contracted form depends on whether Neg raises or not, the head-movement of Neg to T is construed as optional. The optionality of rule (25a) is formalized as a head selection, given in (26), the positive value of which triggers Neg raising.

(26)



Consider (24). Sentence (24a) is well-formed because the "dependency" between the modal and Neg makes them one lexical entity which undergoes SAI, i.e. T to C movement, as shown below.

- (27) a. [CP[C' [TP you [T will] [NegP not [VP eat the cake]]]]  
 b. [CP[C' [TP you [T will [not<sub>i</sub> ] ] [NegP t<sub>i</sub> [eat the cake]]]]  
 c. [CP[C' [C [T<sub>j</sub> will+not]] [TP you t<sub>j</sub> [NegP t<sub>i</sub> [eat the cake]]]]

(27a) is the D-structure. Not right adjoins to T and yields the structure (27b). In (27b), T containing [will [not]] moves to C (SAI) and gives us the S-structure (27c). (27c) is well-formed: both traces  $t_j$  and  $t_i$  are properly governed at S-S and LF, satisfying the ECP.  $t_j$  is head governed by  $T_j$  and  $t_i$  is head governed by  $t_j$ . At PF, rule (25b) applies and yields the contracted form modal+n't.

The grammaticality of (24c) follows from the optionality of Neg being selected by T. When not stays under Neg, only the modal will lands in the C. The well-formedness of (24d)

and (24c) is obvious, no head movement in the former and no T to C movement in the latter.

The ill-formed (24b) can be ruled out by either Case theory or Doubly-Filled-Comp filter (which can be subsumed by the ECP in this case). In the first situation, the subject you cannot be Case-marked by will, since not acts as an intervening element and blocks the adjacency condition required for Case assignment (see Stowell 1981). In the second situation, since the result is not the contracted form, we then know that the prerequisite condition for Rule (25b) is not met during the derivation. That is, will and not are not together in T. This gives the derivation (28a), in which will first lands in C and then not lands in C, violating the Doubly-Filled-Comp condition in (28b) which allows one and only one element in C. Thus, (24b) is ruled out.

- (28) a. [C' [C will<sub>i</sub> not<sub>j</sub>] [IP you [T' [T t<sub>i</sub>] [NEGP t<sub>j</sub> [VP. ]]]]  
 b. .... \* [COMP X<sup>0</sup> Y<sup>0</sup>] ..., where X and Y stand for two different categories.

(28a) also violates the ECP if one assumes that traces may act as intervening heads. The trace of not t<sub>j</sub> cannot be head-governed at S-S or LF. The closest X<sup>0</sup> head to t<sub>j</sub> is T, which is occupied by the trace left by will t<sub>i</sub>. The trace t<sub>i</sub> creates the minimality barrier preventing not which is in C from antecedent governing its trace t<sub>j</sub>; hence, the ungrammaticality of (24b).<sup>6</sup>

### 3.2.2.2. No contraction in don't

Provided the above analysis of contraction, let us turn now to the negative imperatives

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<sup>6</sup> The rigid minimality condition of Chomsky (1986) is introduced to rule out "that-trace" violation. In (i) the complementizer that, i.e. the X<sup>0</sup> element, is assumed to be the minimality barrier for the extracted subject of the embedded to antecedent govern the trace. The absence of the complementizer moves away the barrier as in (ii).

(i) \*...[[C that] [t [VP...  
 (ii) ...[[C 0 ] [t [VP...

Note our discussion above claims that a trace of a moved head can act as a minimality barrier.

in (29), which linearly correspond to (24). Except the first one, they are all ungrammatical.

- (29) a. Don't you eat that cake!  
 b. \*Do not you eat that cake!  
 c. \*Do you not eat that cake!

Logically, (29a) cannot be well-formed with don't analyzed as in Comp, similar to (24a), because it has already been shown clearly that constructions like (24a) and (29a) have different structures (see Section 2.1): negative imperatives are an instance of TP while negative interrogatives are an instance of CP. Therefore, construction (29a) cannot have the contraction analysis proposed above for interrogatives. In other words, there cannot be a Neg raising selected by T in negative imperatives. Thus, the initial negative n't is not a result of movement but base-generated. What should such a structure look like?

### 3.2.3. A hypothesis for Imperative NegP

Recall the structure of (19) proposed for the topicalized negative imperatives, repeated in (30).

- (30) [TP XP<sub>i</sub> [don't] [TP Subj [VP t<sub>i</sub> ]]]

We then were certain that don't is within TP. We now are certain that the negative is base generated before the subject. Therefore, the structure of don't negative imperatives looks like (31), where the categorial status of don't is simply a negative and the structural position it takes is the adjunction site to TP.<sup>7</sup>

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<sup>7</sup> The idea of treating don't as a special negative particle was suggested a long time ago (Cohen 1976, Hankamer 1977), which grew out along a different line of argumentation. Cohen was concerned with the contrast seen between negative imperatives and their positive counterparts

- (i) a. Don't you blow that thing here!  
 b. \*Do you blow that horn here!  
 c. You don't blow that thing here.  
 d. \*You do blow that thing here!

He thinks that, since (a) is traditionally assumed to be an inversion of (c)

(31) [TP don't [TP NP... [VP V XP]]]

I suggest that the negative heads its projection ImpNegP and the full structure looks like (32).

(32) [TP [ImpNegP don't [TP NP [T' T ([NegP) [AgrP [VP V XP]]]]]

The proposal for ImpNegP is based on the consideration that this is a construction-specific analysis. The idea that there is a regular Neg above VP comes from double negative imperatives such as Don't you not listen to me!. I also assume, without further justification, that only the major negative phrase ImpNeg counts as a barrier in (32).

To derive the S-structure, one simply needs to satisfy the quantification-variable binding. The Tense operator T, as a quantifier, requires movement of null-do to T (see Chapter 2). As shown in (33) -- the S-structure for (32), Q moves to T forming [T<sub>i</sub>0]. Imp then provides the event variable to the trace in AgrP, satisfying the quantification theory. Since Neg does not count as a barrier in (33), [T<sub>i</sub>0] governs its trace, satisfying the ECP.

(33) [TP [ImpNegP don't [TP NP [T' [T<sub>i</sub> 0], Imp] ([NegP) [AgrP t<sub>i</sub> [VP V XP ]]]]]

I would like to show that this analysis of negative imperatives finds support from the structure of imperative negation in Indonesian and Kusaian (see below).<sup>8</sup>

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on formal grounds, (b) posed a tough problem for any existing theories at that time. That is, why is inversion impossible in positive imperatives, and why is an inversion not allowed even in a negative imperative (d) without contraction? Cohen's solution is to treat don't as one entity generated at sentential position, hence no inversion rule is assumed for (a).

<sup>8</sup> Is it possible to simply move the X<sup>0</sup>, i.e. Neg to the maximal projection TP? This does not seem to obey the constraint that a maximal projection XP is allowed to adjoin to only another maximal projection YP, but not a head to a YP. However, Kayne (1990) has proposed such a

### 3.3. Sentence initial negative imperatives in other languages

The above hypothesis for ImpNegP claims that English imperatives have two negative structures, one represented in (32) and (33), the other given in (34) as outlined in Section 1.

(34) [...[Ti [Agr {do,AGR<2nd>}i Imp] [NegP not [AgrP ti VP...

The difference between them is simply the base generation of ImpNegP in (26). Negative imperatives in English may either use the special imperative negator don't or employ the regular negative particle not.

This result suggests that negative imperatives make use of two available negation structures, one simply equivalent to the regular negation structure, and the other special to imperatives. English is such a language that has to be synchronically analyzed as employing both of them for the negative imperatives. It can be predicted that some languages may only use the imperative negation structure, and other languages simply use the regular structure of negation for negative imperatives. I will show that Indonesian and Kusaiean are of the

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process, in which an  $X^0$  element is allowed to adjoin to an YP. In discussing clitic structure in Italian infinitives, Kayne proposes that V and Neg in the infinitival clause are allowed to adjoin to TP, yielding the correct surface order where the clitic (CL) follows the negative and the verb in Piedmontese Italian. INFN stands for infinitival agreement.

...nen...V+INFN...CL+T... [INFNe]...[ VP[V e]...

Chomsky (1986a,73) conjectures that a movement from a head to a non-head and then back to a head, which is of the following chain [A --> A' --> A], is probably ill-formed. He is not sure of whether the first part of the movement is not allowed, a point which Kayne refers to and regards as an allowable process.

first kind languages, where the imperatives independently head a projection as adjoined to TP, and Chinese and French are of the second kind languages. As to how the parameter is set so that certain languages may just make use of one, or the other or both for the imperatives, I do not have any explanation and it is left for the future research.

### 3.3.1. The structure of imperative negation in Indonesian

Indonesian is characterized as an SVO language in which verbs do not conjugate, like Chinese. The subject NP, however, is generally obligatorily represented in all constructions and unlike Chinese but like English, there is no "pro-drop" phenomenon.

(35)

- a. \*(John) tidak mau pergi  
John not want go  
'John does not want to go'
- b. Tidakkah (\*John) mau pergi?  
not-QM John want go  
'Doesn't John want to go'

Only in imperatives can subjects -- second person kamu (you) and first person mari (us) -  
- be optional.

- (36) (Kamu) buka pintu itu  
you open window the  
'(You) open the window'

The optionality of subject, according to native speakers, serves as a formal property to mark imperative constructions from non-imperatives. In imperatives, transitive verbs in the active voice lose the prefix meN- (meN- is retained in declaratives) and intransitive verbs retain it.<sup>9</sup>

Things are complex in negative imperatives. Not only do they have a special negative

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<sup>9</sup> The Indonesian examples are provided by Husni Muadz, a Ph.D linguistic graduate student from Indonesia at the University of Arizona. Macdonald & Soenjono (1967) characterize silahkan (to invite) which indicates the connotation of politeness, tolong (to help) which indicates the speaker's desire that the action be performed for his benefit, and coba (to try), as specialized imperative markers. Moreover, mari is first person imperative marker and jangan is the imperative negative.

imperative marker jangan, but also they require the subject kamu, if present, to immediately follow the negative marker.

- (37) a. Jangan buka pintu itu  
           don't open window the  
           'Don't open the window'  
       b. Jangan (kamu) buka pintu itu  
           'Don't you open the window'

What is permitted before jangan is an extra sentential vocative phrase. It can be a name, NP or kamu, similar to vocative phrases in English. When kamu occurs preceding the imperative negative jangan, it functions as a vocative phrase rather than a structural subject, since not only does it require a phonological pause, noted as ",", but also can be followed by an appositive NP, as in (38b). Furthermore, the pre-jangan phrase can be stacked as well as co-referential with another kamu following jangan -- the structural subject, as in (38c).

- (38)  
 a. Kamu, jangan buka pintu itu  
    you, don't open window the  
    'You, don't open the window'  
 b. Kamu, John, jangan kamu buka pintu itu  
    you John don't you open window the  
    'You, John, don't you open the window'  
 c. Kamu, jangan kamu buka pintu itu  
    you, don't you open window the  
    'You, don't open the window'

The negation of non-imperative sentences takes a completely different form, lexically and structurally. The negative tidak (not), takes the position immediately preceding the verb and never occurs before the subject.

- (39)  
 a. Bill tidak makan nasi itu  
    Bill not eat rice that  
    'Bill did not eat the rice'  
 b. [TP NP [NEGptidak [vp V...]]

- (40)  
 a. \*Tidak Bill makan nasi itu  
    not Bill eat rice that  
    'Bill did not eat the rice'  
 b. \*[negp not [vp NP [vp V NP]]]

(41)

- a. \*Tidak makan nasi itu Bill  
not eat rice that Bill  
'Bill did not eat the rice'
- b. \*[negp not [vp [V NP]] NP]

What needs to be explained is why the imperative negator has to occur preceding the subject. The structural difference between imperatives and non-imperative can be explained if we adopt the proposal made earlier. That is, Indonesian is a language which uses the imperative negation.

(42) [TP ImpNegF jangan [TP (kamu) [t' Imp [vp ....]]]

As expected, double negation should be allowed, the second of which must be the regular non-imperative negator. This prediction is borne out, as shown by the data given in

(43)

(43)

- a. Jangan (kamu) tidak makan nasi itu  
not-IMP you not eat rice the  
'Don't (you) not eat that rice'
- b. Jangan (kamu) tidak buka pintu itu  
not-IMP (you) not open window the  
'Don't (you) not open the window'

Additionally, if Indonesian allows the object NP to undergo topicalization, it should be the case that topicalization of the XP places the XP preceding the negative but not after the negative. This is also true.

(44)

- a. Jangan kamu [makan nasi itu]  
Nasi itu jangan kamu [makan t]  
\*Jangan nasi itu kamu [makan t]
- b. Jangan kamu [jual T-shirt itu]  
T-shirt itu jangan kamu [jual t]  
\* Jangan T-shirt itu kamu [jual t]

### 3.3.2. The structure of imperative negation in Kusaien



Kusaian is another language which exhibits similar properties of imperative negation.<sup>10</sup>

A sentence can be negated by any of the native words tiyac (not), tihlac (not any more, not any longer) or soenna (not yet), which must precede the predicate.<sup>11</sup>

(45)

- a. El ac tiyac tuhkuh  
he tense not come  
he will not come
- b. Kun el tihlac sismohk  
Kun S-marker not smoke  
Kun does not smoke any longer
- c. Ninac el soenna poheleack mos ah  
motherS-marker not cook breadfruit the  
Mother has not cooked the breadfruit yet.

However, imperatives have their own negative words mwet and nik (don't), which are used only in imperative constructions. Nik is used together with second person subject pronoun kom (you) or the plural form komtacl, whereas mwet can be used with or without the second person subject pronoun.

- (46) a. Nik kom/komtacl ahkams  
'Don't you/you(pl) kill'
- b. Nik kom/komtacl pihsrapasr  
don't you steal
- c. Nik kom kang ik ah  
don't you eat fish the
- (47) a. Mwet (kom) sroalsraoli wes luhk ah  
don't (you) black make shirt the  
don't make my shirt black
- b. Mwet (kom) lihkahsihki won ah  
don't (you) shoot bird the  
don't shoot at the birds

There is a substitute word met for kom. The difference between the use of nik kom and nik met is that the former is directed to the listener whereas the latter is not necessarily

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<sup>10</sup> Kusaian is spoken on the island of Kusaian, one of the eastern Caroline Islands, 160-163 E and 5 N. (Lee, Kee-dong 1975 Kusaian Reference Grammar, PALI language Texts: Micronesia).

<sup>11</sup> El is the subject maker (S-marker) and also can be used as a pronoun.

directed to any particular listener.

- (48) a. Nik met pihsrapasr  
don't steal  
'Don't steal'  
b. Nik met kosro  
don't commit adultery  
'Don't commit adultery'

Lee (1975) describes sentences with nik met as more or less an admonition rather than a command. But the parallel structure between (47) and (48) with the obligatory subject pronoun or its substitute which contributes a special meaning contrasts sharply with that of non-imperative negation. Positive imperatives in Kusaian are the only constructions where the subject does not have to occur (which is obligatory in declaratives and interrogatives). When it shows up, it precedes the predicate, similar to both English and Indonesian.

This array of properties can be easily explained if Kusaian is taken to be a language in which the structure of imperative has a sentence initial Neg position. I believe imperative double negation and topicalization would exhibit the same properties as seen in English and Indonesian, although I do not have a native speaker to test the prediction.

### 3.3.3. Chinese and French

There are other languages in which the structure of negation for imperatives are similar to that in non-imperatives. Two sub-types can be further distinguished: in one, the imperative and non-imperative negator has the same lexical form; in the other, they do not.<sup>12</sup>

#### 3.3.3.1. Chinese

Chinese has a special negative particle bie for imperatives. This imperative negator, however, takes the same structural position as other regular negators do in non-imperative negative constructions.

(i) pre-VP. In (49), bie immediately precedes VP or Adv if there are any. This is exactly how

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<sup>12</sup> A third type can be proposed, in which imperatives and non-imperatives use the same negative form but the former must be used with the subjunctive mood.

non-imperative negators interact with Adv, VP and subject, as in (50).

(49)

- a. (Ni) *bie xuexi yuyanxue!*  
you don't study linguistics  
'Don't (you) study linguistics'
- b. (Ni) *bie dashen jianghua*  
you don't loudly talk  
'Don't (you) talk loudly'

(50)

- a. *Ta bu zai xuexi yuyanxue.*  
he not Asp study linguistics  
'He is not studying linguistics'
- b. *Women cong lai bu tasheng jianghua*  
we ever not loudly talk  
'We don't ever talk loudly'

(ii) pre-subject NP. The regular negative word *bu* may precede a subject and negates the NP; imperative negative *bie* does the same thing to the imperative subject NP, as in (51)

(51)

- a. *Bu shi ni qu Beijing, ershi wo qu Beijing.*  
not be you go Beijing but I go Beijing  
'It is not YOU who goes to Beijing, it is me who goes there'
- b. *Bie ni qu Beijing, zhe ci kai wo qu le.*  
don't you go Beijing this time should I go modal.particle  
'Don't YOU go to Beijing, this time is my turn to go there'

### 3.3.3.2. French

Unlike Chinese, French does not have a separate lexical negative limited to imperatives. Its imperative negation structure is exactly the same as that for non-imperatives, similar to what we have seen in Chinese.

The S-structure of regular negation has the negative *pas* after the verb and in front of the object, and the particle *ne* immediately precedes the verb.

- (52) *Je n'ouvrirai pas la porte*  
I ne open.Fut not the door  
'I won't open the door'

- (53) *Nous ne le faisons pas.*  
we ne it do.1st not  
'We do not do it.'

The same negative structure is used in imperative sentences.

(54)

- a. N'ouvre pas la porte  
ne open.Imp not the door  
'Don't open the door' (singular)
- b. N'ouvrez pas la porte  
ne open.Imp not the door  
'Don't open the door' (plural)

(55) Ne le-faisons pas  
ne it-do.1st not  
Let's not do it

French also has the kind of infinitival negative imperative construction as mentioned earlier in Chapter III. That is, verbs in their infinitive form are used to function as negative imperatives.

(56)

- a. Ne pas deranger le professeur!  
ne not disturb.Inf the professor  
'Don't disturb the professor'
- b. Ne pas le deranger  
ne not him/her disturb.Inf.  
'Don't disturb him'
- c. \*Ne deranger pas le professeur!

(57)

- a. Ne pas toucher la table!  
ne not touch.Inf the table  
'Don't touch the table'
- b. Ne pas la toucher!  
ne not it touch  
'Don't touch it'
- c. \*Ne toucher pas la table!

The expressions ne...pas must occur clause initially next to each other (56a, 57a). Note that since these are infinitive constructions, the clitic le/la preposes only to the pre-verbal position (56b, 57b) in contrast to behavior of clitics in tensed clauses, and the verb never intervenes within the negative chain (56c, 57c). The negation patterns seen in (56b,c) and (57b,c) are exactly the same as the regular negation of infinitival complements, as in (58)

(58)

- a. Je lui dit de ne pas deranger le professeur  
I him say Comp ne not disturb.inf the professor  
'I told him not to disturb the professor'

- b. Je lui dit de ne pas le deranger  
I him say Comp ne not him disturb.Inf  
'I told him not to disturb him'
- c. \*Je lui dit de ne deranger pas le professeur  
I him say Comp ne disturb.Inf not the professor  
'I told him not to disturb the professor'

### 3.4. Conclusion

I have argued in Section 1 that the presence of do in the functional category T is the offending element that blocks Case assignment to the Spec of TP. As a result, overt subjects cannot be licensed by the occurrence of do. In Section 2, I have hypothesized that the negative imperatives have a base-generated adjunction to TP that contains the imperative sentence-initial negative don't at D-structure, and this hypothesis is supported by facts from interrogative constructions, contraction and topicalizations. The structures argued for English negative imperatives are used in Section 3 to explain negative imperatives in Indonesian and Kusaiean which employ the negative-initial imperative structure, and in Chinese and French which employ the regular negative structure.

To conclude, I have proposed a transformational approach that accomodates the problems noticed in don't imperatives and imperatives with overt and null subjects discussed in Chapter 2. This approach has some consequences regarding the issue of derivability and construction-specific rules. Although GB theory is against construction-specific rules, the base-generated adjunction of don't to TP is a construction-specific rule. The construction-specific adjunction suggests the independence of the don't negative imperatives. The same is true with the independence of positive imperatives: to derive (1) requires the invoked Definitions. This situation resembles the conclusion drawn at the end of Chapter 2, where the relative independence of imperatives in English with respect to Verb Movement and properties of T ([+/-operator],[+/-finite]) is revealed. This chapter suggests that imperatives are formally derivable from move-alpha but only with certain additional assumptions. To have additional assumptions or construction-specific rules for certain constructions is not

necessarily an awkward result. It simply suggests that correlating imperatives and non-imperative constructions by a uniform underlying structure has its limit.

## CHAPTER 4

### A NON-TRANSFORMATIONAL ANALYSIS AND OTHER ALTERNATIVES

#### 4.1. The motivation for a lexical analysis

The major conceptual result of Chapters 2 and 3 is that for GB the imperative constructions in English require additional theoretical assumptions in order to be appropriately represented. These assumptions include:

- (i) the special Tense morpheme *Imp* distinguishes imperatives from clauses with feature [+finite] and from clauses with feature [-finite], with respect to quantificational binding (see Sections 1 and 2 of Chapter 2).
- (ii) verbs be/have in imperatives do not move, and the do in imperative is a non-theta copying substitute verb (Sections 1 and 2 of Chapter 2). Thus, be/have and do are treated differently in non-imperatives and imperatives.
- (iii) don't is a sentence-initial negative, generated as the *ImpNegP* adjoined to TP, and has different syntactic structure from the imperative negative complex do not; it is analyzed as distinct from *Aux+n't* contraction cases like can't, won't, don't and so on in interrogatives (Section 2 of Chapter 3).

It is quite clear that imperatives and non-imperatives differ in English. Postulating a single T morpheme isolated to imperatives, adjusting Verb Movement and theta-copying requirements to imperatives, and proposing the base-generated sentence initial negative seem like the most conservative approach in a transformational analysis. However, advocating this approach does not mean that there is no different approach that equally accounts for the data and brings interesting consequences for the grammar. An alternative to the derivational-based account is not to suppose that there are necessarily related conditions on imperatives and non-imperatives, but rather to highlight the particular properties of imperatives and treat them in their own right. In fact, (i)-(iii) amount to claiming that imperatives need to be treated in their own right with respect to the imperative do, the imperative negative don't, and the overt subjects. It is then quite natural and easy for these idiosyncratic lexical and syntactic properties to be analyzed within a theoretical framework that has rich lexical

categories and multiple subcategorizations that would single out these problems at the onset.

In this chapter, I relate the observations, results and proposals made in the last two chapters to lexical approaches to imperative constructions. I present an analysis along the line of extended Categorical Grammars (CG), showing that the lexical approach captures the particular syntactic properties associated with don't, do not and do that interact with the subject (overt or null), and that imperatives should be treated as an independent clause type. I evaluate the two different approaches, GB and CG, and point out that in GB the underivability of English imperatives from a uniform D-structure is recognized only implicitly but imperatives are formally represented as derivable for methodological reasons. Afterwards, I discuss other alternative proposals for ruling out the co-occurrence of overt subjects and do. I suggest that pragmatic issues such as request and command affect the interactions between overt subjects and do.

#### 4.2. A proposed treatment of imperatives in English

I assume the basic construct of "extended categorial grammar" (Bach 1983a, 1983b, Steedman 1985, 1987, Oehrle, Bach and Wheeler 1988, Moortgat 1989, among others), developed from ideas of traditional categorial analyses (Ajdukiewicz 1935, Bar-Hillel 1953, Lambek (1958, 1961) and Montague (1974), Geach (1972), among others). A categorial or an extended categorial grammar is a grammatical system based on the algebraic notion of function and argument. In this system, complex expressions are constructed from simpler expressions by applying a functor to a set of suitable argument expressions. In its general form, the grammar consists of two components. The first is a categorial lexicon, which associates each word of the language with at least one syntactic category, and distinguishes between functors and arguments. The second is a set of rules for combining functors and arguments. The categorial system of the lexicon provides an infinite number of possible category objects, recursively constructed out of two finite sets, a set of basic/primitive



categories and a set of category-forming connectives. Categories are often referred to as syntactic types. The combinatory rules are a set of laws allowing a sequence of types and individual types to form into other types that represent larger constituents. Below I sketch a fragment of a grammar of English and its relevant examples.

#### 4.2.1. A fragment of English grammar

Suppose our lexicon is a vocabulary  $V$  consisting of a finite set of elements  $v_1 \dots v_n$  and our task is to assign each element  $v$  in  $V$  to a set of categories in a way that will determine its combinatorial properties. The grammar must have a set of types and a set of rules stating how linguistic expressions assigned to various types may combine with each other. This is done by a type system, a type calculus and a type assignment function (see Oehrle 1990).

##### 4.2.1.1 Types

We begin with a recursive definition of types. Let basic categories BASCAT be a finite set of primitive types and connectives CONN a set of three binary category-forming connectives  $\{/, \backslash, .\}$ . The full set of categories CAT is an infinite set of types formed by BASCAT closed under CONN, such that

- (1) i) BASCAT is a subset of CAT, and
- ii) if  $x$  and  $y$  are members of CAT, then  $(x/y)$ ,  $(y \backslash x)$ , and  $(x.y)$  are members of CAT.

##### 4.2.1.2. Initial lexical type-assignment

We let every  $v$  in  $V$  be associated with a set of types defined above by using a lexical-assignment function. Let  $f: V \rightarrow \text{Pow}(\text{CAT})$  be a function which assigns to each  $v$  in  $V$  a non-empty finite set of elements in CAT. If  $v$  is in  $V$  and  $x$  is in  $f(v)$ , we write  $v \rightarrow x$ .

##### 4.2.1.3. Extension of initial lexical type assignment

We need to extend this initial type assignment over  $V$  to a type assignment to all the members of the set  $V^+$  of finite strings of elements constructed from  $V$ . In other words, we extend the initial lexical type assignment function from individual words to phrases (sequences or words), so that we can characterize the set of types assigned to any such

phrases. To do this, we need a type calculus which defines a relation of assignability between sequences of types and individual types. The arrow  $x \rightarrow y$  means that any expression of type  $x$  is also assigned the type  $y$ . If  $x_1..x_k \rightarrow x$  is a valid arrow in the calculus, and  $v_i \rightarrow x_i$ , where 1 is less than or equal to  $i$  and  $i$  is less than or equal to  $k$ , then the corresponding sequence of linguistic expressions  $v_1..v_k \rightarrow x$ .

#### 4.2.1.4. Type calculus

The type calculus we use here is Lambek's Associative system (AL). It has the following structure: the set of types of the calculus is CAT that is generated by CONN over BASCAT; the set of valid arrows is defined by the following axioms and inference rules.

|     |   |                                    |
|-----|---|------------------------------------|
| (2) |   |                                    |
| A1  | $x \rightarrow x$                       |                                    |
| A2  | $(x.y).z \rightarrow x.(y.z)$           | A2' $x.(y.z) \rightarrow (x.y).z$  |
| R1  | $x.y \rightarrow z$                     | R1' $x.y \rightarrow z$            |
|     | -----                                   | -----                              |
|     | $x \rightarrow z/y$                     | R2' $y \rightarrow x \backslash z$ |
| R2  | $x \rightarrow z/y$                     | $y \rightarrow x \backslash z$     |
|     | -----                                   | -----                              |
|     | $x.y \rightarrow z$                     | $x.y \rightarrow z$                |
| R3  | $x \rightarrow y \quad y \rightarrow z$ |                                    |
|     | -----                                   |                                    |
|     | $x \rightarrow z$                       |                                    |

Axiom A1 is the identity rule. Axioms A2 and A2' are the associativity of the product operator  $\cdot$ . R1, R1', R2, R2' are the inference rules that relate the product operator to the slash  $/$  and the backslash  $\backslash$  operators. R3 is the transitivity of the arrow  $\rightarrow$ . AL yields a number of interesting theorems, some of which are given below.

|             |   |   |   |
|-------------|---|---|---|
| application | $x/y.y \rightarrow x$                               | ; | $y.y \backslash x \rightarrow x$  |
| lifting     | $x \rightarrow y/(x \backslash y)$                  | ; | $x \rightarrow (y/x) \backslash y$  |
| composition | $(x/y).(y/z) \rightarrow x/z$                       | ; | $(z \backslash y).(y \backslash x) \rightarrow z \backslash x$            |
| currying    | $(x \backslash y)/z \rightarrow x \backslash (y/z)$ |   |   |
| division    | $x/y \rightarrow (x/z)/(y/z)$                       |   | $y \backslash x \rightarrow (z \backslash y) \backslash (z \backslash x)$ |

These theorems and valid arrows of the calculus apply to linguistic expressions that are assigned types by type-assignment function and characterize the combinatory results of these expressions.

#### 4.2.1.5 Linguistic examples

Given an appropriate set of primitive types (BASCAT), the combinatorial properties of lexical elements can be directly encoded in the types they are associated with. As some examples, the fragment of our grammar consists of the following BASCAT {S, N, NP, VP, IMP} and CAT {NP/N, NP\S, VP/NP, (NP\S)/NP, IMP/VP...}, to which lexical elements or sequences of lexical elements are assigned to.

S stands for tensed sentences like Bill ate the cake and Bill will eat the cake.

N stands for a simple noun like cake and door.

NP stands for a noun phrase like the cake, the door or Bill.

VP stands for a tenseless verb phrase like eat the cake.

IMP stands for an imperative sentences like (You) eat the cake

NP/N stands for a determiner like the, this or those.

(NP\S)/NP stands for a tensed verb like eats, ate, closes, closed.

and so forth.

We regard elements of type  $x/z$  or  $z/x$  as functors with domain  $z$  and co-domain  $x$ , and elements of type  $z$  such that  $x/z.z \rightarrow x$  or  $z.z/x \rightarrow x$  as arguments. The valid arrows of the type calculus provide the combinatory rules for the lexical elements. The rules in (3) are a subset of the calculus given in (2) and will be used in the later discussion of linguistic examples. For any expressions, functor expressions and argument expressions,  $a$ ,  $b$ ,  $c$  associated with types  $A$ ,  $B$ , and  $C$ , respectively, the following rules hold:<sup>1</sup>

- (3) [1].  $(a/b). b \rightarrow A$
- [2].  $b. (b/a) \rightarrow A$
- [3].  $(a/b) . (b/c) \rightarrow A/C$
- [4].  $(a/b)/c \rightarrow A/(B/C)$

The following are derivations of grammatical sentences with rules of functional application (FA) and composition (FC).

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<sup>1</sup> Others rules such as Division, Lifting, Slash-Dot-Convention (Lambek 1958, 1961), Lifting-Permutation (Steedman 1985) and so on are not crucial here. Hence, they are not included.

- (4) a. Bill ate the cake  
 NP (NP\S)/NP NP/N N  
 -----[1]FA  
 NP  
 -----[1]FA  
 NP\S  
 -----[2]FA  
 S
- b. Bill will eat the cake  
 NP (NP\S)/VP VP/NP NP  
 -----[1]FA  
 VP  
 -----[1]FA  
 NP\S  
 -----[2]FA  
 S
- c. Bill will eat the cake  
 NP (NP\S)/VP VP/NP NP  
 -----[3]FC  
 (NP\S)/NP  
 -----[1]FA  
 NP\S  
 -----[2]FA  
 S

All these grammatical sentences are proved to be valid type S in the categorial system. The type S is a result of valid arrows that allow types corresponding to lexical items to associate. (4a) and (4b) are constructed into a S by the theorem of application and (4c) by both theorems of application and composition. Although (4b) and (4c) are exactly the same, the different valid combinations yield different constituent structures.

#### 4.2.2. Syntactic types in the imperatives

The above examples are declarative constructions. In a similar fashion, imperative constructions are postulated to form a sentence type that is IMP in BASCAT. There are several arguments for this postulation. First, imperatives are not equal to regular sentences, as convincingly argued in the previous chapters; hence, the category IMP, which is distinct from the basic category S, is necessary. Second, imperatives are not simply tenseless verb phrases of category VP with an understood subject. Expressions of category VP can be negated by not, as in (4'a), but not plus a VP is not a possible imperative, as in (4'b).

- (4') a. What he did was [not get here on time]  
 b. \*Not get here on time!

Third, imperatives are defined as sentential expressions in Chapter 1 and are argued to have a syntactic structure with a subject and a predicate (see Chapters 2 & 3). We need then to find out what the exact type structures of the lexical elements in imperatives, especially the "problematic" don't, do not and do.

#### 4.2.2.1. The kinds of VPs

Regarding the observed particular properties associated with imperatives, we conclude that a plain predicate imperative is a tenseless VP with an understood subject whose range is limited to second person addressees and third person expressed by the few indefinite NPs. The lambda notation provided next to the VP is the semantic interpretation of a tenseless VP as an imperative construction.

- (5)            Eat                    the cake  
                 VP/NP NP  
                 -----[1]FA  
                 VP  $\lambda y(2nd)$  [eat' (y)]

It is known that, except stative verbs, almost all verbs may form an imperative construction with appropriately selected adverbs (Katz & Postal 1964; Davies 1986). To differentiate a tenseless VP like (5) as the imperative construction from other tenseless VPs like the ones in (6) which are not imperatives, we assume that tenseless verbs of type VP/X can be turned into tenseless imperative verbs of type IMP/X by a lexical type-changing rule, as in (6').

- (6) a. We should [vp eat the cake]  
 b. He didn't [vp eat the cake]

- (6')            VP/X  $\rightarrow$  IMP/X  
                  $\lambda x \lambda y F(x) (y) \rightarrow \lambda x F(x) (y \text{ 2nd})$

Therefore, the tenseless VP as an imperative is type IMP -- the basic category -- with an understood second person subject. On the other hand, non-imperative tenseless VPs do not

have an individual non-variable, like [2nd] with a fixed interpretation directly associated with its semantics. The subject individual variable is only associated with a tensed VP after the tenseless VP in (6) has combined with a tensed V, as in (7).

- (7)    John                would                eat the cake.  
          NP                (NP\S)/VP                VP  
                               $\lambda vp \lambda x$  [would' (vp) (x)]  
                              -----  
                              NP\S  
                               $\lambda x$  [[would eat the cake]' (x)]

In (7), the phrase would eat the cake is made up of two parts: the tensed modal verb would and the tenseless eat the cake. The tenseless VP eat the cake in (7) does not directly associate with the subject argument NP John, and the VP is simply an argument of the tensed verb would.

To sum up, we have distinguished the tenseless VP as imperative from tenseless VP as non-imperative (in addition to tensed VP). The syntactic categories for verbs in tensed VP, tenseless VP and imperatives and their associated semantics are given below.

- (8)    tensed VP  
              NP\S;  $\lambda x$  [F(z) (x)]  
           tenseless VP as imperative  
              IMP;                IMP'[z,(2nd)]  
           tenseless VP as non-imperative  
              VP;                z

#### 4.2.2.2. Functors

There are several single or complex elements which may act on a tenseless VP to yield an imperative. They are the expressed second person pronoun you and indefinite NPs (somebody, everybody, nobody), the emphatic negative complex don't you, the non-emphatic negative don't, the formal and forceful negative do not, and last the do. Together with the imperative where the subject is not expressed, we have a set of six imperatives illustrated in (9).

- (9)    a. Eat the cake  
          b. You/nobody eat the cake  
          c. Do eat the cake

- d. Don't eat the cake
- e. Do not eat the cake
- f. Don't you/anybody eat the cake

Our analysis depends on the assumption that coherent expressions can be represented as a functional product. A function  $f: D \rightarrow C$  associates with each object in its domain  $D$  a unique object in its co-domain  $C$ , written as  $f: d \rightarrow f(d)$ , where  $f(d)$  is an element of  $C$ . We treat each of the imperatives in (9), except (9a), as a function from a tenseless VP to an imperative. Schematically we represent them in a simpler fashion as follows:

- (10)
- |              |              |
|--------------|--------------|
|              | VP ----> IMP |
| You/sombody: | VP ----> IMP |
| Don't:       | VP ----> IMP |
| Don't you:   | VP ----> IMP |
| Do:          | VP ----> IMP |
| Do not:      | VP ----> IMP |

In (10), the left-hand side column are functors and the VPs are the arguments.

#### 4.2.2.3. Subgroups of imperatives and featured types

The imperatives in (9) can be grouped into pairs under three smaller sets according to polarity, emphasis and whether some are more emphatic or special than others. Do in imperatives is distinct from supportive do in non-imperatives in that the former not only is used for considerations of emphasis but also for the pragmatic function of request. I assign it to the group with do not, which is forceful and formal, under "special connotation" for easier syntactic analysis. Thus, we have (11):

- (11)
- a. Eat the cake (positive, non-emphatic)
  - b. Don't eat the cake (negative, non-emphatic)
  - c. You eat the cake (positive, emphatic)
  - d. Don't you eat the cake (negative, emphatic)
  - e. Do eat the cake (positive, special)
  - f. Do not eat the cake (negative, special)

The complex element don't you behaves as a syntactic unit in imperatives. Observe the double negative imperatives:

- (12) a. Don't not finish your homework before I come back.

- b. Don't you not finish your homework before I come back.
- c.\*Don't not you finish your homework before I come back.
- d. Don't you ever not finish your homework before I come back.
- e.\*Don't ever you not finish your homework before I come back.

The sentence is grammatical if not or ever appears after you but ungrammatical if not or ever appears in between don't and you. This indicates that don't you acts as a syntactic unit that resists an intruding element. The syntactic and phonological unity of don't you suggests that don't must first combine with you to form a constituent which then acts on the tenseless VP. This Don't then differs from don't, do not which act directly on the VP. The same is true with the expressed subjects you/somebody etc. and the special element do for special effect, which takes VP directly to make a positive emphatic or a special imperative.

Based on the above (including Sections 2.2.1-2), I assign a syntactic category to each of the items that take a tenseless VP to an imperative.

(13)

- |    |         |                        |
|----|---------|------------------------|
| a. | you=    | IMP/VP<br>+emp         |
| b. | don't=  | IMP/VP<br>+neg         |
| c. | do not= | IMP/VP<br>+spe<br>+neg |
| d. | do=     | IMP/VP<br>+spe         |

Each category has a set of features associated with IMP -- the co-domain category of the functor -- which we have used in describing the six imperatives above (cf. Bach 1983b). The features are [+/-emp] for emphatic/non-emphatic, [+/-neg] for positive/negative and [+/-spe] for special properties such as being formal and forceful associated with do not and such as being cajoled with do. I adopt the convention of specifying only positive values, leaving unspecified features as being associated with a negative value automatically.

#### 4.2.3. Combinations

It is easy to see the generality captured by the functor category IMP/VP which takes its argument VP and yields an imperative sentence.



- (14) { You/Don't/Do not/Do } eat the cake  
 IMP/VP                      VP  
 -----FA  
 IMP

It is also easy to see the advantage of features built into the lexical item which distinguish the differences in the functor categories so that an appropriate imperative may be generated.

- (15) a.      You                      eat the cake  
          IMP/VP                      VP  
          +emp  
          -----FA  
          IMP (positive emphatic imperative)  
       b.      Don't eat the cake  
          IMP/VP                      VP  
          +neg  
          -----FA  
          IMP (negative unemphatic imperative)  
       c.      Do not eat the cake  
          IMP/VP                      VP  
          +spe  
          +neg  
          -----FA  
          IMP (negative special imperative)  
       d.      Do                      eat the cake  
          IMP/VP                      VP  
          +spe  
          -----FA  
          IMP (positive special imperative)

Since don't you behaves as a unit in negative emphatic imperative constructions, don't must first combine with the adjacent you. There are two possible category assignments. Either you is assigned to the functor category as in (16) or don't is assigned to the functor category as in (16').

- (16) you:    (IMP/VP)\(IMP/VP)  
               +neg            +emp  
                          +neg  
 (16') don't: (IMP/VP)/(IMP/VP)  
               +neg            +emp

However, these two possibilities do not express uniformity in type assignments to don't and you with regard to the existing categories given in (13). If (16) is adopted, two types need

to be assigned to you, one for don't:

- (17)
- a.you: (IMP/VP)\(IMP/VP)  
           + neg          + emp
  - + neg
  - b.you: IMP/VP  
       + emp
  - c.don't IMP/VP  
       + neg

If (16') is adopted, two types also need to be assigned to don't, one for you, as in (18)

- (18)
- a.don't IMP/VP  
       + neg
  - b.don't (IMP/V)P/(IMP/VP)  
           + neg          + emp
  - c.you IMP/VP  
       + emp

A plausible approach to partial uniformity, if (16') is adopted, is to employ categories which allow an argument to be optional. Given the fact that the two different types in (18) for don't involve whether or not the subject is explicit, in either positive or negative constructions, don't can be assigned to the category (IMP< + neg>/VP)/[IMP< + emp>/VP], in which "[ ]" stands for optionality.<sup>2</sup> However, there is some evidence for choosing (16) over (16'). Category (16) represents a function from a negative element to a function from a tenseless VP to an imperative. Both the domain and co-domain of the function bear features: the resultant category, i.e. the value, has the correct features [+emp, +neg] needed for a the result don't you. .

---

<sup>2</sup> In fact, the optional argument -- the explicit subject -- can be simply assigned the type NP. Thus, the type for don't will be (IMP/VP)/[NP]. See discussions below.

- (19) Don't            you            eat the cake  
 IMP'/VP        (IMP/VP)\(IMP/VP)    VP  
 +neg            +neg        +emp  
                          +neg  
 -----FA  
                  IMP/VP  
                  +emp  
                  +neg  
                  -----FA  
                  IMP (negative emphatic imperative)

You of category (16) is to be distinguished from the category IMP[+emp]/VP in (13) which is assigned to the emphatic you in You eat the cake, which is a function from tenseless VP to imperative. Only you of category (16) but not of (13) can take don't as shown in (20).

- (20) don't    you            eat the cake  
          IMP/VP        IMP/VP        VP  
          +neg            +emp  
          -----\*

If category (16') is adopted for don't, the feature [+emp] in the domain will cancel with the feature [+emp] on the argument you of type IMP/VP, leaving no [+emp] in the resultant category.

- (21) don't            you            eat the cake  
       (IMP/VP)/(IMP/VP)    IMP/VP        VP  
       +neg    +emp            +emp  
       -----FA  
       IMP/VP  
       +neg

In (21), it has to be assumed additionally that a feature passing convention will allow features on the argument category to pass onto the resultant category. However, the above combination also does not ensure the subject to associate to the right but permits it to associate to the VP, yielding ill-formed constituency structures:

- (22) \*don't ((you not) eat the cake)

#### 4.2.4. Correct generalizations

There are several points to be noted which show that this categorial analysis of imperatives meets both descriptive adequacy and explanatory adequacy.

##### 4.2.4.1.

Regarding (23), the grammaticality as well as ungrammaticality of the sentences are readily accounted for.

- (23) a. \*Do you eat the cake  
 b. \*Do not you eat the cake  
 c. Don't (you/anybody) eat the cake

The only possible category compatible with you is don't, the analysis outlined above captures the fact. It is impossible for do not and do to combine with you of either category due to the the incompatibility in categorial combination or feature mismatch as shown in (24).

- (24) a.      \*Do not          you          eat the cake  
              IMP/VP          IMP/VP          VP  
              +spe          +emp  
              +neg  
              -----\* incompatible categories
- b.      \*Do          you          eat the cake  
              IMP/VP          IMP/VP          VP  
              +spe          +emp  
              -----\* incompatible categories
- c.      \*Do not          you          eat the cake  
              IMP/VP          (IMP/VP)\(IMP/VP)          VP  
              +spe          +neg          +emp  
              +neg          +neg  
              -----\* incompatible features
- d.      \*Do          you          eat the cake  
              IMP/VP          (IMP/VP)\(IMP/VP)          VP  
              +spe          +neg          +emp  
                                  +neg  
              -----\* incompatible features

##### 4.2.4.2.

Additionally it also explains why the sentences in (25) cannot be grammatical imperatives when you cannot occur before don't, do not or do:

- (25) a. \*you do eat the cake  
b. \*you don't eat the cake  
c. \*you do not eat the cake  
d. \*you/anybody don't eat the cake

**This is because of the incompatible categories as given below, no matter which you is used.**

- (26) \*You don't eat the cake  
IMP/VP IMP  
+ emp + neg  
-----\*
- (27) \*You don't eat the cake  
(IMP/VP)\(IMP/VP) IMP  
+ neg + emp + emp  
+ neg

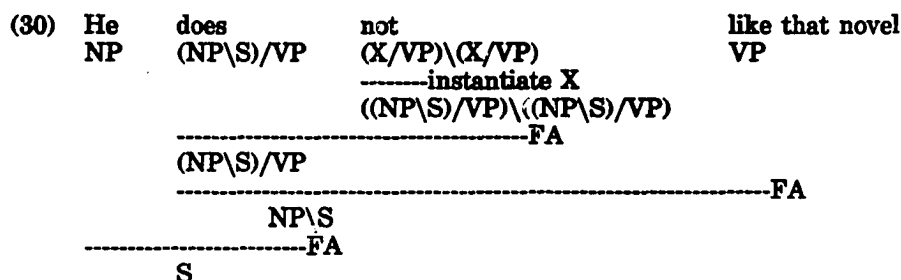
#### 4.2.5. Syntactic types for Non-imperative Do and inversion constructions

This system captures, fundamentally, the particular syntactic properties associated with do and don't which are in the imperative constructions. These elements are treated differently from supportive and auxiliary do in non-imperatives like (28), which is of category  $(NP \backslash S) / VP$ , and from negative complex don't, didn't or doesn't in non-imperatives which are simply contractions between  $(NP \backslash S) / VP$  and the negative not of category  $(X / VP) \backslash (X / VP)$ .

- (28) a. We do love Italian food.  
b. He did go to the movie last night.  
c. She does not like that novel.

In (28), the supportive/auxiliary do either takes a tenseless VP argument or first combines with the negative not, as illustrated below:

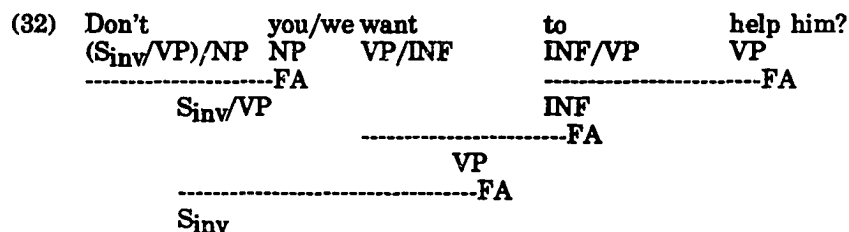
- (29) We do love Italian food  
 NP (NP(S)/VP VP  
 -----FA  
 NP\S  
 -----FA  
 S



In negative constructions like (30), not is assigned a functor category that acts on its argument -- the substitute verb do (does, did). Negative complexes like do(es)n't and didn't in non-imperative constructions in (31) are of type  $(NP\S_{neg})/VP$ .

- (31) a. He didn't go to China  
b. We don't like the food.

When the negative complexes are fronted sentence-initially to form negative interrogative constructions, they are assigned the type  $(S_{inv}/VP)/NP$  -- a function from a NP into a function from VP into a sentence.



The above type structures for don't in inverted construction as well as in regular non-inverted construction apply to complex elements formed of modals and the negative such as won't, can't, shouldn't so on and so forth.

- (33) a. Won't you help me with this box?  
b. He won't listen to me.  
c. I will not read that paper by Robert.

The present categorial system distinguishes easily the two instances of sentence initial don't, one in the imperatives and the other in the non-imperatives, by different type

structures. For non-imperatives, the argument NP can be of any person and don't is of type  $(S_{inv}VP)/NP$  (see (32), whereas for imperatives, the argument NP must be specified as looking for an NP of second person of type  $(IMP/VP)/NP_{2nd}$  if we assume that you is given the type of NP.

- (34)  $\frac{\text{Don't} \quad \text{you} \quad \text{dare touch the computer!}}{(IMP/VP)/NP_{2nd} \quad NP \quad VP}$   
 -----FA  
 IMP/VP

The same is true with sentence initial do in imperatives and non-imperatives. As analyzed earlier, sentence initial do in the imperative is of type  $IMP < +emp > /VP$ . In non-imperatives, placing do in the sentence initial position always yields an interrogative construction, in which do (does, did) is a function from an NP into a function from VP into a question sentence. In (35), the primitive category for question is symbolized as Q, i.e  $S < Q >$ .

- (35)  $\frac{\text{Do} \quad \text{you} \quad \text{like} \quad \text{to have a piece of cake?}}{(Q/VP)/NP \quad NP \quad VP/INF \quad INF}$   
 -----FA  
 VP  
 -----FA  
 Q/VP  
 -----FA  
 Q

In Chapter 2, it is argued that distinctions must be made between the verb be in imperatives and non-imperatives, the former is affected by movement rule whereas the latter is not. Such a distinction is an expected result in the present proposed categorial grammar, since the categorial system allows as the primitive that multiple syntactic categories are associated with a lexical expression. As one more example, formally, tensed be is of type  $(NP \backslash S)/X$ , yielding a tensed clause, and non-tensed imperative be is of type  $IMP/X$ , yielding an imperative construction. The tenseless imperative be, as in (36b) is also differentiated from tenseless be as in (36c). In all these cases, X ranges over the set  $\{NP, PP, ADJP, ADVP\}$ .

(36)

- a. John is a professor of Music (careless, on the platform, there)  
 NP (NP\S)/X NP (ADJP, PP, ADVP)
- b. Be a nice boy (careful, in the office, there at 5 o'clock)!  
 IMP/X NP (ADJP, PP, ADVP)
- c. John should be a doctor (careful, in the room, there at 5 o'clock)  
 NP (NP\S)/VP VP/X

To sum up, the categorial grammar analyzes imperative do, don't, do not and be as having different type structures from the categories assigned to non- imperative do, don't, do not and be. This result simply falls under the fundamental assumption of the grammar that multiple categories and type structures are primitives.

#### 4.3. A comparison of GB and CG

I've provided a categorial analysis that treats imperatives as forming an independent sentential category IMP, non-derivative from other sentential syntactic types such as indicative sentences. Consequently, the particular syntactic properties exhibited by the auxiliary elements and overt subjects in imperatives are a result of particular lexical idiosyncrasies germane to the imperatives. These properties are appropriately accounted for by the syntactic categories assigned to the relevant lexical elements.

Such an account relies partly on the feature values associated with each lexical category. These features, taken as functions from expressions to values, however, are descriptive and not easily to be generalized as morpho-syntactic features such as CASE, GENDER and NUMBER (see Bach 1983b). Pragmatic notions such as emphasis and special connotations are difficult to capture in terms of syntax. But the proposal to use some descriptively necessary notions to treat imperatives in their own right through rigorous combinations guarantees that there are no over/under-generations. Thus, the independence of the imperative construction is highlighted.



Things are somewhat different in the non-categorial approach we have seen in Chapters 2 and 3. Within the theoretical framework of GB, imperative constructions have been analyzed to derive from a D-structure that is similar to the D-structure postulated for non-imperatives. This can be done only if the imperative structure is assumed to be "opaque" to Verb Movement and theta-role copying from V to Agr. The opacity is traceable to the presence of the abstract Tense element Imp postulated for imperatives. Notice that a sentence of category TP has been taken to be a projection of its Tense. The structure of an imperative is characterized by Imp in Tense. Therefore, the structure is, in fact, a projection of the abstract Imp. Without the assumption that Imp creates or allows certain exceptions, the imperative constructions in English simply cannot be made to follow from the interactions between the modules (theories of binding, theta-role and Case) of the GB grammar. What all this means is that the structure of imperatives has its own way of derivation, subsumed under the principles of the grammar with conditions.

As a consequence, on one hand, imperatives are formally analyzed as derivable; but on the other hand, conceptually, the "underivability" of imperatives from a uniform D-structure is implicitly revealed, if we view the assumptions specific to imperatives to be "exceptions" to the general set-up of the grammar. In Chapters 2 and 3, imperatives are not taken to form an independent clause type, but the results of the analysis and the theoretical consequences of the "opacity" of Verb Movement and theta-theory and ImpNegP suggest that imperatives should be treated in their own right.

From this comparison, we conclude that both analyses given in this study have recognized the special syntactic properties associated with the English imperatives. They have both explained the characteristics of imperative constructions, with emphasis on different components of the grammar. While the CG explicitly takes imperatives to form a syntactic type of their own, which is equivalent to the view that imperatives have a maximal projection as Imperative Phrase at the sentence level in the terminology of GB, the approach

along the line GB I have given has only made it implicit. In addition, while CG emphasizes the lexical idiosyncracies, GB tries to explain them in relation to more abstract modules. It is rather clear that the derivation of imperatives in GB is complicated by the invoked assumptions in such a way that one may question whether the derivation is the most appropriate analysis. But it is more due to methodological reasons that some of the complicated derivations are needed and that the conditions argued for imperatives are treated as subsumed under the modules.

Apart from the obviously different primitive assumptions these two theories have and the consequent results regarding the independence of the imperative sentences, the two analyses have different claims about the restriction on the appearance of overt subjects. Recall the GB analysis I proposed in Section 1 of Chapter 3. The prohibition against the co-occurrence of overt subjects and do was attributed to the presence of do in T which blocked the strong Spec-Head agreement. The lack of such an abstract agreement was insufficient to assign Case to the subject position; hence, lexical subjects could not be realized. In the present chapter, however, the categorial analysis has attributed the restriction to both parties. It is the incompatible lexical types associated with you and do that make it impossible for the syntactic combination between overt subjects and do; hence, sentences like \*You do eat that cake! or \*Do you eat that cake! are ill-formed. In the next section on pragmatic issues, I show that there is evidence for the categorial analysis. I argue that it is two opposed pragmatic notions -- command and request which are associated with overt subjects and do respectively -- that causes the syntactic "clash".

#### 4.4. Non-syntactic alternatives to the restriction on overt subjects

What has been said so far does not exclude other plausible non-syntactic-oriented accounts of the syntactic properties noticed in imperatives, since it already becomes clear in the above that non-syntactic notions are relevant to the analysis of imperatives. In the

following, I outline a non-syntactic explanation of the clash between do and overt subjects, attributing it to the incompatible pragmatic notions between request and command that are built into the formal type structures of categorial grammar.

#### 4.4.1. Prosodic restriction

One prominent property that attracts attention is the occurrence of overt subjects that is incompatible with the auxiliary/substitute verb do. We have seen that a syntactic account of it within GB requires some machinery -- the Assumptions 1 and 2 in Chapter 3, and the [+spe] and [+emp] feature in the type structures in this chapter. Can there be other factors contributing to the incompatibility?

##### 4.4.1.1. Akmajian's proposal

There is a non-syntactic account of the restriction on the overt subject in imperatives. Akmajian (1984) ascribed the prohibition against the co-occurrence of you and do in the imperative to a prosodic constraint. He claims that do, but not don't, requires a stress:

- (37) a. Do[+stres] have a seat!  
b. \*Do[-stres] have a seat!

- (38) a. Don't[+stres] stand up!  
b. Don't[-stres] stand up!

He proposes that it is for reasons of prosody that do in imperatives cannot be combined with an overt subject, as in (39), while don't can, as in (40).

- (39) a. Do help me!  
b. \*Do you/somebody help me!
- (40) a. Don't come near me!  
b. Don't you/anybody come near me!

He suggests that the contrast in (39) and (40) reflects a more general prosodic restriction in imperatives that there be at most one stress before the VP. Consider (39b), there are two lexical elements preceding the VP. He states that overt subjects in imperatives always bear a stress. The fact that do also bears a stress at the same time makes (39b) ungrammatical. As shown in (37) and (38), don't can be unstressed while do must be stressed. Therefore

(39b), with two stresses, violates the constraint while (40b) does not.

The prosodic constraint, as argued by Akmajian, may also explain why topicalization of (41) is good, while topicalization of (42) is excluded when the imperative has an overt subject:

- (41) a. Solve the first forty problems by Monday  
b. The first forty problems, solve by Monday
- (42) a. One of you solve the first forty problems by Monday!  
b. \*The first forty problems, one of you solve by Monday!  
(Akmajian 1984)

Topicalized constituents are known to be obligatorily stressed. In (42b), the topicalization results in two stresses before the VP, one on the topicalized constituent and the other on the subject; hence, the ill-formedness of (42b) results.

#### 4.4.1.2. Incorrect predictions

There are two problems with this prosodic account. First, it would incorrectly rule out well-formed topicalized imperative constructions, such as (43b,c) and (44b,c).

- (43) a. You put the apples into the refrigerator!  
b. The apples, you put into the refrigerator!  
c. This pie, none of you touch!
- (44) a. Don't you put the book on the stove!  
b. The book, don't you put on the stove!  
c. This pie, don't any of you touch!

In (43b,c) and (44b,c), there are two nuclear stresses before the VP, one on the topicalized constituent and the other on the subject. The prosodic account does not seem to make correct predictions since both (43b,c) and (44b,c) are well-formed.

Second, there is a parallel distribution between do and the word please regarding the appearance of an overt subject. Neither of them allows the subject to occur.

- (45) a. Do open the window!  
b. Please open the window!
- (46) a. \*Do you open the window!  
b. \*Please you open the window!

The word please does not have to bear a stress, different from do. Thus, the imperative with a pre-VP please and an overt subject, such as (46b), satisfies the prosodic constraint, but the sentence is clearly ungrammatical.

The above evidence suggests that the prosodic account is not satisfactory in explaining the prohibition against co-occurrence of do and overt subjects. The parallel between do and please seems to be a reflex of some non-structural constraints placed upon imperatives. I would like to suggest that it is simply incompatible pragmatic notions, i.e. principles of human understanding of how imperatives work, that determine the grammaticality involved in the interactions between do, please and overt subject you.

#### 4.4.2. Pragmatic constraint

##### 4.4.2.1. Request and command

What is special about the word please is its incompatibility with overt subjects in imperatives, though it freely occurs in imperatives without overt subject.

- (47) a. \*Please you step in!  
 b. \*You step in please!  
 c. Please step in!  
 d. Step in please!

Notice that the word please conveys the meaning of request on the part of the speaker but not the meaning of command, as shown by following examples given in Schachter (1973).

- (48) a. Would you and your guests please not make so much noise?  
 b. Why don't you please leave me alone?  
 c. \*Don't you and your guests please make so much noise!  
 d. \*Please don't you and your guests make so much noise!

Both (48a,b) are questions that have been turned into requests because of please. Imperative constructions in English always express some subset of /requests/commands/orders/suggestions/instructions. With the word please, the imperatives like those in (47) are requests rather than commands. (48c,d) are ill-formed due to the incompatibility between the command, which is expressed by you, and the request, which is expressed by please.

The substitute auxiliary verb do in imperatives is more or less used in the same way as please. Do indicates not only emphasis, but also a meaning of cajolery and request on the part of the speaker. Assume that please and do are carriers of these pragmatic notions, and their distributional properties are syntacticized, as a consequence, do and please contribute to the syntactic well-formedness of the imperative sentences involving subject you. Consider (48c,d), since do and please are expressions indicating request, whereas the use of the overt subject pronoun you indicates a command, i.e. the authoritative power of the speaker over the addressee, a simultaneous occurrence of them creates a incompatible situation for an imperative. Based on this pragmatic reasoning, we have a straightforward account of the unacceptability of (46), (47a,b) and (48c,d): commands are incompatible with please or do. It then follows that subject pronoun you in an imperative cannot be compatible with either do or please.

To implement the above observations, we assume that the type structure is multi-dimensional in that it has syntactic, semantic, phonological as well as pragmatic properties (see Oehrle 1988). For the present purpose, we are simply concerned with the syntactic type and the pragmatic type that are to be postulated as being associated with the type structure of lexical elements.

Let us represent the lexical items do and please as having a structure that contains a pair  $\langle x, P \rangle$ , where  $x$  stands for the syntactic type and the upper case  $P$  stands for the pragmatic type "request", as Req. Let us also assume that these two elements act on the sentential category IMP. The type IMP has a structure with the same pair  $\langle x, P \rangle$ , where  $P$  ranges over the set containing at least the members {Req, Comd (Command)}. Thus, we have the type structures associated with do, please and any well-formed imperative sentences as follows,

- (49)    do         $\langle \text{IMP/IMP}, \text{Req} \rangle$   
          please     $\langle \text{IMP/IMP}, \text{Req} \rangle$   
          IMP         $\langle \text{IMP}, \{\text{Req}, \text{Comd}\} \rangle$

Given the empirical fact the pragmatic notion *Req* clashes with the pragmatic notion *Comd*, our grammar of the type calculus must specify the arrow as valid if and only if the two type structures contain compatible syntactic types as well as compatible pragmatic types. The notion of syntactic compatibility is the same as demonstrated in Section 2 and the notion of pragmatic compatibility is defined as follows, where *P* stands for pragmatic types with subscripts indicating particular pragmatic notions, and *[P]* stands for being unspecified for pragmatic notion.

- (50) Type  $\langle \alpha, P_k \rangle, \langle \beta, P_j \rangle \rightarrow \langle \gamma, P_m \rangle$  if and only if  
 $\alpha, \beta \rightarrow \gamma$  and  $P_k \text{ union } P_j = P_m$

As a result, the arrows in the type calculus are valid if (50) is satisfied. As an illustration, (51) and (52) are well-formed while (53) is ill-formed.

- (51) Please/Do                      go away  
 $\langle \text{IMP/IMP}, \text{Req} \rangle$                $\langle \text{IMP}, [\text{P}] \rangle$   
 -----[1] FA  
 $\langle \text{IMP}, \text{Req} \rangle$
- (52) You                              go away  
 $\langle \text{IMP/IMP}, \text{Comd} \rangle$                $\langle \text{IMP}, [\text{P}] \rangle$   
 -----[1] FA  
 $\langle \text{IMP}, \text{Comd} \rangle$
- (53) \*Please/Do                      you go away  
 $\langle \text{IMP/IMP}, \text{Req} \rangle$                $\langle \text{IMP}, \text{Comd} \rangle$   
 -----\*

The ill-formedness of (53) is due to the clash between *Req* and *Comd*. As a formal prediction, the following type combination should be allowed, which is true empirically as in (54).

- (54) Please                              do                              go away  
 $\langle \text{IMP/IMP}, \text{Req} \rangle$                $\langle \text{IMP/IMP}, \text{Req} \rangle$                $\langle \text{IMP}, [\text{P}] \rangle$   
 -----[1] FA  
 $\langle \text{IMP}, \text{Req} \rangle$   
 -----[1] FA  
 $\langle \text{IMP}, \text{Req} \rangle$

#### 4.4.2.2. Correct predictions

The above proposed account carries over to co-ordinate imperative constructions. It predicts that conjuncts must be compatible with respect to the pragmatic notions. Therefore,

two commands can conjoin (55a), so can two requests (55b), but not a command and a request (55c), or a request and a command (55d,e). This is exactly true, as shown below.

- (55) a. You come over and don't you dare talk back!  
 b. Do stay and please have a cup of tea!  
 c.\*You come over and please don't talk back!  
 d.\*Do stay and you have a cup of tea!  
 e.\*Please come over and don't you dare talk back!

It also predicts that, within a single clause of imperative, expressions indicating compatible pragmatic notions can co-occur. This is also true, as in (56).

- (56) a. Please do attend our regular meetings!  
 b. Do attend our regular meetings please!

Indefinite NP subjects in imperatives may co-occur with please and do. This can be easily explained, since an indefinite NP does not specify any particular person and is addressed to at least two people. Thus, indefinite NPs are not as direct as second person pronoun(s) regarding the identity of the addressee over whom the speaker may feel to have power. Therefore, indefinite NPs do not designate directly a person to whom a command is issued, and are compatible with please and do.

- (57) a. Someone please open the window!  
 b. Everyone please stand up!  
 c. ?Someone do open the window!  
 d. ?Everybody do stand up!

Note that (57) becomes ungrammatical if the indefinite NPs are not in the sentence-initial position, as in (58).

- (58) a.\*Please somebody open the window!  
 b.\*Please everyone stand up!  
 c.\*Do someone open the window!  
 d.\*Do everybody stand up!

Their ungrammaticality has nothing to do with pragmatic reasons but is due to a syntactic constraint. Please seems like a non-sentential adverb and cannot precede the subject, as the following well-formed sentences show.

- (59) a. Somebody please help me!  
 b. Everybody please stand up!



Please should be next to the domain of VP. However, in (58a,b), it is not next to the domain of VP. Since do has the same function as please and should be next to the domain of VP, it being separated from the VP by a subject NP causes (58c,d) to be ill-formed, given the previous argument that there is no pre-subject Comp position in an imperative structure for do to occupy.

#### 4.4.2.3. An interesting residue

The above pragmatic account and correct predictions leave us with a residue, as in (60).

(60) \*Do not you touch my computer!

Let's first consider (61), where there is a difference between the two negatives in (61a) and (61b) for considerations of emphasis and formality.

- (61) a. Do not touch the computer!  
b. Don't touch the computer!

(61a) is more formal and emphatic, conveying a meaning of seriousness, while (61b) is simply an ordinary negative imperative. Do in (61a) does not seem to have the association with a request. The negative do not is more of a emphatic negative command and should be compatible with you, given the previous assumption that two commands are compatible with each other. However, (60) is ill-formed.

Interestingly, negative imperative containing do not is compatible with please, as in (62a).

- (62) a. Please do not touch my computer!  
b. \*Do not please touch my computer!

This is contrary to one's expectation, since the previous account assumes that requests should conflict with commands. (62a) indicates that do not does not necessarily convey the meaning of commands, and this claim is indeed supported empirically. Do not in (63) can be used in pleading with someone --a context in which you is completely impossible as pleas,

as in (64).<sup>3</sup>

- (63) a. Do not hurt me!  
       b. Do not strangle me!  
       c. Do not lose my favorite ear rings!
- (64) not pleas  
       a. Don't you hurt me!  
       b. Don't you strangle me!  
       c. Don't you lose my favorite ear rings!

Therefore, the negative do not is simply an expression that should be assigned two types, one with command as <IMP/IMP, Comd> and the other with request as <IMP/IMP, Req>. Recall that one of the important properties of CG is its ability to allow multiple types to be associated with a single expression. As a result, the remaining residue ends up providing argument for the proposed analysis.

#### 4.5. Conclusion

To conclude, I have sketched an alternative analysis to a derivational-based account of the English imperative constructions. This analysis clearly argues for imperatives to be treated as an independent sentence type from that of non-imperatives, unlike the GB analysis which treats imperatives as derivable from the global underlying structure. It uses the lexical specification strategy of the CG, together with the incorporation of the particular pragmatic notions into the type structure that are associated with these lexical elements. In this way, the notorious properties exhibited by don't, do and even the word please at the presence of overt subjects are isolated as construction-specific problems and are easily accounted for.

The basic issue regarding the comparison between the GB analysis and the CG analysis is this: on one view, there is an abstract global object -- the underlying clausal structure -- from which all clauses are derived by simple rules (conditions on movement);

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<sup>3</sup> Dick Oehrle (p.c).

on the other view, clauses are constructed from a common set of materials such as NP's and VP's, and a set of possibly idiosyncratic tools such as tense, modals, ordering-relations and various clausal structures. I have shown that in both analysis imperatives have to be treated as having their own clause structure different from that for other clauses, especially when exceptions are created for the derivations of imperatives in GB. However, their independence is only implicitly recognized in GB.

## **CHAPTER 5**

### **IMPERATIVES AND THE STRUCTURE OF MAD MAGAZINE SENTENCES**

#### **5.0. Introduction**

In the previous chapters, I have given two analyses of imperatives, one in GB and the other in CG. In these analyses, imperatives are analyzed as having their own idiosyncratic syntactic properties. Clearly articulated in the CG treatment is that imperatives form an independent clausal structure and a primitive syntactic category in the system of type structure. In the GB treatment I proposed that the global underlying abstract clausal structure must allow special variations for imperatives. These conclusions suggest that the syntactic properties associated with imperatives are important to theoretical syntax and should not be overlooked or equated with other sentence types.

Schmerling (1975, 1982) suggests that imperatives should be taken as a distinct third clause type, as opposed to the binary distinction between finite (tensed) and non-finite (untensed) clauses in the generative grammar tradition (see Chapter 1). That imperatives exhibit certain syntactically arbitrary properties and are primitive relative to indicatives with respect to formal properties forms the basis for her proposal. Akmajian (1984), however, argues that the formal properties noticed in imperatives are also shared by a class of exclamative sentences known as Mad Magazine Sentences (MMs). He analyzes both imperatives and these exclamatives as having the same clausal structure. Hence, he proposes that imperatives are simply a functional sentence type (determined pragmatically like exclamatives, interrogatives and so on) without interesting formal properties and play no role in a syntactic theory.

Akmajian's proposal is incompatible with our conclusions drawn in the previous chapters, especially with the CG analysis in which imperatives are taken as a basic syntactic category and have their own clausal structures. In this chapter, I argue that there are non-trivial formal properties associated with imperatives in English which are distinct from MMs,

and that there is no structural equation between these two constructions. I present arguments to show that MMs are constructions of S' (CP) structure while imperatives are an instance of S (TP). I also show that although both have an accusative "subject" NP and lack verb inflections, MMs are not similar to subject-taking infinitives. The conclusions are (i) MMs and imperatives are two distinct sentence types and cannot be regarded as an instance of one sentence type having two distinct pragmatic functions, and (ii) the properties associated with imperatives are important to syntactic investigations.

## 5.1. Imperatives and Mad Magazine sentences

### 5.1.1. Similarities

Akmajian (1984) observes a class of sentences in English, called Mad Magazine sentences (MMs) and illustrated as in (1), which he characterizes as having an exclamatory function -- that is, they are characteristically used to express surprise, disbelief, skepticism, scorn and so on.

- (1) a. What, me worry?
- b. What! John get a job! (Fat chance)
- c. My boss give me a raise?! (Ha)
- d. Him wear a tuxedo?! (Sure) Akmajian (1984, 2)

He argues that MMs are syntactically equivalent to imperatives. The similarities include the following. (i) Subjects are optional in MMs as in (2a,b), and the subject cannot be a reduced pronoun as in (2c). The same is true with imperatives as shown in (3a,b).

- (2) a. (You) get a job at IBM (Fat chance)?!
- b. What! (Her) call me up?! Never.
- c. Him/\*im get a job?!
- (3) a. (You) leave!
- b. You/\*Ya leave

(ii) Neither MMs nor imperatives allow tense or modal elements, i.e. they lack an AUX



(Akmajian et al 1979), as illustrated in (4) and (5) respectively.<sup>1</sup>

- (4) a. Him get a job?!  
 b. \*Him gets a job?!  
 c. Her call me up?!  
 d. \*Her might/will call me up?!

- (5) a. Leave!  
 b. \*Must leave!  
 c. Be nice!  
 b. \*Are nice!

(iii) MMs do not allow sentential adverbs as in (6), neither do imperatives as in (7).<sup>2</sup>

- (6) a. What! Her lose her job?!  
 b. \*What! Her unfortunately lose her job!?

- (7) a. \*Certainly drive the car!  
 b. \*Perhaps open the door!

(iv) Syntactic operations such as topicalization are difficult to apply to MMs as shown in (8).

Often it is the case that topicalization is not acceptable in an imperative with the subject you present, as in (9).<sup>3</sup>

- (8) a. What! Us read that trashy novel by tomorrow?!  
 b. \*What! That trashy novel, us read by tomorrow?!

- (9) a. The first forty problems, solve by tomorrow!  
 b. \*The first forty problems, you solve by tomorrow!

Akmajian (1984)

Based on the above, Akmajian concludes that imperatives and MMs share the same

<sup>1</sup> As pointed out by Keith Allan (p.c), British English allows sentences with a nominative subject and modal, for instance, She might call me up?! Fat Chance. American English allows them, too (Andy Barss, p.c). However, this does not seem to be MMs, because the modal here is not allowed with an accusative NP: \*Her might call me up?! (Fat chance).

<sup>2</sup> Notice that sentences in (7) would become grammatical if an intonational break were allowed after the adverbs. But (6b) cannot be accepted even if there is a break after the adverb.

<sup>3</sup> Sentence (9b) is judged ungrammatical by Akmajian, who attributes the ungrammaticality to the presence of you. However, most speakers find it acceptable. See more examples later on.

formal structure (except for the intonation that distinguishes them): they lack an AUX and have an optional NP subject, generated by a PS rule of the form in (9').

(9')  $S_{\{mm, Imp\}} (NP) V^{max}$

He also argues that this is simply an instance of one sentence type having two distinct pragmatic functions. Therefore, he concludes that it makes no sense to have an "imperative sentence" type in a syntactic analysis.

### 5.1.2. Dissimilarities

Despite the above similarities, there exist many dissimilarities between MMs and imperatives -- crucial differences sufficient enough to separate them. First, MMs can have subjects of any grammatical person. Imperatives, however, allow only second person subjects (including quantified NPs such as somebody/anybody/everybody/nobody). Second, subjects precede the negator not in MM as in (9'), whereas the subject must follow the negator in an imperative as in (10).

(9") What! Mary not clean the room?! Nonsense.

(10) Don't you make a mess in the room!

Third, MMs and imperatives use different negators, not for the former as in (9") and (11), don't or do not for the latter as in (10) and (11c).<sup>4</sup>

(11) a. What! Not leave early?! That is unthinkable.

b. What! \*Don't leave early?! That is unthinkable.

c. Stay where you are! Don't/Do not move!

The fact that the predicate of MMs can be negated by not shows that the predicate is a VP in (11a), as VP can be negated by not, as in (11'). Imperatives like Leave early! and Get here on time! are not simply VP's, since they are not possible imperatives if negated by not, as in (11'')

(11') a. What he did was [not leave early].

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<sup>4</sup> Sentences like (11b) are acceptable to some speakers with an echoic and emphatic effect. According to Akmajian (1984), (11b) is ungrammatical if used as a MMs.

- b. What he will do is [not get here on time].  
 (11") a. \*Not leave early!  
 b. \*Not get here on time!

Fourth, imperatives are compatible with the element do whereas MMs are not:

- (12) a. What! Him not leave early?!  
 b. What! \*Him do leave early?!  
 c. What! \*Him don't leave early?!  
 d. What! \*Him do not leave early?!

The element do plays an important role in imperatives, since do in imperatives differs from do in non-imperatives. While imperative do allows aspectual words such as have (13), non-imperative do does not (14):

- (13) a. Don't you have eaten all the cookies before I come back.  
 b. Do have tasted the fish before you say you don't like it.  
 (14) a. \*We do have loved Chinese food.  
 b. \*We don't have eaten all the cookies before you come back.

Both do and don't can be used as single words with their own rules of use as imperatives.

The following examples are taken from Akmajian (1984, 15), where the expressions don't and do are used alone with imperative force.<sup>5</sup>

- (15)  
 a. A: (About to take the last cookie in the jar)  
 B: Don't!  
 b. A: (Offering Speaker B a tray filled with appetizers)  
 B: (Hesitates, muttering about his diet)

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<sup>5</sup> In terms of types of imperatives depicted in Chapter 1, these are sentential imperatives with VP-ellipsis.

There is another potential difference between MMs and imperatives regarding stative verbs (Andy Barss p.c). It is odd for imperatives to have stative verbs (Katz & Postal 1964) but quite usual for MMs, as in (i) and (ii).

- (i) a. ?Understand the answer in the book!  
 b. ?Know calculus!  
 (ii) a. What? Her understand all the answers?! Unthinkable.  
 b. What? Him know calculus?! No way.

However, imperatives do allow stative verbs under certain contexts, as noted by Davies (1986).

- (iii) a. Just understand this -- I never met to hurt you.  
 b. Know that poem by Friday.



A: Oh, do! You only live once.

Given these empirical facts, Akmajian's conclusion that imperatives and MMs have the same clausal structure cannot be accepted. Instead, what seems clear is that imperatives and MMs are two different sentence types.<sup>6</sup> I would like to present evidence from Latin, French and German to further support the claim that imperative and MMs are two different grammatical sentence types.<sup>7</sup>

### 5.1.3. MMs and IMPs in other languages

As shown above, MMs are identifiable in English on both formal and functional grounds. The formal properties are: MMs are AUX-less and require an accusative NP subject; the functional property is: MMs are being used in a heavily-discourse-oriented context to express surprise, disbelief, skepticism, scorn, and so on at some situation or event. It is quite natural to find constructions in other languages which are semantically and pragmatically equivalent to the MMs in English, and it is extremely useful to see whether in other languages the similar exclamative sentences share formal properties with imperatives.

In a recent paper, Lambrecht (1990) gives examples of MMs from Latin, French and German.<sup>8</sup> The Latin MM construction has a subjunctive rather than infinitival verb form,

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<sup>6</sup> MMs are not syntactically related to tensed exclamatives such as What a mess you have made! and How nice he is!. Not only does the latter type involve inversion of the predicate, but it also can be embedded: I did not how nice he is!. MMs, however, are incompatible with inversion or embedding.

<sup>7</sup> There is not much data on MMs that is available in the literature. Latin, French and German are the only ones I find.

<sup>8</sup> Fillmore, Kay & O'Connor (1988) refer to Mad Magazine sentences as Incredulity Response Constructions, a term adopted by Lambrecht (1990) to avoid language specific connotations in discussing similar sentences outside English.

named by Latin grammarians as a special category -- "subjunctive protest".<sup>9</sup>

- (16) Ego tibi irascar?  
 1sg:Nom 2sg:Dative angry  
 'Me be angry at you?'

In French, the MMs construction has the formal structure in (17), where the initial NP is in the accusative case if it is a pronoun and the verb in its infinitive form. The relevant examples of MMs are provided in (18), contrasting with the inflected verbs in the imperative construction, as shown in (19).

- (17) [NP<sub>acc</sub> [INF VP ]]  
 (18) a. Moi, me faire des soucis?!  
           me ref:1st do these worriness  
           'Me worry?!'  
       b. Toi, pleurer?! Jamais.  
           you cry       never  
           'You cry?! Never'  
 (19) a. (Tu) pleure!  
           (you) cry!  
       b. (Vous) pleurez!  
           (you) cry!

Both French and Latin have imperative constructions in which the verb inflects for appropriate morphological form. But, in the above, the Latin MMs construction is in the subjunctive form and the French MMs are in the infinitival. Neither of them are formally related to imperative constructions.

The German MMs provide interesting formal properties, the structure of which, according to Lambrecht (1990), does not resemble any known construction. The sentences in (21) are German MMs, and (22) is the abstract structure for them proposed by Lambrecht (1990).

- (21)  
 a. Ich und mir Sorgen machen?!  
       I-NOM and me-DAT worries make-INF  
       'Me worry?'

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<sup>9</sup> There is no literal gloss in Lambrecht (1990).

- b. Mein Chef und mir eine Gehaltserhöhung geben?!  
 my-NOM-MASC boss and me-DAT a-ACC-FEM raise give-INF  
 'My boss give me a raise?!'
- c. Der und einen Smoking anziehen?  
 that.one-NOM and a-ACC-MASC tuxedo put.on-INF  
 'Him wear a tuxedo?!'

(Lambrecht 1990)

(22) [NP<Nom> und VP<inf> ]

The structure in (22) consists of an NP in the nominative case immediately followed by the conjunction und, and a bare infinitival phrase. The structure in (22) shares no properties with the imperative construction in German. German verbs, for example sagen (to say) as in (23), inflect for person and number in imperatives but verbs in (21) do not.

(23)

|              | INF   | PRESENT | PAST     | IMP    |
|--------------|-------|---------|----------|--------|
| 2SG familiar | sagen | sag-st  | sagte-st | sag    |
| 2PL familiar | sagen | sag-t   | sagte-t  | sag-t  |
| 2SG/PLpolite | sagen | sag-en  | sagt-en  | sag-en |

Structure (22) has a unique property: the initial NP cannot be characterized as "subject", since in German subjects cannot be separated from their predicates by a conjunction and non-tensed verb phrases cannot have subjects. However, according to Akmajian (1984)'s prediction, the NP should be the subject of the MMs. In German, imperatives usually do not allow syntactic subjects to appear. Only with special circumstances such as emphasis do they permit subjects (only after the verb) and be obligatorily in the polite plural form, as in (24c), but they never allow a conjunction like und to follow the subject.

- (24) a. Geh (du) nach Hause!  
 go (you/sg) home  
 'Go home'
- b. Geht (ihr) nach Hause!  
 go (you/pl) home  
 'Go home'
- c. Gehen Sie nach Huase!  
 go you-polite home  
 'Go home' (polite form)  
 (Schmerling 1975)

The above evidence from outside English suffices to show that MMs and imperatives cannot be classified as having the same structure. Thus, we may conclude that the proposal of



Akmajian (1984) that MMs are simply syntactically equivalent to imperative constructions in English is inadequate. The next issue is what the structure and analysis are for MMs in English and how they differ abstractly from imperatives.

## 5.2. The Structure of MMs

### 5.2.1. A proposal

Akmajian characterizes MMs as an instance of S but not S' and as having a structure that lacks an AUX constituent, i.e. a constituent which contains Tense and Modal, proposing the PS rule in (25).<sup>10</sup>

(25)  $S_{mm} \rightarrow (NP) V^{max}$

Akmajian treats MMs as a construction S but not S', since he takes topicalization to be a movement rule into Comp and the impossibility of topicalization in the MMs like (8) suggests that there is no Comp. He treats MMs as lacking an AUX, since a construction without an AUX implies tenselessness and a lack of modality, and the tenseless environment would both ban sentential adverbs and explain why the NP is not nominative: nominative case on a subject is possible only in tensed expressions.

I propose instead that MMs form an independent sentence type of their own having the structure in (26), where it is an instance of S' (i.e. CP) rather than S (i.e. TP) with the initial NP base generated as an adjunction to S'(CP) and co-indexed with a null subject PRO inside S (TP).

(26)  $[S' NP_i [S' [S PRO_i [VP ]]]]$

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<sup>10</sup> Akmajian (1984, 4-7) suggests that the predicate phrase following NP can be captured by either  $V^{max}$  or  $X^{max}$ , where X ranges over N, A, V and P, depending on one's treatment of the predicate phrase. It can also be be. See Akmajian (1984) for detail.

This proposal is based on arguments given below from considerations of the non-subjecthood of the initial NP, the syntactic behavior of the constituents in MMs in the topicalization and binding of anaphoric pronouns, and case-marking properties.

### 5.2.2. The non-subject status of NP

MMs do not exhibit any verbal inflections for tense or person and number agreement between the subject and verb, nor do they allow modals. The lack of an AUX in MMs superficially makes MMs like either imperatives or infinitives.<sup>11</sup> Since I argue in Section 1 that imperatives and MMs are not alike on empirical grounds, it leaves us with another potential parallel between MMs and the infinitive constructions known as Exceptional Case Marking (ECM) or subject-taking infinitives, as in (27).

- (27) a. I expect (you/him/her) to win the game.  
b. I want (you/him/her) to leave.

#### 5.2.2.1. MMs and exceptional subject-taking infinitives

MMs and subject-taking infinitives share many syntactic properties, as given in (28), except the presence of the marker to in the latter.

- (28) a. lack of inflection on the verb  
b. optional occurrence of the overt subject  
c. obligatory accusative case-marking on the subject  
d. incompatibility with the auxiliary/substitute do

But there is a fundamental difference between them regarding the status of the optional NP: while the optional NP is the subject in the infinitive clause, the optional initial NP is not a subject in MMs since it does not pass the idiom test for subjecthood.

#### 5.2.2.2. Idiom chunks and pleonastic elements

One test for subjecthood in English involves the use of idiom chunks and pleonastic elements, since some idiom chunks and the dummy expressions (i.e. pleonastic pronouns)

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<sup>11</sup> The name "infinitive" suggests that it is unmarked for tense. Temporal interpretations, however, are certainly associated with infinitives via other elements in the sentence. For discussions, see Steele et al (1981) and Sandoval (1985), and compare Stowell (1982) for a different view.

are restricted to occurring as the subjects of clauses.

- (29) a. The chips are down.  
 b. The cat is out of the bag.  
 c. It is likely that Mark is sick.  
 d. There were a few seats left.

Notice that exceptional subject-taking infinitives, as in (30) and (31), allow both idiom chunks and pleonastic pronouns to be in the subject positions.

- (30) a. I believe [the chips to be down]  
 b. I've never known [the fur to fly so quickly]  
 c. They reported [the cat to be out the bag]  
 d. I consider [the shit to have hit the fan]
- (31) a. I expect [it to rain tomorrow].  
 b. He reported it to be likely that Mark'd quit school].  
 c. I believe [there to be few linguistic positions].  
 d. I've never known [there to be no more beer left].

If MMs are like infinitives with accusative subject NPs, one expects that MMs would also allow subject oriented idiom chunks and dummy expressions in the position occupied by the optional NP. But they do not. As in (32) and (33), pleonastic pronouns it and there are never accepted in MMs.

- (32) a. Damn! There's no more beer left.  
 b. What! \*There be no more beer left?!  
 c. It's false that the world is flat.  
 d. What! \*It be false that the world is flat?!
- (33) a. Those clouds make it look like it might rain again.  
 b. What! \*It rain again?! Oh, no.  
 (Akmajian 1984, 7f)

MMs are ungrammatical with subject oriented idiom chunks, as in (34). Interestingly, non-subject oriented idiomatic phrases are freely allowed, as in (35).<sup>12</sup>

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<sup>12</sup> Without the verb be, the sentences are acceptable but are understood only in the literal interpretation: the cat out of the bag?! meaning a specific cat got out the bag (Andrew Barss, personal communication).

Akmajian (1984, 8) notes that MMs allow idiom chunks to occur in the following manner, which he believes to be subjects.

(i) a. What?! No headway made on this problem yet?! You're fired, idiot.



- (34) a.\*The chips be down?!  
 b.\*The cat be out of the bag?!  
 c.\*/?The shit hit the fan?!  
 (35) a.John keep tabs on Mary?!  
 b.Me take care of this baby?!  
 c.\*Tabs be kept on Mary?!

Chomsky (1981,1986) assumes that the subject-oriented idiom chunks have inherent thematic role; therefore, like expletives, they can occupy non-theta-marked argument positions and be subjects. The fact that idiom chunks and pleonastic pronouns are not allowed in MMs suggests a significant mark of MMs. First of all, MMs cannot be the same as subject-taking infinitives. Secondly, more important, the pre-VP position in (25) occupied by the NP is not a regular "subject" position, and the NP which has been taken to be the subject by Akmajian is not a subject.

### 5.2.3. Topicalization and binding anaphoric pronouns

Given the conclusion that the NP is not the subject, the two peculiar morphosyntactic properties noticed of MMs, i.e. the optionality of the initial NP and the accusative-marking on the NP, can be described in a first step: the NP does not need to be marked nominative, nor does it need to be obligatorily present. Some other questions still remain:

- (36) a. Why is the NP not adjoined to S(TP) but to S'(CP)?  
 b. Why is PRO in the subject position (NP of S(TP))?  
 c. How is the NP marked accusative?

#### 5.2.3.1. Topicalization

Regarding (36a), the NP cannot be generated as adjoined to S (TP) and must be

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b. Oh? The hatchet buried so soon?! My, my, will wonders never cease?

But these examples cannot be accepted as testing for subjecthood, since the presence of the verb be before the participial forms results in ungrammatical strings:

- (ii) a.\*What?! No headway be made on this problem ?!  
 b.\*Oh? The hatchet be buried so soon?!

The question of why there is a difference is left to the future research.

outside S (TP). This assertion is supported by facts from topicalization in MMs.

The initial NP of MMs is not a topic phrase, since the NP can be a quantified NP such as no one or nobody in (37), as pointed out by Akmajian (1984, 4), a type of NP that cannot serve as a topic:

(36') \*As for no one, he/she likes the movie.

(37) a. What! No one eat this wonderful cake?! Impossible.  
b. What! Nobody like going to the colloquium on Friday?!

If the NP is not a topic phrase, it cannot be adjoined to S (TP) structurally given topicalization as a process of adjunction to S (TP) (Lasnik & Saito 1990). Thus, we conclude that the NP has to be an element outside S (TP), as in (38).

(38) [NP...[TP Top [TP Subj [ VP]]]]

There is further support for this conclusion. As noted by Lasnik & Saito (1990), topics cannot be string-vacuous. Thus, TP adjunction of subject is impossible:

(38') a. \*John, t likes the movie.  
b. This book, no one thinks t is interesting.

Given that the initial NP of MMs is not the subject, the subject must be null. If the initial NP of MMs is in Top, it violates the string-vacuous constraint.

In regard to topicalization, the conclusion that the NP is structurally outside S (TP) makes the following prediction. If an XP undergoes topicalization in MMs, i.e, moves into the S (TP) -adjunction site Top, this XP must follow the initial NP but not precede it. For example, movement of the verb's internal argument in MMs to the left of the NP is impossible, whereas movement to the S (TP)-adjunction site is possible. This prediction is indeed true, as shown by the contrasts in (39)-(41):<sup>13</sup>

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<sup>13</sup> The less perfect (40c) seems to suggest that MMs prefer the pre-predicate NP to be a pronoun rather than a full NP. This can be explained in regard to the nature of MMs. MMs are exclamatory sentences used to respond to a foregoing utterance in a heavily discourse-dependent



- (39) a. Us [read that trashy novel by tomorrow] ?!  
 b.\*[That trashy novel] [us] [read by tomorrow]?!  
 c. [Us] [that trashy novel] [read by tomorrow]?!
- (40) a. The first-year students [read that book by next week]?!  
 b.\*[That book] [the first-year students] read by next week?!  
 c.?[The first-year students] [that book] read by next week?!
- (41) a. Them [read that book by next week]?!  
 b.\*[That book] [them] read by next week?!  
 c. [Them] [that book] read by next week?!

Furthermore, the conclusion in (38) predicts that, without the occurrence of the initial NP, topicalization should be quite free, which is exactly the case.

- (42) a. That trashy novel, read by tomorrow?!  
 b. This box of books, sell to the students?!

Note that there are three positions available for the NP preceding S (TP): Comp, Spec of CP and the position Y created by adjunction to CP, as in (43), since we know that the NP position must be higher than the adjunction to TP -- TOP.

- (43) [CP Y [CP Spec [C' Comp [TP TOP [TP SUBJ...[VP]]]]]

The NP -- an  $X^{\max}$  category -- cannot be in Comp, a position which only allows an  $X^0$  element such as complementizer that. The NP can be in either Y and Spec position in (43). So far, there is no evidence given for the preference of one or the other (see Section 2.4 below) in structure (38).

### 5.2.3.2. Binding anaphoric pronouns

Regarding (36b), we need to maintain that the NP is structurally able to trigger

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context. The use of a pronoun indicates that the person is old information.

When the initial NP becomes longer, the acceptability seems to decrease.

- (i)a The President of U.S. want to visit China next week?!  
 b ?[China], [the President of U.S]. [want to visit next week]?!  
 c \*[The President of U.S] [China] [want to visit next week]?!

reflexives, since MMs allow anaphoric pronouns to appear inside the VP, as shown in (44).

- (44) a. Him [hurt himself/\*herself again]?! Oh, no.  
 b. Us [control ourselves/\*yourselves at the party]?! Oh, sure.  
 c. Me [cut myself/\*himself]?! Possibly.

This seems contradictory, given that the binding domain is S (TP) and the NP is outside S (TP). How could the NP be simultaneously inside S (TP) to meet the binding condition and outside the domain of S (TP) to satisfy (38)? The binder position for the anaphor in a structure like (38) is the structural subject position, i.e. Spec of S(TP), which is open and may block the reflexivization if it is not coindexed with the initial NP. This requires that Spec of S (TP) be occupied by a null element coindexed with the initial NP. This null element as the structural subject cannot be a WH-trace or an NP trace, since no movement is assumed to take place in the formation of MMs. MMs lack an AUX. They are tenseless and like imperatives. However, I have suggested earlier that there is an AGR which identifies *pro* in imperatives. The fact that MMs do not restrict the features of the subject indicates that MMs are not able to identify *pro*. Therefore, the null subject cannot be *pro*. What it must be then is PRO, which is allowed to be in the structural subject position of a [-finite] clause. Thus, the coindexation between the NP and PRO allows PRO to bind the anaphors in the VP.<sup>14</sup>

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<sup>14</sup> Regarding [+/-finite], MMs are unlike imperatives since the latter is characterized as [-finite, Imp] which licenses *pro*, but they parallel with infinitives. Both MMs and infinitives are [-finite] clauses and MMs use the infinitive verb form in French and German. See Section 3.

Given the argument in Section 1 that the initial NP of MMs is adjoined to CP, the NP is a non-argument element. What is in the argument position? It is a null element, which can be either a trace or a base-generated element. If it is a trace, it must satisfy the ECP with the conjunctive conditions, argued by Rizzi (1989).

(i) a. A trace must be locally bound, either A-bound or A'-bound;  
 b. A trace must be governed by a head.

This null element in the structure outlined above cannot be an NP trace, since it is not A-bound; it cannot be a wh-trace, not only because there is no wh-movement but also because it is not head-governed by anything to

(45) Him<sub>i</sub> [TP PRO<sub>i</sub> [vp hurt himself<sub>i</sub> /\*herself/\*yourself again]]?!

As the structural subject, PRO is obligatory and controlled by the initial NP. When the initial NP is absent, PRO cannot have a controller. As a result, PRO has the arbitrary interpretation to be fixed in context. This is exactly the case with respect to the MMs in (46).

- (46) a. PRO not eat Peking Duck in Chinatown?!  
b. PRO leave at three o'clock in the morning for Phoenix?!

In addition, the PRO subject predicts that anaphoric pronouns are banned except the arbitrary oneself(ves) when the initial NP does not appear. This prediction is fulfilled, as shown below.

- (47) a. PRO not get oneself hurt in a car accident?!  
b. PRO kill oneself in a stupid war?!  
c. \*PRO cut himself with that knife?!  
d. \*PRO control yourselves at the party?!

All these facts support the analysis of PRO as the null subject in MMs. Thus, we have the structure (47').

(47') [CP Y [CP Spec [C' Comp [TP TOP [TP PRO...[VP]]]]]

#### 5.2.4. Case-marking

Regarding part of the question raised in (36a) of why the initial NP is adjoined to S'(CP) (i.e, taking the position Y in (43)), I give an answer in addressing (36c) of how the initial NP is marked accusative in relation to left-dislocation constructions (LD). At the end of Section 2.3.1, it is noted that the initial NP of MMs could be in either Y or Spec of CP position. I suggest that the NP not be in the Spec -- a position usually for moved WH-elements -- for the clear reasons that the NP is not a WH-element and that no movement

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satisfy the ECP. It can be A'-bound by the NP. Thus, it seems to be either PRO or pro.

is assumed for the formation of MMs. I propose that the NP is in Y position in (47') and receives the unmarked accusative case by the structural position it occupies.

(47') [CP NP<sub>i</sub> [CP Spec [C' Comp [TP TOP [TP PRO<sub>i</sub> ...[VP]]]]]

This proposal is based on a parallel analysis of LD constructions and MMs.

#### 5.2.4.1. Left-dislocation (LD) and MMs

The structure I take for LD constructions in (48) is given in (49), in which LD is a base-generated construction with the left-dislocated element as adjoined to S'(CP).

- (48) a. This room, it really depresses me.  
 b. John's sister, she won't do anything rash.  
 c. These clams, I buy them right at the shore.  
 d. This movie, I said you wouldn't like it much.

(Emonds 1976, 32)

(49) [CP NP<sub>i</sub> [CP Spec [C' Comp [TP... Pronoun<sub>i</sub> ...]]]

Left-dislocation was introduced by Ross (1967) and treated, similar to topicalization, as a process of movement of NP which is followed by the replacement of the NP with an appropriate pronoun (Ross 1967, Emonds 1970, 1976).<sup>15</sup> However, there is ample evidence for taking LD sentences to be a base-generated construction and distinct from topicalization. Topicalization leaves a gap within S (TP) and involves WH-movement (Chomsky 1977; see Jaeggli 1982 for PRO movement), whereas dislocation does not. LD seems to involve a predication rule that relates an element in the sentence to the element outside the sentence (Chomsky 1977). One convincing argument, taken from Radford (1988, 531), is in relation

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<sup>15</sup> Corresponding to left-dislocation, there are also right-dislocation (Emonds 1976)

(i) a. It really bothers me, John's cigar.  
 b. I buy them right at the store, these clams.

Non-transformational proposal in regard to LD was first suggested by van Riemsdijk & Zwarts 1974 (cited from Emonds 1976), which treats them as base construction.

to case-marking facts.

A WH-moved NP is assigned the case appropriate to the position it occupied prior to the movement. As in (50), the accusative case-marked WH-word is not allowed after the movement if it is from a subject position (50a), but no such restriction is placed on the element from an object position (50b).

- (50) a. Who/\*Whom are you sure *t* would admire George Bush?  
b. Who/Whom are you sure George Bush would admire *t*?

However, for LD, the dislocated element must always be marked accusative irrespective of the case assigned to the referential pronominal expression within the S (TP).

- (51) a. Me/\*I, (everyone knows) I don't like Japanese food.  
b. Him/\*He, no one likes to invite him to the party.

In (51), the dislocated elements bear the accusative forms even if the pronominal expression *I* is in the subject position. If movement is taken as preserving case-marking, it is quite obvious that LD does not involve movement and is base-generated.

Given that the dislocated constituents are base-generated in the position they occupy at surface structure, the appropriate position for them is the adjunction site to CP, as shown in (52) where the Spec of CP is taken by the moved WH-word.

- (52) a. Snow peas, [CP what [TP can you cook them with]]?  
b. This kind of furniture, [CP where [TP can you find it in town]]?

#### 5.2.4.2. Unmarked accusative case

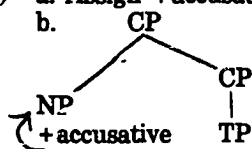
Notice that the data on case-marking of dislocated elements not only provides arguments for no-movement but also show the similarity between LD in (49) and the proposed structure for MMs in (26) or (47"). In both constructions, the initial NP is in the accusative form, which must be coindexed with a pronoun or PRO inside the sentence.

But why must the dislocated NP have the accusative form? In strict GB Case-theory, there is no Case-assigner for the dislocated constituent, since it is not governed by any  $X^0$  category. Therefore, the accusative case on the dislocated element is completely independent of the Case-assigning mechanisms outlined in Chomsky (1981, 1986a,b). The same is true

with the case-marking of the initial NP in MMs. In MMs constructions, it is argued that the initial NP is not the subject and must appear to the left of the domain of S (TP). It is further noted that the NP should not be in the Spec of CP, as in (47"). The only structural position available is the adjunction site to CP. Therefore, it is sensible to assume that the accusative case is the unmarked form for sentence-initial pronouns in English. But it is evident that not every sentence-initial NP gets the accusative case. The appropriate generalization about these two constructions seems to be that the initial NP is an extra-sentential element, adjoined to S'(CP).

To formally implement this, I propose that extra-sentential elements, i.e. elements base-generated as adjoined to S' (CP), receive the unmarked accusative form by virtue of the phrase-structural position they occupy.

- (53) a. Assign +accusative to the NP in the configuration (b).



In (53), the NP occupies the position adjoined to CP; hence, it receives the accusative case.

### 5.2.4.3. Correct predictions

#### 5.2.4.3.1. Embedding

The analysis of MMs as an instance of S'(CP) rather than S and as having a structure parallel to that of LD makes correct predictions on sentence embedding and gapped structures. Dislocation constructions cannot be embedded and do not allow parasitic gaps. As a prediction, MMs cannot be embedded or allow parasitic gaps either. This is indeed true.

The dislocation structure differs from a regular S'(CP) structure in that the former contains the "extra-sentential element". It seems impossible to embed LD sentences, as shown in the b sentences below.

- (54) a. Me, (everyone knows) I don't like Japanese food.  
 b. \*He wonders whether [her [(everyone knows) she doesn't like Japanese food]].

- (55) a. Bill, he goes to Yale.  
 b. \*I want to know whether [Bill [he goes to Yale]].
- (56) a. Snows peas, what can you cook them with?  
 b. \*I want to know [snows peas [what you can cook them with]]  
 c. I want to know [snows peas [what can you cook them with]]

The ill-formed (54b), (55b) and (56b) suggest that dislocation is disallowed in non-root clauses. The well-formed (56c) is not an embedding but just a direct quotation, since regular embedding in English does not permit subject-Aux inversion (except under a few negative preposing circumstances). In sum, adjunction to CP in the embedded clause is not allowed.<sup>16</sup>

Given that MMs involves an adjunction to CP similar to LD, the impossibility of having adjunction to CP in the embedded clauses predicts that MMs can never be embedded. This is borne out, as in (57).

- (57) a. \*John wonders me get a job at IBM?!  
 b. \*Bill expects (that) her call him up tonight?!

#### 5.2.4.3.2. Parasitic gaps

As shown earlier, the sentence initial NP constituent in topicalization constructions is formed through movement while the initial NPs in LD and MMs constructions are base-generated. The constructions known as parasitic gaps in (58) are analyzed as involving WH-movement in their formation (Chomsky 1981, 1986a). In other words, the parasitic gap structure presupposes movement.

- (58) a. What did you file t before reading e?  
 b. What did you file t before you read e?

As an interesting pair, topicalization constructions allow parasitic gaps since their formation requires movement, whereas LD constructions do not since their formation involves no

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<sup>16</sup> Under the following negative preposing circumstances, inversion is obligatory.

- (i) The boss says that under no circumstances will anyone leave the room.  
 (ii) John said that not once had he heard of Chomsky.

movement, as illustrated in (59) and (60) respectively.

- (59) a. That paper, Bill graded without reading.  
b. That paper, you cannot use for class without reading.

- (60) a. \*That paper, did you grade without reading?  
b. \*That paper, did you grade it without reading?  
c. \*That paper, what can you use for without reading?  
d. \*That paper, what can you use it for without reading?

None of the LD sentences in (60) is grammatical, with two gaps in (60a,c) and one gap in (60b,d). We should expect then that MMs do not license parasitic gaps either, since there is no movement at all in MMs. This is true, as in (61).

- (61) a. \*Him file a paper without reading?!  
b. \*Him file what without reading?!  
c. \*Him what file without reading?!

MMs do allow *Wh-in-situ* structures, a clear indication that movement is impossible, as in (62).

- (62) a. Him receive what from the President?! (echo questions)  
b. \*What him receive from the President?!  
c. \*Him what receive from the President?!

Not only do we have these correct predictions regarding the proposed analysis of MMs and LD constructions, we also seem to have support from other languages for the analysis of unmarked case on the initial NP in the MMs.

#### 5.2.4.4. Unmarked case in other languages

I have proposed that the initial pronouns in MMs receive the unmarked case and that the unmarked case in English is accusative. Let us consider MMs in other languages discussed in Section 1.3. The unmarked citation form for case in French is accusative. In German, however, it is nominative (Demers, p.c). As illustrated in Section 1.3, the initial NP in MMs in French bears accusative case and in German it bears nominative. It has also been reported in Akmajian (1984) that the initial NP of the MMs in Swedish is in the nominative case if the NP is in the pronoun form, and that the nominative case turns out to be the unmarked citation form in that language. It would be beyond the scope of this discussion



to find out about the exact structures of MMs in these languages, but what seems clear is the fact that the initial NP in MMs in these languages is not the subject, as indicated by the structure proposed by Lambrecht (1990) for German MMs in (22) and the structure for French MMs in (17). It seems that the unmarked case forms associated with the NP in MMs in these languages support our conclusion regarding English MMs: the initial NP is not the subject and the case associated with the NP is the default case by virtue of the structural position (see (53), not by government configurations).

#### 5.2.5. Summary

I have provided empirical evidence and analytical arguments to support the structure for MMs given in (26) and (47'). The arguments include (i) the non-subject status of the initial NP, (ii) the interaction between the initial NP and topicalized constituents, (iii) the structural subject PRO and its binding of anaphors, and (iv) the unmarked accusative case in the extra-sentential position. I conclude that the initial NP in MMs is an extra-sentential element bearing the unmarked accusative case. Thus, we end up with two parallel structures for MMs and LD constructions, as given in (63).

- (63) a. [CP NP<sub>i</sub> [<sub>↑</sub>+ACC [CP [TP PRO<sub>i</sub> [T -finite]... ]]]  
       b. [CP NP<sub>i</sub> [<sub>↑</sub>+ACC [CP [TP pronoun<sub>i</sub> [T +finite]... ]]]

In (63), the PRO and overt resumptive pronoun are bound by an initial NP adjoined to CP. What is characteristic about the LD constructions is that the resumptive pronoun in the sentence can be in either subject or object position. (63b) only represents the structure when the pronoun is in subject position. The structure for MMs in (63a) differs in that it contains a null element PRO, always in the subject position, that is coindexed with the initial NP. In addition, MMs are tenseless while LD constructions are tensed.

The analysis of MMs proposed here makes correct predictions that Akmajian's analysis

does not: MMs do not embed; they do not allow parasitic gaps; they allow verb internal arguments to be topicalized, restricted only to the position immediately following the initial NP; and MMs allow arbitrary as well as specific anaphoric pronouns depending on the presence and absence of the optional NP.

### 5.3. Conclusion and theoretical consequences

Taking a different angle from what has been done in Chapters 2, 3 and 4, I have presented arguments for the status of imperatives in syntactic analysis and their independence from other clauses. I have argued that MM constructions are structurally distinct from imperatives (and infinitives), although they all share uninflected verb forms. MMs are a based-generated S'(CP) construction with a cluster of properties of their own. (i) they lack verb inflections and are incompatible with auxiliary/substitute do, because MMs are [-finite] clauses (i.e. lack of an AUX in Akmajian's analysis), similar to infinitives which are also incompatible with do. (ii) The optional initial NP in MMs takes the accusative form (if it is a pronoun), because the NP is not the subject but rather an extra-sentential constituent receiving the unmarked accusative case.

All these properties have nothing in common with the analysis and structure I have proposed for the imperative constructions. In sum, imperatives and MMs have distinct clausal structures: imperatives are an instance of S (TP) while MMs are an instance of S'(CP); imperatives have abstract Tense category [-finite, Imp] to allow auxiliary/substitute verb while MMs have only [-finite].

The advantage of my analysis over that of Akmajian (1984) can be seen in two aspects. First, it is empirically adequate to separate imperatives from MMs in English and other languages (see Section 1). Second, my proposal makes predictions about topicalization, embedding and parasitic gaps and assimilates LD constructions regarding accusative case marking (see Section 2). It also accounts for why there is no restriction to second person in

MMs while there is such a restriction in imperatives: MMs have arbitrary PRO as the structural subject whereas imperatives have pro as their subjects. It explains why both imperatives and MMs are fundamentally distinct despite their lack of verbal inflections: imperatives fall between [+finite] and [-finite], as argued in Chapter 2, which is descriptively notated as [-finite, Imp]; MMs constructions are simply [-finite].

As a consequence of this study, the independence of the English imperatives from tensed clauses and infinitives as well as MMs is reinforced, and the appropriate analysis of imperatives is proven to be both necessary and important to syntactic investigations. Furthermore, substantive arguments and analyses of MMs have an interesting result regarding the typology of sentence types: under one typology, MMs are an independent sentence type parallel to imperatives, tensed clauses and infinitives; under the other, MMs are subsumed under infinitives.

The first typology is based on the assumption that constructions are typed according to [+/-finite] and categories S and S'. These criteria are stated in (64).

- (64) a. whether a structure is [+finite] or [-finite];  
 b. whether a structure X is an instance of S or S' if Xs' values in (a) are the same;

From (a) we have three types, tensed clauses are [+finite], infinitives are [-finite] and imperatives are neither. Including (b) in addition to (a), MMs are the fourth type. The structure of MMs indicates that MMs and infinitives are a pair in terms of [-finite]. However, MMs differ from infinitives because MMs are an instance of S' while infinitives are an instance of S. As a result, MMs are an independent sentence type.

The second typology is based only on the assumption in (64a), which gives three sentence types. Notice that under either assumption, the result does not affect the independence of imperative constructions. Controversy only arises regarding the affinity between MMs and infinitives. Once again, it suggests that the conclusion to separate imperatives from MMs and other clauses is correct. The issue whether there are only three

clause types, as suggested by Schmerling, or more, must remain open for future research.

The study has another consequence for the theory of abstract Case-marking. The Case theory of GB requires Case be assigned to lexical NPs by reference to standard channels such as structural case assignment in terms of government and inherent case assignment in terms of assumption. The unmarked accusative form in MMs and LD constructions suggests that the theory of Case needs to make specific reference to the position a lexical expression occupies in a particular structural configuration, rather than requiring that these expressions be assigned a Case by assigners which must govern them. As pointed out earlier, there is simply no potential element that stands in a relation to govern the initial NP of MMs and LD constructions to be qualified as a Case assigner.<sup>17</sup>

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<sup>17</sup> See Lebeaux (1987) for a similar proposal.



## CHAPTER 6

### A CROSS-LINGUISTIC PERSPECTIVE ON IMPERATIVES

#### 6.0. Introduction

From the above detailed examination and analysis of English imperatives, the issue arises of how imperatives in other languages are realized in comparison with English. Given the cross-linguistic definition we started off with in Chapter 1 as to what counts as a strong imperative sentence type, I now turn to specific properties, common as well as uncommon, of strong imperatives (henceforth imperatives or imperative constructions) that languages have. These properties range over morphological, syntactic, and phonological aspects of imperatives -- including modal elements, tense elements, imperative-marking elements, presence or absence of subject, negation, and intonation.

The study shows that the imperatives examined here have three properties in common. First, they lack modal elements. Second, they lack elements indicating past tense. Third, they use formal strategies to mark the construction, positive or negative, or both, as distinct from non-imperatives.

Five implicational universals can be drawn from this cross-linguistic examination:

(A) the lack of "core" imperative constructions -- a unique sentence type compatible with direct commands and not with assertions-- implies sentence type(s) ambiguous for commands and assertions.

(B) [-past] tense elements in imperatives imply specialized uses of these tense-marking elements.

(C) non-sufficiently marked positive imperative constructions imply marked negative imperative construction -- the special imperative negatives.

(D) the null use of imperative-marking elements, morphological or syntactic, implies the use of intonation as a formal strategy to mark the imperative.

(E) quantifier-like NP subjects in imperatives imply the possibility of having second person pronoun as the subject, and imply the possibility of having anaphoric pronouns of either second person or third person.

These results come from an examination of forty-six languages across thirteen language families, given in (1), and of some additional language data reported in the literature.

(1)

- 
- a. Indo-European
- |               |                                 |
|---------------|---------------------------------|
| Germanic:     | English, Dutch, German          |
| Italic:       | Latin, Italian, Spanish         |
| Balto-Slavic: | Russian, Lithuanian,            |
| Indo-Iranian: | Hindi, Persian, Mandari, Romani |
| Celtic:       | Welsh                           |
- 
- b. Uralic
- |           |
|-----------|
| Finnish   |
| Hungarian |
- 
- c. Sino-Tibetan
- |         |
|---------|
| Chinese |
| Thai    |
- 
- d. Altaic
- |          |
|----------|
| Japanese |
| Korean   |
- 
- e. Athapaskan
- |        |
|--------|
| Navajo |
|--------|
- 
- f. Hokan
- |                         |
|-------------------------|
| Paipai, Mojave, Yavapai |
|-------------------------|
- 
- g. Uto-Aztecan
- |                 |
|-----------------|
| Southern Paiute |
| Tübatulabal     |
| Hopi            |
| Yaqui           |
| Mayo            |
| Cora            |
| Nahuatl         |
| Serrano         |
| Cupeño          |
| Papago          |
- 
- h. Austronesian
- |             |                            |
|-------------|----------------------------|
| Polynesian: | Indonesian, Chamorro       |
| Oceanic:    | Hawaiian, Kusaiean, Fijian |
- 
- i. Australian
- |                    |
|--------------------|
| Warlpiri           |
| Yidin <sup>y</sup> |
| Dyirbal            |
| Tiwi               |
- 
- j. Indo-Pacific
- |       |
|-------|
| Amele |
|-------|
- 
- k. Nilo-Saharan
-

## Luo

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### 1. Semitic

Amharic  
Arabic  
Hebrew

---

These languages are selected on the bases of both availability of data and native informants. The genetic classification of the above languages is based on the Voegelin & Voegelin (1977), Hawkins (1984), and Ruhlen (1987). While the sample is selected on the bases of availability of data and native informants, no attempt is made to balance the sample to ensure an areal and genetic representativeness. Therefore it is not clear that the findings based on it can be taken to be statistically significant. Nevertheless, the properties of this sample are at the least suggestive. Since much of the crucial data is not readily available in the published sources, there is some justification for relying on sporadic cases where the judgements of native speakers are available, rather than relying on a representative sample of languages for which the crucial data is not available.

### 6.1. Common properties

There are three properties that all imperatives share in common: (i) they lack elements marking past tense or elements indicating the past; (ii) they lack elements indicating modality which correspond to English modals such as must, should, and may; (iii) they have formal signals characterizing the constructions as distinct from non-imperatives, either morphological, syntactic or phonological, or combinations of these.

#### 6.1.1. Lack of [+past] elements and modality

The first two common properties imperatives have are obvious in terms of empirical facts and the semantics of the imperative sentence type. I have found no language which contains these elements in the imperative construction. All languages surveyed use syntactic forms that contain either imperative-marking elements or present or future-indicating

elements (particles and affixes) for imperatives. Imperatives do not assert a proposition-in-intension which may or may not be true in the past, now, or in the future, but can be best described as only presenting a proposition-in-intension which may or may not become true (Davies 1986). Therefore, *passe tense* is incompatible with imperatives.

### 6.1.2. The use of formal strategies

The third property that all (strong) imperative constructions share is that each language employs some kind of formal strategy to mark its imperative construction as distinct from non-imperatives. Our cross-linguistic investigation shows that imperative constructions --sentential types which are compatible with direct commands but not with assertions as defined in Chapter 1 -- are realized in languages by means of a limited number and range of formal strategies. These formal strategies, in general, include the imperative verb form, imperative-marking particles, the absence or presence of the subject argument, intonation, or combinations of these. Although considerable diversity exists in the way that the constructions are manifested, the formal strategies can be generalized into three types:

- (2) Generalized Formal Strategies
  - i. Imp-marking elements
  - ii. manipulation of subject
  - iii. intonation

Languages seem to use either one of these types or combinations of them to formally mark the imperative. The inclusion of intonation in (2) is due to the report in Sadock & Zwicky (1985) that Chrau, an Autric language (Ruhlen 1987), marks imperatives by intonation.<sup>1</sup> In the present cross-linguistic examination, I have not found a single language which employs only intonation as a formal strategy for marking the imperative. Rather I found combinations of intonation and (2i) or (2ii). Therefore, in the following discussion, I treat intonation as a subsidiary strategy and my focus will be the first two strategies.

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<sup>1</sup> Unfortunately, there is no data given on Chrau in Sadock & Zwicky (1985).



The first two types of strategies in (2) consist of sub-types, as given in (3).

- (3) i. Imp-marking elements  
       <1> verb morphology  
           [a] imperative conjugation or affixes  
           [b] bare stem  
           [c] future affix  
       <2> sentential particles
- ii. manipulation of 2nd person subject  
       <1> optional presence of subject  
       <2> obligatory absence of subject  
       <3a> obligatory presence of subject  
       <3b> special subject personal pronouns

Languages differ in which sub-type and combinations of the sub-types are used to mark imperatives. The detailed properties that will be discussed below are particular manifestations of the sub-type strategies or combinations of them used in imperatives. Basically, to examine how imperatives are realized is finding out what kind of formal strategies or combinations of them would be commonly and uncommonly used.

The generalized formal strategies (i) Imp-marking elements (henceforth, IME) and (ii) manipulation of subject (henceforth, MS) in (2) and (3) above yield four logical possibilities of combinations:

- (4) a. [+IME, +MS]  
       b. [+IME, -MS]  
       c. [-IME, -MS]  
       d. [-IME, +MS]

That is, an imperative can be realized by using both IME and MS, or none of them, or either one of them. The possibility (4c), i.e. the realization of an imperative without using IME and MS, is fulfilled by Chrau with the use of intonation. Below I discuss the sub-types of formal strategies given in (3) in conjunction with illustrating the combinations (4a), (4b) and (4d).

## 6.2. Formal strategies and various other properties

In this section, I illustrate examples of the various possibilities of formal strategies given in (3i) and (3ii). Imperatives are most commonly realized by Imp-marking elements

and manipulation of second person subject. Imperatives indicated by sentential particles are found in Thai and Chinese, as illustrated in Chapter 1. In both Thai and Chinese, there are special sentential particles unique to imperative constructions (see Section 2 of Chapter 1). In addition, subjects also play a role in characterizing the imperatives. In both Thai and Chinese, subjects can freely disappear in conversational constructions (as answers to questions). In non-conversational constructions, however, it is more common for subjects to be present than for them not to. In Thai the imperative is also characterized by a lack of the subject, and in Chinese by an optional subject. Therefore, the imperative constructions in both languages can be treated as instantiations of combination (4a) -- [+IMS, +MS]. The positive value of MS in Thai is the absence of subject, notated as [+MS<-subject>], and in Chinese is the optionality of subject, notated as [+MS<subject>].

## 6.2.1. Verb morphology

### 6.2.1.1. Imperative conjugation and affixes

Most of the languages in the sample indicate their imperatives by verb morphology through imperative conjugations or imperative affixes. Examples from Japanese and Papago are given in Section 2 of Chapter 1. Other languages include:

- (6) French, German, Dutch, Latin, Italian, Spanish, Russian, Lithuanian, Hindi, Finnish, Hebrew, Korean, Mundari, Serrano, Indonesian, Warlpiri, Amele, Amharic.

Most of these languages can be represented as having the matrixes [+IMS, +MS<-subject>] (French, Finnish, Italian, Spanish, for example) or [+IMS, +MS<subject>] (Russian, Lithuanian, German, Korean, for examples). The language Amele has the matrix [+IMS, +MS<+subject>] (see Section 2.2).

Characteristic of imperative conjugation and affixes is the use of fewer than the normal number of affixes. Consider Hebrew. In Hebrew, imperative is morphologically quite straightforward: it takes the form of second person future tense with the initial prefixal

syllable of the future lopped off and concomitant vowel alternations in the stem (Berman 1978, 73). For instance, a verb stem g-m-r 'to finish' in (7) has the conjugation for future tense in the left column, and the corresponding conjugation for imperatives in the right column, where "E" stands for shwa.

|            |                   |            |
|------------|-------------------|------------|
| (7)        | g-m-r 'to finish' |            |
|            | Future            | Imperative |
| 2nd Mas Sg | tigmor            | gmor       |
| 2nd Fem Sg | tigmEri           | gimEri     |
| 2nd Mas Pl | tigmEru           | gimEru     |
| 2nd Fem Pl | tigmorna          | gmorna     |

The imperative verb form is marked for number, gender and person, just like the non-imperative verb form in Hebrew. The rich inflectional information in the imperative forms remains consistent with the observation that imperatives use less than the normal number of affixes that non-imperative verbs use for conjugation. It is illustrated by the fact that the first syllable of the future is chopped off for the imperative. In contemporary colloquial usage, the corresponding future forms substitute very generally for the imperative forms. However, imperative can be formally differentiated if necessary.

Hebrew has imperative conjugation as IME. However, it does not use MS, since the subject is usually included in the conjugation and not expressed structurally in either imperatives or non-imperatives. Thus, Hebrew instantiates the combination (4b) -- [+IME, -MS].

#### 6.2.1.2. Bare stem

In Chamorro, the imperative is formed by the use of the stem form of the verb that occurs in the future tense. Chamorro has two tenses: future and nonfuture. The verb phrase is marked for future tense and unmarked for the nonfuture. Future tense is indicated by the markers para and u/bai, u for the third person only, as in (8).

- (8)  
 a. Para u gimen i sethesa  
     FUT FUT drink the beer  
     'He will drink the beer'

- b. Para bai hu chocho  
FUT FUT I eat  
'I will eat'
- c. Para bai hu falagu  
FUT FUT I run  
'I will run'

The markers for future tense must be deleted in imperatives and there is no second person subject represented in the construction (Topping 1973, 264). Corresponding to (8), we have imperative constructions in (9).

- (9)
- a. Gimen!  
drink  
'Drink!'
- b. Chocho!  
eat  
'Eat!'
- c. Falagu  
run  
'Run!'

#### 6.2.1.3. Future affix

Positive imperatives in Tiwi (Osborne 1974) require the prefixation of the future-imperative morpheme Ca- (the initial consonant changes depending on the morphological environment) to the verb stem, as shown in (10). Singular imperative forms are distinguished from all other verbs by the absence of a subject prefix. Plural imperative forms have the subject prefix nə, (you)

- (10) a. ta-jakupauli!  
imp-go back  
'Go back!' (you sg)
- b. nə-ra-jakupauli!  
you-imp-go back (you pl)
- a. ta-kʸ imi tutini!  
imp-make grave post  
'Make grave posts (you sg)
- b. n -ra-kʸ imi tutini!  
you-imp-make grave post

In Tiwi non-imperative constructions, verbs must be preceded by a subject prefix, as shown in (11); this is not necessary for imperatives.

- (11) a.     *tiikɾ imi?*  
           you-do  
           'Did you do it?'  
       b.     *waija tuapa?*  
           already you-ate?  
           'Have you eaten?'

Regarding the combinations of the generalized formal strategies for marking imperative constructions (4), both Chamorro and Tiwi are manifestations of using IME and MS simultaneously as formal strategy for marking imperatives, i.e. [+IME, +MS], since either one of IME and MS would be insufficient.

#### 6.2.1.4. Summary

To summarize, we have seen examples exhibiting imperative-marking elements and instantiations of combinations (4a) [+IME, +MS] and (4b) [+IME, -MS]. There are two sub-cases regarding [+MS] in (4a) -- the subject as optional or as absent.

- (11') [+IME, +MS]  
       -- [+IME, +MS<subj>]  
       -- [+IME, +MS<-subj>]

A third sub-case regarding [+MS] in (4a) is the obligatory presence of subject -- [+IME, +MS<+subj>], which I will illustrate (with the language Amele) after discussing the combination (4d) -- [-IMS, +MS] below.

#### 6.2.2. The manipulation of subject expression

The imperative has been commonly characterized as a construction without a subject or with an optional subject. In this section, I show that there is a three-way distinction to be made in our cross-linguistic characterization: obligatory absence of subject, optional absence of subject, and obligatory presence of subject.<sup>2</sup>

##### 6.2.2.1. Obligatory absence of the subject argument

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<sup>2</sup> It is difficult to obtain any data regarding the presence of the subject argument in imperatives in grammar books. The results reached here, to a large extent, rely on the intuition of available native informants.

In some languages, the lack of a subject expression in imperatives is obligatory. These include Walpiri, French, Spanish, Italian, and Hindi.

### Walpiri

Hale (1973, 326) takes person markers in Walpiri as equivalent to subject, calling them the clitic subjects. Regarding the Walpiri imperative constructions, he proposes an obligatory rule deleting the clitic subject. He notices that the person marking must be absent in imperatives and only number markings are represented, as illustrated in (12).<sup>3</sup>

(12)

- a. pul,a-ya0  
shout-Imp      imperative  
'Shout! (you sg)'
- b. pul,a-ya0-pala  
shout-Imp      Imp-dual  
'Shout! (you dual)'
- c. pul,a-ya0-lu  
shout-Imp      Imp-pl  
'Shout (you pl)'

An independent pronoun may occur in an imperative only for considerations of emphasis or the like, as in (13). In this case, the word order of imperatives looks exactly like that of the non-imperatives in (14), in which the clitic subjects are obligatory.

(13)

- a. njuntu              0      pul,a-ya  
you                  Imp      shout-Imp  
'You shout (sg)'
- b. njumpala           0-pala      pul,a-ya  
you                  Imp-dual      shout-Imp  
'You two shout'

(14)

- a. yalumpu           ka-npa           pul,a-mi  
the                  present-2          shout-nonpast  
'You are there shouting'
- b. yalumpu-tjara      ka-n-pala          pul,a-mi  
that-dual          present-2-2        shout-nonpast  
'You two there are shouting'

---

<sup>3</sup> See Steele's (1990) proposal which takes markings for either person or number to be values that define the notion of subject.

If we take Hale's analysis of Walpiri to be correct, then it is clear that the subject argument must be obligatorily absent.<sup>4</sup>

### French

Imperatives in French (and other Romance languages) are indicated by verb conjugations and the obligatory absence of the subject pronoun in the subject position (NP of S).

(15)

- a. ouvrez la porte  
open.Imp the door  
'Open the door!'
- b. \*Vous ouvrez la porte  
you open.Imp the door  
'You open the door!'

The obligatory absence of the subject in French (other Romance languages, Hindi and so on) and Hebrew, which was discussed earlier, should not be attributed to their imperative conjugations that already contain person and number markings. Languages such as German, Dutch, Finnish, Russian, and Lithuanian, which all have imperative conjugations and rich verb inflections, allow subject pronoun to appear.

#### 6.2.2.2. Optional presence of subject

The lack of subject expression is optional in English, Chinese, Japanese, Korean, Indonesian, Russian, Lithuanian, German, Dutch, and Finnish. Among the languages -- German, Dutch, Finnish, Russian and Lithuanian -- German, Dutch and Finnish form a group in the sense that the subject pronoun may show up immediately following the verb only, not preceding the verb as it usually does in non-imperative constructions. Russian and Lithuanian form the other group, where the subject pronoun in imperatives takes the position preceding the verb that the subject usually takes in non-imperative constructions.

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<sup>4</sup> The question of what counts as a subject in general is much more complicated than what is being given here and is beyond the scope of the present discussion. Therefore, I simply assume the existing claims of subjects in Walpiri by Hale.

Consider German. The subject may precede the verb in non-imperative constructions, as in (16a). The pronoun du, if present, must follow the verb in the imperative (16b), otherwise the imperative is ill-formed (16c).

(16)

- a. Er trinkt den Kaffee.  
he drink the coffee  
He drinks the coffee.
- b. Trink (du) den Kaffee  
drink.imp (you) the coffee  
'Drink the coffee'
- c. \*Du trink den Kaffee  
you drink.imp the coffee  
'Drink the coffee'

When the polite form of the second person pronoun Sie is used, subject is obligatory and must follow the verb:

(17)

- a. Ich trete ein  
I step in  
'I come in.'
- b. Treten Sie ein!  
step you.polite in  
Come in!
- c. \*Sie treten ein  
you.polite step in

The interpretation of the post-verb pronoun is contrastive and emphatic.<sup>5</sup>

### 6.2.2.3. Obligatory presence of subject

Quite contrary to the above no-subject or optional-subject situations, there are also imperatives which obligatorily require the presence of the subject. In languages such as Luo and Hawaiian, the expression of the grammatical subject is obligatory or highly preferred

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<sup>5</sup> Finnish is unique in that its imperatives allow the direct object argument to be marked nominative. Other languages exhibit similar phenomenon are some Uto-Aztec and Uralic languages. See Timberlake (1974).



in imperatives and only optional in non-imperatives.<sup>6</sup>

Hawaiian, a Polynesian language of the Austronesian family, exhibits no verbal morphology. Its different moods and tenses are indicated by sentence particles which may either surround or be adjacent to or surround the verb. Subject and object person and number are indicated by independent lexical items: *'oe* (you.sg), *'lua* (you.dual) and *'oukou* (you.pl). In simple declaratives, the subject pronoun is frequently omitted unless there is ambiguity.

In imperatives, however, the subject pronoun is commonly expressed (Elbert and Pukui 1979, 108). In other words, the presence of the subject pronoun is not obligatory in declaratives but obligatory in imperatives.

According to native informants (M. Lewis 1986), the imperative sentence form is typified by a special intonation, and the verb is preceded by a particle *e* which is also used for the declarative future construction, as shown in (18) and (19).

(18)

- a. E        hele    'oe  
FUT    go        you  
'Go!'
- b. E        hele    ('oe)  
FUT    go        you  
'You will go'

(19)

- a. E        hai'awi=aku    'oe i ka lama ia: ke kanaka  
FUT    give                    you OBJ the rum OBJ the man  
'Give the rum to the man!'
- b. E        hai'awi=aku    ('oe) i ka lama ia: ke kanaka  
FUT    give                    you OBJ the rum OBJ the man  
'You will give the rum to the man'
- c. Ua       hai'awi=aku    ('oe) i ka lama ia: ke kanaka  
PERF   give                    you OBJ the rum OBJ the man  
'You gave the rum to the man'

---

<sup>6</sup> The results regarding Hawaiian and Luo come from an unpublished study of M. Lewis (1986), who based his investigation on the cited references and native consultants: Janusco on Hawaiian, Obadaiah Ochillo and Adongo Harun on Luo.

In (18a,b) and (19a,b), the imperative and declarative future would be exactly the same if the presence of the subject pronoun is also optional in imperatives.

A second example is Luo, a Nilotic language of Nilo-Saharan family. The expression of the grammatical subject is obligatory in imperatives and only optional in the declarative.

(20)

- a. (In) dhi(yo)  
     you go  
     you go (all the time) /level intonation/  
 b. In dhi(you)  
     you go  
     Go /sharp rise-fall intonation/  
                                 M. Lewis (1986)

The above formation of imperatives by use of an obligatory subject is uncommon and may seem unexpected. However, it becomes quite natural and expected if we also consider simultaneously the syntactic properties associated with the non-imperatives in these languages. All our previous examples of imperatives show the general phenomenon in which imperatives and non-imperatives are differentiated either morphologically or syntactically. If the grammatical subject is optional to non-imperatives, as in Hawaiian and Luo, then one would not be surprised to find that it is just the opposite situation in imperatives.

One common property to these two languages is that the imperative sentence is typified by a special intonation contour. Intonation is a formal property that has its various patterns in accordance with sentence types in languages and has been argued to form one of the basic formal properties categorizing sentences (Akmajian 1984). But it seems typical in languages for imperatives to have a rather different intonation contour from both assertions and questions just because of the very nature of imperatives. Thus, both Hawaiian and Luo, besides having phonological properties for imperatives, relies on manipulating the subject to differentiate imperatives from non-imperatives. Thus, they are instantiations of the combination (4d) -- [-IME, +MS], more accurately [-IME, +MS<+subj>]], in which there are not any imperative-marking elements.

#### 6.2.2.4. Special subject personal pronouns

Mojave, a Yuman language of the Hoken family, has a special subject marker that occurs only in the imperative sentence type. The imperative is formed by adding the prefix k- to regular declarative sentences referring to the present.

(21).

- a. k-isva:r-k  
IMP-sing-PRES  
'Sing!'
- b. k-iyu:-k  
IMP-look.at-PRES  
'Look at it!'
- c. k-icho:-k  
IMP-teach-PRES  
'Teach him!'
- d. k-a?wi:-m  
IMP-do-PRES  
'Do it!'
- e. k-i?i:-m  
IMP-say-PRES  
'Say it!'

Suffixes -k and -m in (21) are tense markers and may refer to both present or past in declarative sentences, as in (22). The selection of these suffixes seems arbitrary and is not conditioned by either phonological properties or by the meanings of verbs (Munro 1976, 8)

(22)

- a. isva:r-k  
sing-PRES/PAST  
'S/he sings/sang'
- b. ul<sup>y</sup>e:s-m  
break PRES/PAST  
'S/he breaks/broke it'

In Mojave, the person markers are prefixes and work in the following manner: third person subject and object marker is null, as in (19) above; the first and second person subject markers are ?- and m- respectively.<sup>7</sup>

(23)

- a. ?-isva:r-k  
1-sing-PRES?PAST  
'I sing/sang'

---

<sup>7</sup> In Mojave, singular and plural numbers are indicated by a change in the verb stem.

- b. m-isva:r-k  
 2-sing-PRES/PAST  
 'You sing/sang'

Compare sentences in (21) and (23). The imperatives in (21) differ from the non-imperative (23b) in that the imperatives have the prefix k- instead of the regular m-. The prefix k- functions as a second-person subject marker (Munro 1976, 11). The other construction in Mojave which has directive force is the simple future, which is described as a mild 'imperative'. However, the simple future (understood as an indirect command) uses the regular subject marker, as shown by the contrast in (24).

- (24)
- a. kahmop k-turav-tam-k  
 baking.powder IMP-buy-this.time-PRES  
 'Buy baking powder this time!'
- b. kahmop m-turav-tam-e  
 baking.powder you-buy-this.time-FUT  
 'Buy baking powder this time!'

A similar situation is also reported in Yokuts, a language of the Penutian family. What is characteristic about the special subject pronoun in Yokuts imperatives is that the subject pronoun remains optional (Sadock & Zwicky 1985, 171) instead of being obligatory as in Mojave illustrated above.

### 6.2.3. Negative imperative particles

As a general phenomenon across languages, there are negative forms as a pair in imperative and non-imperative constructions. Apart from the well-known facts in Latin, the following languages all turn out to have a separate negation form for imperatives.

- (25) Chinese, Thai, Indonesian, Romani, Japanese, Korean, Welsh, Yaqui, Papago, Yidin<sup>y</sup>, Dyirbal, Fijian, Kusiean, Tiwi, Hebrew, Hindi, Amharic, Classical Arabic.

The results I have reached here coincide with that of Jelinek (1979) where out of 30 languages under investigation 25 were found to have special negators for imperatives, including Old Irish, Berber, Pawnee, Cree, Quechua, Tagalog so on. As a few illustrations of imperative negatives, let us consider Tiwi and Yidin<sup>y</sup>.

Tiwi

In Tiwi (Osborne 1974), positive imperatives require the prefixation of the future-imperative morpheme Ca- (the initial consonant changes depending on the morphological environment) to the verb stem, as shown in (26). Singular imperative forms are distinguished from all other verbs by the absence of a subject prefix. Plural imperative forms have the subject prefix n, (you)

- (26) a. ta-jakupauli!  
imp-go back  
'Go back!' (you sg)
- b. n-ra-jakupauli!  
you-imp-go back (you pl)
- c. ta-k<sup>ʔ</sup>imi tutini!  
imp-make grave post  
'Make grave posts (you sg)
- d. n-ra-k<sup>ʔ</sup>imi tutini!  
you-imp-make grave post

However, in Tiwi non-imperative constructions, verbs must be preceded by a subject prefix, as shown in (27).

- (27) a. tiik<sup>ʔ</sup>imi?  
you-do  
'Did you do it?'
- b. waija tuapa?  
already you-ate?  
'Have you eaten?'

Negation of non-imperative constructions involves placing the negative adverb kaɽlu at the beginning of VP and changing the verb form into the subjunctive ma, as in (28).

- (28) a. awunu-pa-kupauli  
man-future-come back  
'He'll come back'
- b. kaɽlu jini-ma ta-kupauli  
not he subjunctive-fut  
'He won't come back'
- c. awurini ka lu jirituwa i  
man not he went  
'The man didn't go'

Negation of imperatives, however, uses the special negator natiti and requires a change of mood in the verb from imperative to future incomplete a-, as in (29).

- (29) a. ta-kʸimi  
imp-fut-do  
'Do it!'  
b. natiti nʸmpatak imi  
Don't do it! (sg)
- (30) a. narakʸimi  
you-imp-fut-do  
'Do it! (pl)'  
b. natiti nəm-p-a-ta-k imi  
not you-np-ic-imp-fut-do  
'Don't do it! (pl)'

Notice that the subject prefix must be present in the negative imperatives nʸ for singular and nə for plural.

### Yidinʸ

The next example is from Yidin (Dixon 1977), where imperatives can be formed from any verbal stem by the imperative inflection. These are shown in (31) and (32).

- (31) (nyndu:ba) buna wawa  
you-all woman look-at-IMP  
'(All of you) watch the woman!'
- (32) nanda wiwin wangal  
I-DAT give-IMP boomerang-ABS  
'Give me (your) boomerang'

Negative imperatives use a verb in regular imperative inflection preceded by the imperative negative particle -- giyi in the coastal dialect, and guni in the tablelands dialect.

- (33) (nundu) bulmba giyi wawa  
you camp IMP-not look at  
'Don't you look around the camp!'
- (34) giyi wanga:di  
IMP-not get up  
'Don't get up!'

In negative imperative constructions, the particles giyi and guni must precede the verb. As a contrast, non-imperative sentences use a different negative particle, nudu (not, never) which can either immediately precede or follow the verb, as shown in (35) and (36).

- (35) nayu nudula bugan  
I not eat  
'I am not eating now'

- (36)           nayu   dina   budi:linu    nudu  
               I       foot   put down   not  
               'I couldn't put my foot [in the water]

### 6.3. Some universal implications

There are five universal implications drawn from this cross-linguistic survey.

#### 6.3.1. Strong imperatives and weak imperatives

Universal (A):

The lack of "core" imperative constructions -- a unique sentence type compatible with direct commands and incompatible with assertion -- implies sentence type(s) ambiguous for direct commands and assertions, and vice versa.

As demonstrated in Chapter 1, there are three languages -- Mayo, Navajo and Paipai - which can be described as having weak imperatives. In these three languages, there are no sentence constructions that are compatible only with direct commands, but there are constructions compatible with both direct commands and assertions. These ambiguous sentence constructions are weak imperatives. Strong imperatives and weak imperatives do not co-exist in the languages surveyed, the existence of one implying the non-existence of the other. Thus, the above universal implication is bi-directional.

#### 6.3.2. [-past] tense elements

Universal (B):

[-past] tense elements in imperatives imply specialized uses of these tense-marking elements.

Hoffmann (1903) describes the imperatives in Mundari as being used in the following tenses: the indeterminate and the simple future, the static future, and the anterior future. Indeterminate tense and simple future are formally the same. Indeterminate tense is used to express (i) propositions stating general principles or universal truths; (ii) propositions stating customs and habits not yet extinct and regularly recurring actions and events (equivalent to English Present tense). Simple future has the functional difference that means "to



become". Static future, has the connotations (i) the intention of the agent of an action with regard to the effects of that action (ii) a particular state of mind in which the agent performed the action.

Langendoen (1967) characterizes the tenses used in imperatives as having taken on specialized meanings. Consider the anterior future. Anterior future is formed by suffixing le (in transitive predicates) or koo (in intransitive predicates) to the root, and denotes the priority of one future action over another future action:

(.37)

- a. om-le-ko-a-ing  
give-tense-them-cop-I  
I shall first give them to (someone)  
'I shall first give (it) to them'
- b. oraateng sen-koo-a-ing  
home-go-tense-cop-I  
'I shall first go home'

In imperatives, the future anterior tense koo assumes the meaning of politeness.

(37)

- a. ol-koo-me  
write-tense-you  
do write, please
- b. sen-koo-me  
go-tense-you  
go, please.

In our earlier example regarding Tiwi imperatives, the future tense marker Ca- is part of the imperative formation and assumes the function of imperative indicator.

### 6.3.3. Negatives

Universal (C):

Non-sufficiently marked positive imperative constructions imply marked negative imperative construction -- the special imperative negatives.

Here the term "non-sufficiently marked constructions" is defined as constructions which are marked by imperative-marking elements other than imperative conjugation or special affixes.

The fact that some languages have a special imperative negative yields two possibilities



regarding the formation of the negative imperative. Either a language has a special imperative negative or it simply uses the regular negative. How do we predict which is to be the case in a given language? Intuitively, it seems that the use of regular negatives is natural and expected if positive imperative constructions already contain "sufficient imperative-marking elements".

As some examples, French, German, Dutch, Russian and Finnish have imperative verb conjugations; thus, they simply use the regular negative for imperatives. Mojave and Yavapai, two Yuman languages that mark imperatives with affix-like special subject pronouns, also use the regular negative. Consider Huasteca Nahuatl, a Uto-Aztecan language.<sup>8</sup> Positive imperatives in this language are marked by the prefix shi-, on the verb, which substitutes for the second person subject marker. This resembles what we have seen earlier in Mojave, where a special imperative subject marker is used. Thus, shi- in Nahuatl can be taken to be a pronoun unique to imperatives and it functions as a marker on the verb form. Plural subjects are indicated by a suffix -kah that is used only with imperatives and hortative constructions.

(40)

- a. Shi-ya mo-cha  
Imp-go your-home  
'Go home'
- b. Shi-nech-tla-kaki-kah  
Imp-me-?-hear-Imp:pl  
'You all listen to me'

Since the positive imperative in Nahuatl is already specially marked, the negative imperatives do not have to have an imperative negator that is distinct from the regular negative. In Nahuatl, the imperative uses the negative amo, also used in non-imperative constructions, to negate the positive counterparts:

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<sup>8</sup> There are four Nahuatl dialects, Huasteca, North Puebla, Tetelcingo, Michoacan. Imperative constructions in four Nahuatl dialects are almost the same. I use Huasteca Nahuatl data, given the relatively detailed description in R. Beller & P. Beller (1979).

- (41)
- a. Amo shi-nech-istlaksti  
Neg Imp-me-lie  
'Don't lie to me'
  - b. Amo shi-ya-kah  
Neg Imp-go-Imp:pl  
'Don't you all go'

To sum up, it seems that, if the positive imperative is sufficiently marked, it may not be necessary to have a special imperative negator. Some languages, such as Hebrew, Japanese, Korean, Old Irish, Dyirbal and so on, still use special imperative negatives even if the positive imperative contains sufficient marking elements. Therefore, what we may predict is simply that the condition for special imperative negatives has to be that the positive construction lacks sufficient imperative-marking elements. This leads to the implicational Universal (C). Notice that the universal says nothing about sufficiently marked imperatives, for they may or may not have imperative negatives.

#### 6.3.4. Intonation

Universal (D):

The null use of imperative-marking elements, morphological or syntactic, implies the use of intonation as a formal strategy to mark the imperative.

Both Luo and Hawaiian, examples given earlier in Section 2.2.3, lack imperative-marking elements. They use the obligatory presence of the subject argument to indicate imperatives. The characteristic property associated with the imperative constructions in Luo and Hawaiian is that they also have special intonation contours. The language Chrau, reported in Sadock & Zwicky (1985), does not have the first two generalized formal strategies (i.e. imperative-marking elements and manipulation of subjects) but only uses intonation to signal imperatives. Symbolically, Luo and Hawaiian are instantiations of the combination (4d) [-IMS, +MS], and Chrau is instantiation of (4c) [-IMS, -MS]. From this perspective, we may conclude that the null use of imperative-marking elements [-IMS] implies the necessary use of intonation (see (5i)).

### 6.3.5. quantifier-like subject

Universal(E):

Quantifier-like NP subjects in imperatives imply the possibility of having second person pronoun as the subject; and imply the possibility of having anaphoric pronouns of either second person or third person.

This universal implication comes from a comparison between English and the rest of the languages in the sample. English is the only language in the sample that allows certain quantifiers to function as subjects of the imperative construction. In addition, the quantifiers permit anaphoric pronouns of either second or third person. Chapter 1 presents the analysis of such quantifiers as quantifying over the set of addressees that are of second person. Thus, the fact that all other languages surveyed, except English, allow only the second person pronoun as subjects in imperatives yields the implication that second person pronoun is subsumed under quantifier-like NP subjects in imperatives. Moreover, the quantifier-like NPs permit anaphoric pronouns of either second or third person. Therefore, the above implication applies across the languages surveyed.

## 6.4. Let's constructions and pseudo-imperatives

In the cross-linguistic survey, there are also other properties frequently observed. Although no implications can be drawn from these properties at the moment, they are interesting to mention for future studies.

### 6.4.1. First person "imperative"

In Section 1.4 of Chapter 1, I have briefly touched on let's constructions and distinguished them from imperatives in terms of person and definition of imperatives (see Chapter 1). In let's constructions like those in (45), the referent of the subject includes both the speaker and the hearer.

- (45) a. Let's go to the party together!  
       b. Let's not bother him again!  
       c. Let's you and me be friends again!

d.\*/?? Let's you and him be friends!

Let's constructions have the directive force of suggestion but are not direct commands or orders, since it is absurd for one to command oneself to do something. Our definition of imperatives as compatible with direct commands -- verbal attempts by the speaker to get the hearer to do something -- separates let's constructions from the imperatives. However, it is worthwhile mentioning some properties of let's constructions in the languages surveyed here.

First, in some languages, imperative-marking elements such as imperative verb conjugation or affixes occur on verbs in let's constructions. Take Finnish for an example. The imperative verb conjugation appears in the second person singular and plural and the first person plural, given in (46).<sup>9</sup>

(46)

- |    |   |          |         |
|----|---|----------|---------|
| a. | saata                                   | tyttö    | kotiin! |
|    | ImpV 2sg                                | girl.NOM | home    |
|    | '(you.sg) accompany the girl(NOM) home' |          |         |
| b. | saattakaa                               | tyttö    | kotiin! |
|    | ImpV 2pl                                | girl.NOM | home    |
|    | '(you.pl) accompany the girl(NOM) home' |          |         |
| c. | saattakaamme                            | tyttö    | kotiin! |
|    | ImpV 1.pl                               | girl.NOM | home    |
|    | 'Let us accompany the girl (NOM) home!' |          |         |

In addition, the second person imperatives and the first person plural construction in (46) also behave similar regarding the nominative case marking on the direct object. In Finnish, direct objects in certain constructions, including the imperative, must be marked nominative case (see Timberlake 1974). This usage may be illustrated by the contrast between a finite personal verb with an accusative object in (47) and the imperative with nominative objects above.

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<sup>9</sup> The Finnish data are either taken from Timberlake (1974) or provided by Juhani Rudanko, a Finnish visiting scholar at the Linguistics Department of the University of Arizona.

- (47) 

|                                       |          |        |
|---------------------------------------|----------|--------|
| saatan                                | tytön    | kotiin |
| V 1st.sg                              | girl.ACC | home   |
| 'I will accompany the girl(ACC) home' |          |        |

One particular property associated with the nominative object is that the object is expressed in the accusative if the object assumes the pronoun form. This is exactly what we see in second person imperatives, as given in (48), as well as in the first person let's construction, as given in (49).

- (48)
- a. Kutsu mies!  
invite manNOM  
'Invite the man'
- b. kutsu heidät!  
invite manACC  
'Invite them(ACC)'

- (49)
- a. Kutsutaan mies  
invite.let's manNOM.  
'let's invite the man(NOM)'
- b. Kutsutaan heidät!  
invite.let's.PAS manACC  
'Let's invite them(ACC)'

These examples simply suggest that second person imperatives and let's constructions in Finnish share similar morphological and syntactic properties.

On the other hand, in languages such Russian and Lithuanian, let's constructions are formed from the first person present indicative constructions. In Russian, the historically older first person imperative have been entirely replaced by forms derived from the first plural present indicative, as shown in (50).

- (50) a. pojdem!  
go  
let's you(sg.) and me go
- b. pojdemte!  
go  
let's you(pl) and me go

As in some dialects of Lituanian in (51), the first plural indicative present may be used without pronoun in place of the inclusive imperative form.

- (51) a. e'nam!  
we go  
(lit.we go!) Let's go  
b. vazhiuojam!  
we drive  
(lit.we drive!) let's drive

Second, the imperative negative in some languages is not only used in imperatives but also in let's constructions. Take Indonesian for an example. In Indonesian mari (to let), in (52a), is used for first person inclusive (Inc) construction and is compatible only with first person pronoun, as shown by the ill-formed (52b).

- (52) a. Mari kita pergi  
let us-Inc go  
'Let's go'  
b. \*Mari kami/dia pergi  
let them/him go  
'Let them/him go'

In the corresponding negative construction, it is the imperative negative jangan (not) but not the regular negative tidak (not) (see Chapter 3) that is used. The negative jangan can either precede the subject or follow it (for contrastive use):

- (53) a. Mari jangan kita pergi  
let not us-Inc go  
'Let's not go'  
b. Mari kita jangan pergi, biarkan dia pergi (contrastive)  
let us-INC not go let him go  
'Let not us go! Let him go'

In (54), biarkan (to let) is the counterpart of English let meaning permission in Indonesian.

- (54) Jangan (kamu) biarkan kami pergi (wait for too long)  
not-IMP (you) let us-Exclusive pergi  
'Don't (you) let us go'

Similar use of the imperative negative in let's construction is also seen in English (and Chinese), as shown by the sentences in (55) and (56), where both the regular negative and imperative negative are possible.

- (55) a. Let's unite again.  
b. Don't let's fight!  
c. Let's not fight!  
(56) a. Let's you and me stop fighting!

- b. Don't let's you and me fight!
- c. Let's you and me not fight!

To sum up, let's constructions and imperatives do share certain similar formal properties in some languages. Language particularly, it could be appropriate to incorporate let's constructions into the imperatives (see Davies 1986). But cross-linguistically, the evidence is not sufficient enough to argue for first person imperative constructions. According to our definition of imperatives, let's constructions are not a part of imperatives. We may attribute the use of imperative conjugations, affixes and negatives in let's constructions to the same illocutionary act which imperatives and let's constructions have. Both second person imperatives and first person let's constructions have directive illocutionary act; thus, properties of imperatives such as imperative conjugation and negatives are also found in let's constructions in some languages.

#### 6.4.2. Extended use and pseudo-imperatives

Another property of imperatives is their extended use without imperative meaning. For example, in Russian, verbs in the imperative form are used in expressing involuntary condition, and actions either unavoidable, or uncontrollable or unexpected:

(57)

- a. provalis'            ja na meste,       esli eto nepravda.  
Imp.V            I on place       if that false  
'May I collapse(Imp.V) on the spot, if that isn't the truth'
- b. vse                ushii na            progulku,       a ja       sidis doma  
everyone       go.out on       walk       but I       Imp.V home  
'Everyone went out on a walk, but I sit(Imp.V) at home'
- c. ja s nim shuchu,       a on       vos'mi da       uda' menja po golove  
I with him jokebut he Imp.V yes       Imp.V me on head  
'I am joking with him, and he takes(Imp.V) and hits(Imp.V) me on the head'

This extended use is different from another known construction -- the pseudo-imperative - in which syntactic imperatives serve as conditional constructions. Familiar examples are those in (58) from English.

- (58) a. Work harder and I will give you a bonus.
- b. Be quiet or I'll call the police.
- c. Don't think about it, and you will feel better.



d. Don't go there alone, or you may get lost.

Although various suggestions have been made as to whether the clauses before the conjunctions are imperatives in English,<sup>10</sup> no discussion was made or data was presented regarding similar constructions in other languages. From the present survey, it is certain that the first conjunct is a syntactic imperative which semantically expresses a conditional statement together with the second conjunct. The evidence comes from the fact that counterparts of the first conjunct of (58) are imperatives in the languages that allow similar conditionals: they use imperative conjugations or affixes, imperative negatives, and are restricted to second person addressees.

The imperative form in Lithuanian is indicated by verb conjugations. It has an extended use without the imperative meaning (command and prohibition) of expressing conditions, either real or hypothetical or involuntary, as in (59).<sup>11</sup>

(59)

- a.    tekinaĩ pabek,    greichiauũ    nubegsi  
                                  Imp.V           Fut.  
       'Run, and you'll arrive faster'
- b.    nors    visa    bachkasishlaizhyk,    negausi niẽko  
    Imp.V           Fut.  
       'Even lick out all the barrels, you'll still get nothing'

Similar use of imperative constructions in conditionals is fairly common in German, French, Spanish, Chinese, Japanese. For instance in German, one has:

(60)

- a.    Trink            den            Kaffee, oder ich werfe dich raus  
       drink.Imp    the.ACC    coffee or I throw you out  
       'Drink the coffee, or I will throw you out'
- b.    Trink            den            Kaffee, und ich schenke dir einen keks  
       drink.Imp    the.ACC    coffee and I give you biscuit  
       'Drink the coffee, and I will give you a biscuit'

---

<sup>10</sup> See Bolinger (1967), Culicover (1971) and Davies (1986), among others, for different views on pseudo-imperatives.

<sup>11</sup> The examples are from Timberlake (1974) which are without literal gloss.



German, French and Spanish all have imperative conjugations and use the regular negative for imperatives. Chinese and Japanese have the imperative negatives. In addition, Chinese has sentential imperative particles and Japanese has imperative affixes. All these imperative elements (particles, affix, negatives) appear in the first clause of the conditional statement in Chinese (and Japanese):

(61)

- a. (Ni) kuai zuo ba, buran jincha yao zhua ni  
you quick walk Imp. otherwise police want catch you  
'Get away fast, otherwise the police will catch you'
- b. Bie zhouyao hejiu, wo jiu gei ni mai zixinche  
don't smoke drink I then for you buy bicycle  
'Don't smoke or drink, and I will buy you a bicycle'

In the language Yidin<sup>12</sup>, positive or negative imperative are frequently used in the main clause of a sentence that has a 'lest' subordinate clause. Dixon (1976, 350) describes a 'lest' clause as "a subordinate clause refers to an undesirable event that some person or thing referred to in the main clause might get involved in; the main clause will describe action that can be taken to try to avoid this."<sup>12</sup>

(62)

- a. nyundu            gigy    galin    gana:uir            dyugi:l,            mayi  
you-SABJ        not    go-IMP underneath-LOC    three-LOC        nut-ABS  
nyuni:nda        wanda:ndyi        dungu:  
you-DAT        fall-lest-ABS    head-LOC  
'Don't you walk under [that] tree, a nut might fall on your head.'
- b. nyundu            giyi    galin    nyunygu:runy,  
you-SUBJ        not    go-IMP that way  
muni:ldu        duga:ldyi  
vine-ERG        grab-Lest-ABS  
'Don't you go that way, lest the Muni-vine grab you!'
- c. nyundu            ngunggu            gadan dyurinumu,    nyuniny  
you-SABJ        there-LOC        come-IMP        leech-ABL            you-Obj  
badya:ldyi  
bite-Lest-ABS  
'You come away from the leeches there, or they will bite you'

<sup>12</sup> The combination ny stands for 'ɲ', dy for 'd', ng for 'ŋ', ry for 'r' close to 'r' in the word arrow.

In Yidin<sup>y</sup>, the main clause of such conditionals is often imperative but can also be tensed.

- (63) ngayu dyadya            nyudyu badyary,  
       I-SUBJ baby-ABS        not    leave-PRES  
       bama:l            nyudyu dyili+budi:ldyi  
       person-ERG    not    eye-put doen-Lest-ABS  
       'I won't leave the baby in case there's no one to mind it'

The above examples from various languages indicate that imperatives have extended uses.

The Russian case is rare but the conditionals are fairly common.

Consider now the English pseudo-imperatives in (58). Logically, the constructions are not conditionals but are conjunctions and disjunctions. They are semantic conditionals, meaning [if X, then Y] and [not X, or Y], if interpreted in terms of 'short-circuit' logic. 'Short circuit' logic is an evaluation that applies to the process of Boolean expression evaluations in programming languages, as presented in (64).<sup>13</sup>

- (64) given "x and y" where x is false, then y is not evaluated;  
       given "x or y" where x is true, then y is not evaluated;

The pseudo-imperative is restricted to second person, as suggested by the oddity of first person in (65), interpreted in the short-circuit way:

- (65) ??/\*Let's eat the pizza, and he will give us a pie.  
       ??/\*Let's not be aggressive, or she will be mad.

The second conjunct express promises, threats or predictions. With predictions, the conjunct is usually and:

- (66) Laugh, and the world laughs with you.  
       Cry, and the world cries with you.

But the above extended use of imperatives is not universal. For languages with imperative conjugations such as Finnish, however, the imperative is used only in expressing prohibitions, commands, exhortations, and requests with varying force, but not in extended

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<sup>13</sup> Thanks to Terry Langendoen (p.c) for bringing 'short-circuit' logic to the discussion of these examples. See E. Horowitz (19??) Fundamentals of Programming Languages.

function to express conditionals.

### 6.5. Conclusion and a second look at English

The cross-linguistic perspective shows that the imperatives in the languages surveyed have three properties in common: they lack modal elements, elements indicating past tense, and they use formal strategies to mark the construction as distinct from non-imperatives. Although considerable diversity exists in the way imperatives are manifested, there are three generalized types of formal strategies for indicating imperatives: imperative-marking elements (IMS), the manipulation of subject (MS) and intonation. IMS and MS yield four logical combinatory possibilities for constructing imperatives, all of which are shown to have instantiations in languages. Moreover, five implicational universals can be drawn from this cross-linguistic examination, ranging over imperative types, formal strategies, negatives, and subjects.

An obvious question for one to answer concerns how this cross-linguistic study contributes to our understanding of the English imperative, given our detailed argumentations in the previous chapters. There are five points which I think are helpful.

- a. The optionality of subject in English only represents one of the possibilities of manipulating the subject for marking imperative constructions.
- b. The lack of tense in English is a special case of lack of [-past] elements.
- c. Cross-linguistically, the negative-initial word order in English negative imperatives is not a "rare" phenomenon (see Chapter 3).
- d. English use both imperative-marking elements (the bare verb stem, do) and the manipulation of the subject argument as formal strategies for marking imperatives.
- e. English has special imperative negatives don't and do not.



## CHAPTER 7

### CONCLUSIONS

#### 7.1. Summary

##### The issues

This study of imperatives centers around three major issues: (i) what is a cross-linguistic definition of imperative constructions and how are imperatives formed in languages? (ii) do English imperative constructions form an independent sentence type distinct from non-imperative constructions in terms of abstract structures and derivations? (iii) are imperatives simply a functional sentence type which plays no role in a syntactic theory?

##### The reasons

There are three reasons that make it necessary and important to address the above issues (and related questions) in current grammatical theories.

First, it is almost a common assumption in generative grammar that imperatives are trivially analyzed and it is standard practice to ignore them.<sup>1</sup> This is evident in various theories which leave out the interesting properties of English imperatives: the categories of do, be/have and don't, interactions between subjects (overt or null) and auxiliary verbs, negation and inversion, anaphoric pronoun binding, affinities to tenseless clauses like infinitives and Mad Magazine sentences.

Second, it is often said that imperatives in languages have peculiar properties -- uncommon syntactic or morphological properties in comparison with non-imperatives (Schmerling 1975, 1977, among others), but few attempts have ever been made to give a thorough cross-linguistic study of what they are and why they are (see Sadock & Zwicky 1985).

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<sup>1</sup> Except Schmerling (1975, 1977, 1982).

Third, it is claimed that a study of imperatives should be within the realm of speech acts rather than in syntax and that (English) imperatives are subsumed under other tenseless clauses; thus imperatives do not play a role in syntactic analysis (Akmajian 1984).

### **The approaches**

I have addressed these issues and related questions in two domains, intra-language and inter-language. Within the intra-language study, I have analyzed the imperative constructions under two grammatical theories, Government and Binding theory and Extended Categorical Grammar. Within the inter-language study, I have examined imperative constructions across thirteen language families. The conclusions are summarized under three headings below.

## **7.2. Conclusions**

### **Inter-language**

There are two general types of imperatives that need to be recognized -- strong and weak. I have defined strong imperatives as a unique sentential construction compatible only with direct commands. I have shown that strong imperatives are not universal: there are languages which can only be characterized as having weak imperatives -- sentential constructions which are ambiguous between assertions and direct commands. A language can have either one of them but not both. The majority of the forty six languages examined have strong imperatives; three of them have weak imperatives.

The strong imperatives in languages have the following properties in common: (i) they lack modal elements; (ii) they lack elements indicating past tense; and (iii) they use formal strategies to mark themselves as distinct from non-imperatives. These formal strategies can be generalized into three types:

- (1) imperative-marking elements (IME)
  - a. verb affixes

- b. sentential particles
- (2) the manipulation of subject (MS)
  - a. obligatorily present
  - b. obligatorily absent
  - c. optional
- (3) intonation (INTO)

Languages use either one of the types or the combination of (1) and (2) to mark the imperative: [+IME, -MS], [-IME, +MS], [-IME, -MS, +INTO], and [+IME, +MS].

Five implicational universals are drawn from the cross-linguistic study:

- (A) the lack of strong imperative constructions implies weak imperatives;
- (B) [-past] tense elements in imperatives imply specialized uses of these tense-marking elements;
- (C) non-sufficiently marked positive imperative constructions imply special imperative negatives;
- (D) the null use of imperative-marking elements implies the use of intonation to mark the imperative;
- (E) quantifier-like NP subjects in imperatives imply the possibility of having second person pronoun subjects, and the possibility of binding either 2nd or 3rd person anaphoric pronouns.

### Intra-language

I have proposed to treat the English imperatives as forming a distinct clause type from non-imperative constructions in terms of abstract properties and structures.

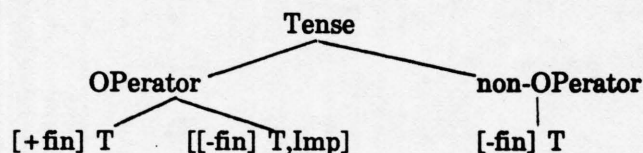
Within GB theory, I have shown that the derivation of imperatives regarding Verb Movement of be and have, and theta-role copying by do separates imperatives from tensed clauses and infinitives. As shown below, be and have cannot move out of the VP in imperatives, must move out of the VP in tensed clauses, and can optionally move out of the VP in infinitives; do in imperatives is a non-theta copying substitute verb but must copy theta-role in tensed clauses:

|                   | Verb Movement    | theta-copying |
|-------------------|------------------|---------------|
| [+finite] clauses | yes (obligatory) | yes           |
| [-finite] clauses | yes (optional)   |               |
| [Imp] clauses     | no               | no            |

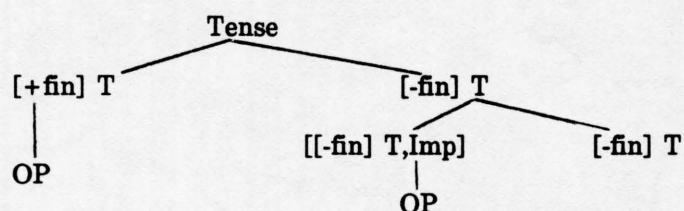
In addition, imperatives cannot be conflated with either the tensed or untensed clauses



regarding Pollock's theory of quantificational binding and [+/-finite] clause types. As illustrated below, the operator status of T in imperatives distinguishes imperatives from [-finite] infinitives:



On the other hand, the priority of [+/-finite] would separate imperatives from [+finite] clauses:



I have argued that Pollock's (1989) proposal for negative imperatives is untenable. Not only is it unable to account for the entire range of positive imperatives, it also makes incorrect predictions regarding negative imperatives. Instead, I have proposed that imperatives are of the structure TP (S) without a Comp position, and don't is an unanalyzable Imp Negative, base-generated in sentence initial position. The proposal explains the structural difference between imperatives and negative interrogatives. The interrogatives have an S'(CP) structure, thus, Can't you hit the ball? is a result of Subject-Aux-Inversion (T to C movement), whereas negative imperatives have an S (TP) structure and are not inverted constructions. The hypothesis that negative imperatives have a base-generated sentence-initial negative is supported by facts from English as well as from negative imperatives in Indonesian and Kusaian.

Within CG, I have analyzed imperatives as a basic sentence type forming a primitive category. I have argued that restrictions on co-occurrence of overt subjects and do are not

only syntactic but also pragmatic. The restrictions are analyzed as a result of clash of distinction in force between request and command which can be correlated with syntactic type structures.

I have also argued that Akmajian's proposal that imperatives are simply a functional sentence type and play no role in a syntactic theory is incorrect. MMs and imperatives cannot be regarded as an instance of one sentence type having two distinct pragmatic functions. Imperatives have the clause structure of S (TP) and MMs have an S' (CP) structure similar to that of left-dislocation constructions; imperatives fall between [+finite] and [-finite], whereas MMs are [-finite].

In short, I have attempted to establish the independence of the imperative construction and its role in syntactic analysis and have proposed grammatical rules for their representation and generation.

### Theories of grammar

Both the GB and CG analyses I proposed have the consequence of treating the English imperatives as an independent clause structure from non-imperatives. In GB, however, imperatives are formally derivable from a structure underlying both imperatives and non-imperatives only if adjustments to requirements by theta-theory, Case-theory and quantification-variable binding are provided. Negative imperatives are derived by construction-specific rules. In CG, imperatives are taken to be a basic sentence type parallel to declaratives, questions and various other sentence types which all have different clausal structures. The analysis uses lexical types to specify the particular syntactic properties associated with the imperative negatives don't and do not, do and please in conjunction with pragmatic issues.

The ultimate difference between these two approaches lies in the conceptual idea about underlying structure. In one view, there is an abstract global object -- the underlying clausal structure -- from which all clauses are derived by simple rules (conditions on movement);



In the other view, clauses are constructed from a common set of materials such as NP's and VP's, and a set of possibly idiosyncratic tools such as tense, modals, ordering-relations and various clausal structures. But as far as imperatives are concerned, the optimal analysis is to treat them as forming a distinct clause type.

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